



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

June 12, 2013

Mr. Joseph Lentini
Senior Project Manager
Equilon Enterprises, LLC dba Shell Oil Products US
3801 Sepulveda Boulevard
Culver City, CA 90230

CERTIFIED MAIL NO.:
7000 0600 0029 1196 8342
RETURN RECEIPT REQUESTED

Dear Mr. Lentini:

TRANSMITTAL OF THE WASTE DISCHARGE REQUIREMENTS (WDRS) AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR SHELL SERVICE STATION #204-1944-0100, 3801 SEPULVEDA BOULEVARD (AT VENICE BOULEVARD), CULVER CITY, CA. (NPDES NO. CA0064289, CI NO. 8030)

Our letter dated May 3, 2013, transmitted the revised tentative waste discharge requirements for the renewal of your permit to discharge wastes under the National Pollutant Discharge Elimination System (NPDES) Program.

Pursuant to Division 7 of the California Water Code, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) at a public hearing held on June 6, 2013, reviewed the revised tentative requirements, considered all factors in the case, and adopted Order No. R4-2013-0091.

Order No. R4-2013-0091 serves as an NPDES permit, and it expires on July 6, 2018. Section 13376 of the California Water Code requires that an application/Report of Waste Discharge for a new permit must be filed at least 180 days before the expiration date.

You are required to implement the attached Monitoring and Reporting Program (MRP) on the effective date (July 6, 2013) of Order No. R4-2013-0091. Your first monitoring report for the period of July 2013 through September 2013 is due by November 1, 2013.

The Regional Board is implementing a paperless office system to reduce paper use, increase efficiency, and provide a more effective way for our staff, the public and interested parties to view water quality documents. Therefore, please convert all regulatory documents, submissions, data and correspondence that you would normally submit to us as hard copies to a searchable Portable Document Format (PDF). Documents that are less than 10 megabytes (MB) should be emailed to losangeles@waterboards.ca.gov. Documents that are 10 MB or larger should be transferred to a disk and mailed to the address listed above. If you need additional information regarding electronic submittal of documents please visit the Regional Board's website listed above and navigate to Paperless Office.

MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles

Mr. Joseph Lentini
Equilon Enterprises, LLC dba Shell Oil Products USA
Shell Service Station #204-1944-0100

- 2 -

June 12, 2013

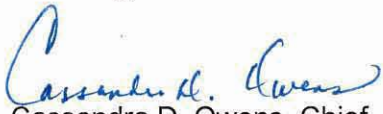
When submitting monitoring or technical reports to the Regional Board as required by your Monitoring and Reporting Program, please continue to send them ATTN: Information Technology Unit and include a reference to Compliance File CI-8030 and NPDES No. CA0064289. This will assure that the reports are directed to the appropriate electronic file and staff. Also please do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

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

http://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/by_permits_tools.shtml.

If you have any further questions, please contact Thomas Siebels at (213) 576-6756.

Sincerely,



Cassandra D. Owens, Chief
Industrial Permitting Unit (NPDES)

cc: Mailing list

Enclosures: Order No. R4-2013-0091 - Waste Discharge Requirements
Attachment E - Monitoring and Reporting Program (MRP No. 8030)
Attachment F - Fact Sheet

Mailing List (Via E-mail Only)

Ms. Robyn Stuber, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Mr. Kenneth Wong, U.S. Army Corps of Engineers
Mr. Bryant Chesney, NOAA, National Marine Fisheries Service
Mr. Jeff Phillips, Department of Interior, U.S. Fish and Wildlife Service
Mr. William Paznokas, Department of Fish and Game, Region 5
Department of Public Health, Sanitary Engineering Section
Ms. Teresa Henry, California Coastal Commission, South Coast Region
Los Angeles County, Department of Public Works, Waste Management Division
Mr. Angelo Bellomo, Los Angeles County, Department of Health Services
Ms. Kirsten James, Heal the Bay
Ms. Liz Crosson, Santa Monica BayKeeper
Ms. Anna Kheyfets, Natural Resources Defense Council
Mr. M.L. Elmore, Equilon Enterprises, LLC
Mr. David E. Potts, Wayne Perry, Inc.
Ms. Ann La Duca, Tetra Tech
Mr. Jae Kim, Tetra Tech

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

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

**ORDER R4-2013-0091
 NPDES NO. CA0064289**

**WASTE DISCHARGE REQUIREMENTS
 FOR EQUILON ENTERPRISES, LLC DBA SHELL OIL PRODUCTS US
 SHELL SERVICE STATION #204-1944-0100**

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

Table 1. Discharger Information

Discharger	Equilon Enterprises, LLC dba Shell Oil Products US
Name of Facility	Shell Service Station #204-1944-0100
Facility Address	3801 Sepulveda Boulevard
	Culver City, CA 90230
	Los Angeles County


Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Treated groundwater and stormwater	34° 00' 45" N	118° 25' 02" W	Ballona Creek Reach 2 (via storm drain)

Table 3. Administrative Information

This Order was adopted by the Los Angeles Regional Water Board on:	June 6, 2013
This Order shall become effective on:	July 6, 2013
This Order shall expire on:	July 6, 2018
The Discharger shall file a Report of Waste Discharge as an application for reissuance of waste discharge requirements in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	180 days prior to the Order expiration date
The U.S. Environmental Protection Agency (USEPA) and the Los Angeles Regional Water Quality Control Board have classified this discharge as follows:	Minor discharge

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on June 6, 2013.


 Chief Deputy E.O. for
 Samuel Unger, P.E., Executive Officer

March 14, 2013
 Revised: May 3, 2013

Table of Contents

I.	Findings	3
II.	Discharge Prohibitions	4
III.	Effluent Limitations and Discharge Specifications.....	4
	A. Final Effluent Limitations – Discharge Point 001	4
	B. Final Contaminant Concentrations in Sediments—Discharge Point 001	8
	C. Interim Effluent Limitations– Not Applicable	8
	D. Land Discharge Specifications – Not Applicable	9
	E. Reclamation Specifications – Not Applicable	9
IV.	Receiving Water Limitations.....	9
	A. Surface Water Limitations	9
	B. Groundwater Limitations.....	10
V.	Provisions.....	10
	A. Standard Provisions	10
	B. Monitoring and Reporting Program (MRP) Requirements.....	14
	C. Special Provisions	14
VI.	Compliance Determination.....	16

List of Tables

Table 1.	Discharger Information.....	1
Table 2.	Discharge Location	1
Table 3.	Administrative Information.....	1
Table 4.	Effluent Limitations – Discharge Point 001.....	5
Table 5.	Sediment Contaminant Waste Load Allocations--Discharge Point 001.....	6

List of Attachments

Attachment A – Definitions	A-1
Attachment B – Maps	B-1
Attachment C – Flow Schematic	C-1
Attachment D – Standard Provisions	D-1
Attachment E – Monitoring and Reporting Program (MRP No. 8030).....	E-1
Attachment F – Fact Sheet.....	F-1
Attachment G – Storm Water Pollution Prevention Plan Requirements	G-1
Attachment H – State Water Board Minimum Levels	H-1
Attachment I – List of Priority Pollutants.....	I-1
Attachment J – Summary of Reasonable Potential Analysis.....	J-1

I. FINDINGS

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

- I. **Legal Authorities.** This Order serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit for point source discharges from this facility to surface waters.
- II. **Background and Rationale for Requirements.** The Los Angeles Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G through J are also incorporated into this Order.
- III. **Notification of Interested Parties.** The Los Angeles Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- IV. **Consideration of Public Comment.** The Los Angeles Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

THEREFORE, IT IS HEREBY ORDERED, that this Order supercedes Order R4-2008-0007 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Los Angeles Regional Water Board from taking enforcement action for past violations of the previous Order. If any part of this Order is subject to a temporary stay of enforcement, unless otherwise specified, the Discharger shall comply with the analogous portions of the previous Order, which shall remain in effect for all purposes during the pendency of the stay

II. DISCHARGE PROHIBITIONS

- I. Wastes discharged shall be limited to treated wastewater consisting of up to 0.576 MGD of treated groundwater and stormwater as described in the findings. The discharge of wastes from accidental spills or other sources is prohibited.
- II. 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 Ballona Creek, or other waters of the State, are prohibited.
- III. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or a nuisance as defined by Section 13050 of the Water Code.
- IV. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- V. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Los Angeles Regional Water Board or the State Water Resources Control Board as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.
- VI. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.
- VII. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

III. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Final Effluent Limitations – Discharge Point 001

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

Table 4. Effluent Limitations – Discharge Point 001

Parameter	Units ¹	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	S.U.	--	--	6.5	8.5
Temperature	°F	--	--		86
Oil and Grease	mg/L	10	15	--	--
	lbs/day ¹	48	72	--	--
Settleable Solids	ml/L	0.1	0.3	--	--
Total Suspended Solids	mg/L	50	75	--	--
	lbs/day ¹	240	360	--	--
Turbidity	NTU	50	75	--	--
Cadmium, Total Recoverable	µg/L	4.5	9	--	--
	lbs/day	0.022	0.043	--	--
Copper, Total Recoverable (Dry) ²	µg/L	19	41	--	--
	lbs/day ¹	0.091	0.20	--	--
Copper, Total Recoverable (Wet) ³	µg/L	8.5	18	--	--
	lbs/day ¹	0.041	0.086	--	--
Lead, Total Recoverable (Dry) ²	µg/L	9	24	--	--
	lbs/day ¹	0.043	0.115	--	--
Lead, Total Recoverable (Wet) ³	µg/L	22	59	--	--
	lbs/day ¹	0.11	0.28	--	--
Selenium, Total Recoverable (Dry) ²	µg/L	3.9	8.7	--	--
	lbs/day ¹	0.019	0.042	--	--
Selenium, Total Recoverable (Wet) ³	µg/L	2.2	5.0	--	--
	lbs/day ¹	0.011	0.024	--	--
Silver, Total Recoverable	µg/L	12	24	--	--
	lbs/day	0.058	0.115	--	--
Zinc, Total Recoverable (Dry) ²	µg/L	180	542	--	--
	lbs/day ¹	0.9	2.6	--	--
Zinc, Total Recoverable (Wet) ³	µg/L	39	119	--	--
	lbs/day ¹	0.19	0.57	--	--
Benzene	µg/L	--	1	--	--
	lbs/day	--	0.005	--	--
1,1-Dichloroethane	µg/L	--	5	--	--
	lbs/day	--	0.02	--	--
1,1-Dichloroethylene	µg/L	3.2	6	--	--
	lbs/day	0.02	0.03	--	--
Ethylbenzene	µg/L	--	700	--	--
	lbs/day	--	3.4	--	--
Ethylene dibromide	µg/L	--	0.05	--	--
	lbs/day	--	0.0002	--	--
Methyl tertiary butyl ether	µg/L	--	13	--	--
	lbs/day	--	0.06	--	--
Napthalene	µg/L	--	17	--	--
	lbs/day	--	0.1	--	--

Parameter	Units ¹	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Tertiary butyl alcohol	µg/L	--	12	--	--
	lbs/day	--	0.06	--	--
Tetrachloroethylene	µg/L	--	5	--	--
	lbs/day	--	0.02	--	--
Toluene	µg/L	--	150	--	--
	lbs/day	--	0.72	--	--
Total petroleum hydrocarbons	µg/L	--	100	--	--
	lbs/day	--	0.48	--	--
1,1,1-Trichloroethane	µg/L	--	200	--	--
	lbs/day	--	1	--	--
Trichloroethylene	µg/L	--	5	--	--
	lbs/day	--	0.02	--	--
Xylene	µg/L	--	1750	--	--
	lbs/day	--	8.4	--	--
Acenaphthene ⁶	µg/L	2,700	5,420	--	--
	lbs/day	13	26	--	--
Anthracene ⁶	µg/L	110,000	221,000	--	--
	lbs/day	528	1,060	--	--
Benzo(a)Anthracene ⁶	µg/L	0.049	0.098	--	--
		0.00024	0.0005	--	--
Benzo(a)Pyrene ⁶	µg/L	0.049	0.098	--	--
		0.00024	0.0005	--	--
Chrysene ⁶	µg/L	0.049	0.098	--	--
		0.00024	0.0005	--	--
Dibenzo(a,h)Anthracene ⁶	µg/L	0.049	0.098	--	--
		0.00024	0.0005	--	--
Flouranthene ⁶	µg/L	370	742	--	--
		1.78	3.56	--	--
Flourene ⁶	µg/L	14,000	28,100	--	--
		67	135	--	--
Pyrene ⁶	µg/L	11,000	22,100	--	--
		53	106	--	--
Chlordane ⁶	µg/L	0.00059	0.00118	--	--
		0.000003	0.000006	--	--
4,4'-DDT ⁶	µg/L	0.00059	0.00118	--	--
		0.000003	0.000006	--	--
4,4'-DDE ⁶	µg/L	0.00059	0.00118	--	--
		0.000003	0.000006	--	--
4,4'-DDD ⁶	µg/L	0.00084	0.00169	--	--
		0.000004	0.000008	--	--
Total PCBs ⁶	µg/L	0.00017	0.00034	--	--
		0.0000008	0.0000016	--	--
Acute Toxicity	% survival	4			

Parameter	Units ¹	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Chronic Toxicity	TU _c			⁵	

- ¹ Mass-based (lbs/day) effluent limitations are based on a maximum discharge flow rate of 0.576 MGD.
- ² Dry-weather effluent limitations are applicable when the maximum daily flow in Ballona Creek is less than 40 cubic feet per second (cfs). Flow data can be obtained by contacting Mr. Arthur Gotingco (Tel: 626-458-6379; Email: agoting@dwp.lacounty.gov) at LACDPW.
- ³ Wet-weather effluent limitations are applicable when the maximum daily flow in Ballona Creek is equal to or greater than 40 cfs.
- ⁴ The acute toxicity of the effluent shall be such that:
 - i. the average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and
 - ii. No single test producing less than 70% survival
- ⁵ The monthly median for chronic toxicity of 100% effluent shall not exceed 1 TU_c in a critical life stage test.
- ⁶ Limits for these constituents added to demonstrate compliance with requirements of the Ballona Creek Estuary Toxic Pollutants TMDL.

B. Final Contaminant Concentrations in Sediments—Discharge Point 001

For the implementation of the Ballona Creek Estuary Toxic Pollutants TMDL, the Discharger shall maintain compliance with the following sediment limitations at Discharge Point 001 with compliance measured at Monitoring Location EFF-001 as described in the attached Monitoring and Reporting Program (MRP) (Attachment E). The Discharger shall collect sufficient effluent sample to provide an adequate amount of effluent sediments for contaminant analyses or other such analytical method approved in advance by the Los Angeles Regional Board that would allow direct comparison of effluent sediment concentrations with sediment contaminant waste load allocations.

Table 5. Sediment Contaminant Waste Load Allocations—Discharge Point 001

Parameter	Units	Contaminant Waste Load Allocations
Cadmium, Total Recoverable	mg/kg	1.2
Copper, Total Recoverable	mg/kg	34
Lead, Total Recoverable	mg/kg	46.7
Silver, Total Recoverable	mg/kg	1.0
Zinc, Total Recoverable	mg/kg	150
Chlordane	µg/kg	0.5
DDTs ¹	µg/kg	1.58
Total PCBs ²	µg/kg	22.7
Total PAHs ³	µg/kg	4,022

¹ The State Water Resources Control Board Water Quality Control Plan for Enclosed Bays and Estuaries—Part 1 Sediment Quality, August 25, 2009 (Sediment Quality Plan), listed chemical analytes needed to characterize sediment contamination exposure and effect. According to Attachment A of the Sediment Quality Plan, DDTs shall mean the sum of: o,p'-DDE, o,p'-DDD, o,p'-DDT, p,p'-DDD, p,p'-DDE, and p,p'-DDT.

² According to Attachment A of the Sediment Quality Plan, total PCBs (polychlorinated biphenyls) shall mean the sum of the following PCB congeners: 2,4'-Dichlorobiphenyl, 2,2',5-Trichlorobiphenyl, 2,4,4'-Trichlorobiphenyl, 2,2',3,5'-Tetrachlorobiphenyl, 2,2',5,5'-Tetrachlorobiphenyl, 2,3',4,4'-Tetrachlorobiphenyl, 2,2',4,5,5'-Pentachlorobiphenyl, 2,3,3',4,4'-Pentachlorobiphenyl, 2,3',4,4',5-Pentachlorobiphenyl, 2,2',3,3',4,4'-Hexachlorobiphenyl, 2,2',3,4,4',5'-Hexachlorobiphenyl, 2,2',4,4',5,5'-Hexachlorobiphenyl, 2,2',3,3',4,4',5-Heptachlorobiphenyl, 2,2',3,4,4',5,5'-Heptachlorobiphenyl, 2,2',3,4',5,5',6-Heptachlorobiphenyl, 2,2',3,3',4,4',5,6-Octachlorobiphenyl, 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl, and Decachlorobiphenyl.

³ According to Attachment A of the Sediment Quality Plan, total PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of: Acenaphthene, Anthracene, Biphenyl, Naphthalene, 2,6-dimethylnaphthalene, Fluorene, 1-methylnaphthalene, 2-methylnaphthalene, 1-methylphenanthrene, Phenanthrene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(e)pyrene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Perylene, and Pyrene.

C. Effluent at this facility is primarily comprised of groundwater that has been effectively treated to remove sediments prior to discharge. When the amount of settleable solids and total suspended solids (TSS) present in the effluent are within the limits established in this Order it may be infeasible for the Discharger to collect enough water to conduct sediment analysis. Alternatively, compliance with these WLAs may be demonstrated when effluent monitoring, including annual monitoring for priority pollutants, indicates that all of the following are within the limits established in this Order: settleable solids, TSS, cadmium, copper, lead, silver, zinc, chlordane, DDTs (includes 4,4'-DDT, 4,4'-DDE, and 4,4'-DDD), Total PCBs (includes PCB-1016, PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, and PCB-1260), and PAHs (includes acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, chrysene,

dibenz(a,h)anthracene, fluoranthene, flourene, naphthalene, phenanthrene and pyrene. **Interim Effluent Limitations– Not Applicable**

D. Land Discharge Specifications – Not Applicable

E. Reclamation Specifications – Not Applicable

IV. 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 Ballona Creek:

1. The normal ambient pH to fall below 6.5 nor exceed 8.5 units nor vary from normal ambient pH levels by more than 0.5 units.
2. Surface water temperature to rise greater than 5°F above the natural temperature of the receiving waters at any time or place. At no time shall the temperature be raised above 80° F as a result of waste discharged.
3. Water Contact Standards: In waters designated for Non-Water Contact Recreation (REC-2) and not designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 2000/100 ml (based on a minimum of not less than four samples for any 30 day period), nor shall more than 10 percent of samples collected during any 30-day period exceed 4000/100 ml.
4. Depress the concentration of dissolved oxygen below 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.
5. Exceed total ammonia (as N) concentrations specified in the Los Angeles Regional Water Board Resolution 2004-022, adopted on March 4, 2004. Resolution 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.
6. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
7. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.
8. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.

9. Toxic or other deleterious substances in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
10. Accumulation of bottom deposits or aquatic growths.
11. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
12. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
13. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.
14. Alteration of turbidity, or apparent color beyond present natural background levels.
15. Damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.
16. Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.
17. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
18. Create nuisance, or adversely affect beneficial uses of the receiving water.
19. Violation of any applicable water quality standards for receiving waters adopted by the Los Angeles 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 Los Angeles Regional Water Board will revise or modify this Order in accordance with such standards.

B. Groundwater Limitations

The discharge shall not cause the underlying groundwater to be degraded, to exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

V. 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. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:
- a. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of sections 122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
 - b. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in the municipal storm water management program developed to comply with NPDES permits issued by the Los Angeles Regional Water Board to local agencies.
 - c. Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.
 - d. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 318, 405, and 423 of the Federal CWA and amendments thereto.
 - e. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.
 - f. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
 - g. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.
 - h. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - i. Violation of any term or condition contained in this Order;

- ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
- iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- i. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
- j. The Discharger shall notify the Los Angeles Regional Water Board not later than 120 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.
- k. The Discharger shall file with the Los Angeles Regional Water Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.
- l. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Los Angeles Regional Water Board as soon as they know or have reason to believe that they have begun or expect to begin to use or manufacture intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.
- m. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Los Angeles Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Los Angeles Regional Water Board.
- n. The Water Code provides that any person who violates a waste discharge requirement or a provision of the Water Code is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

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

- o. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to waters of the United States, is prohibited unless specifically authorized elsewhere in this permit or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.
- p. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.
- q. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to the planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:

 - i. Name and general composition of the chemical,
 - ii. Frequency of use,
 - iii. Quantities to be used,
 - iv. Proposed discharge concentrations, and
 - v. USEPA registration number, if applicable.
- r. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- s. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, average monthly effluent limitation, maximum daily effluent limitation, instantaneous minimum effluent limitation, instantaneous maximum effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Los Angeles Regional Water Board by telephone (213) 576-6600 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Los Angeles Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Special Provisions

1. Reopener Provisions

- a. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Los Angeles Regional Water Board will revise and modify this Order in accordance with such more stringent standards.
- b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.
- c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in Parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new MLs.
- d. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for the Ballona Creek.
- e. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Los Angeles Regional Water Board, to provide for dilution credits or a mixing zone, as may be appropriate.
- f. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Chronic Toxicity Limit and Monitoring Requirements

The Order includes the chronic toxicity limit from the previous permit defined as an exceedence of 1.0 TUc in a critical life stage test for 100% effluent (The monthly median for chronic toxicity of 100% effluent shall not exceed 1 TUc in a critical life stage test). The Discharger shall monitor the effluent annually for chronic toxicity to determine the presence of chronic toxicity. If the chronic toxicity of the effluent exceeds 1.0 TUc (where TUc = 100/NOEC), the Discharger shall immediately implement accelerated chronic

toxicity testing, as required in Section V.B of the Monitoring and Reporting Program (Attachment E).

b. Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan

The Discharger shall submit to the Regional Water Board an Initial Investigation Toxicity Reduction Evaluation (TRE) workplan (1-2 pages) **within 90 days** of the effective date of this permit. If the Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Discharger shall use USEPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected, and should include at a minimum:

- i. A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency;
- ii. A description of the facility's method of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility;
- iii. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor) (Section V of the MRP, Attachment E, provides references for the guidance manuals that should be used for performing TIEs).

3. Best Management Practices and Pollution Prevention

- a. The Discharger shall submit, within 90 days of the effective date of this Order:
 - i. An updated storm water pollution prevention plan (SWPPP) that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The updated SWPPP shall accurately reflect current facility conditions and incorporate changes in the discharge practice (i.e., hydrostatic test water is no longer routed to retention ponds prior to discharge). The SWPPP shall be developed in accordance with the requirements in Attachment G.

4. Construction, Operation and Maintenance Specifications

- a. The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.
- b. The Discharger shall develop and maintain a record of all spills, overflows or bypasses of raw or partially treated wastewater from its collection system or treatment plant. This record shall be made available to the Los Angeles Regional Water Board and USEPA upon request. On the first day of February, May, August, and November (one month after the end of the fiscal quarter) of each year, the Discharger shall submit to the Los Angeles Regional Water Board and USEPA a report listing all spills, overflows or bypasses occurring during the

previous quarter. The reports shall provide the date and time of each spill, overflow, or bypass; the location of each spill, overflow or bypass; the estimated volume of each spill, overflow, bypass including gross volume, amount recovered and amount not recovered; the cause of each spill, overflow, or bypass; whether each spill, overflow, or bypass entered a receiving water and, if so, the name of the water body and whether it entered via storm drains or other man-made conveyances; mitigation measures implemented; corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences; and beneficial uses impacted.

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

6. Other Special Provisions – Not Applicable

7. Compliance Schedules – Not Applicable

VI. COMPLIANCE DETERMINATION

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

A. Single Constituent Effluent Limitation.

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

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

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

C. Effluent Limitations Expressed as a Median.

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

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

D. Multiple Sample Data.

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

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

E. Mass-Based Effluent Limitations

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

F. Average Monthly Effluent Limitation (AMEL).

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

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

1. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for that constituent, the Discharger has demonstrated compliance with the AMEL for that month;
2. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any constituent, the Discharger shall collect four additional samples at approximately equal intervals during the month. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later.

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

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

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

G. Maximum Daily Effluent Limitations (MDEL).

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

H. Instantaneous Minimum Effluent Limitation.

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

I. Instantaneous Maximum Effluent Limitation.

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

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)

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

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

Average Monthly Effluent Limitation (AMEL)

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

Best Management Practices (BMPs)

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

Bioaccumulative

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

Carcinogenic

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

Coefficient of Variation (CV)

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

Daily Discharge

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

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

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

Detected, but Not Quantified (DNQ)

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

Dilution Credit

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

Effluent Concentration Allowance (ECA)

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

Enclosed Bays

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

Estimated Chemical Concentration

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

Estuaries

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

Existing Discharger

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

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

Four-Day Average of Daily Maximum Flows

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

Infeasible

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

Inland Surface Waters

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

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

Maximum Daily Effluent Limitation (MDEL)

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

Median

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

Method Detection Limit (MDL)

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML)

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

Mixing Zone

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

Not Detected (ND)

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

Ocean Waters

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

Persistent Pollutants

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

Pollutant Minimization Program (PMP)

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

Pollution Prevention

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

Reporting Level (RL)

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

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

Satellite Collection System

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

Source of Drinking Water

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

Standard Deviation (σ)

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

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

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

Toxicity Reduction Evaluation (TRE)

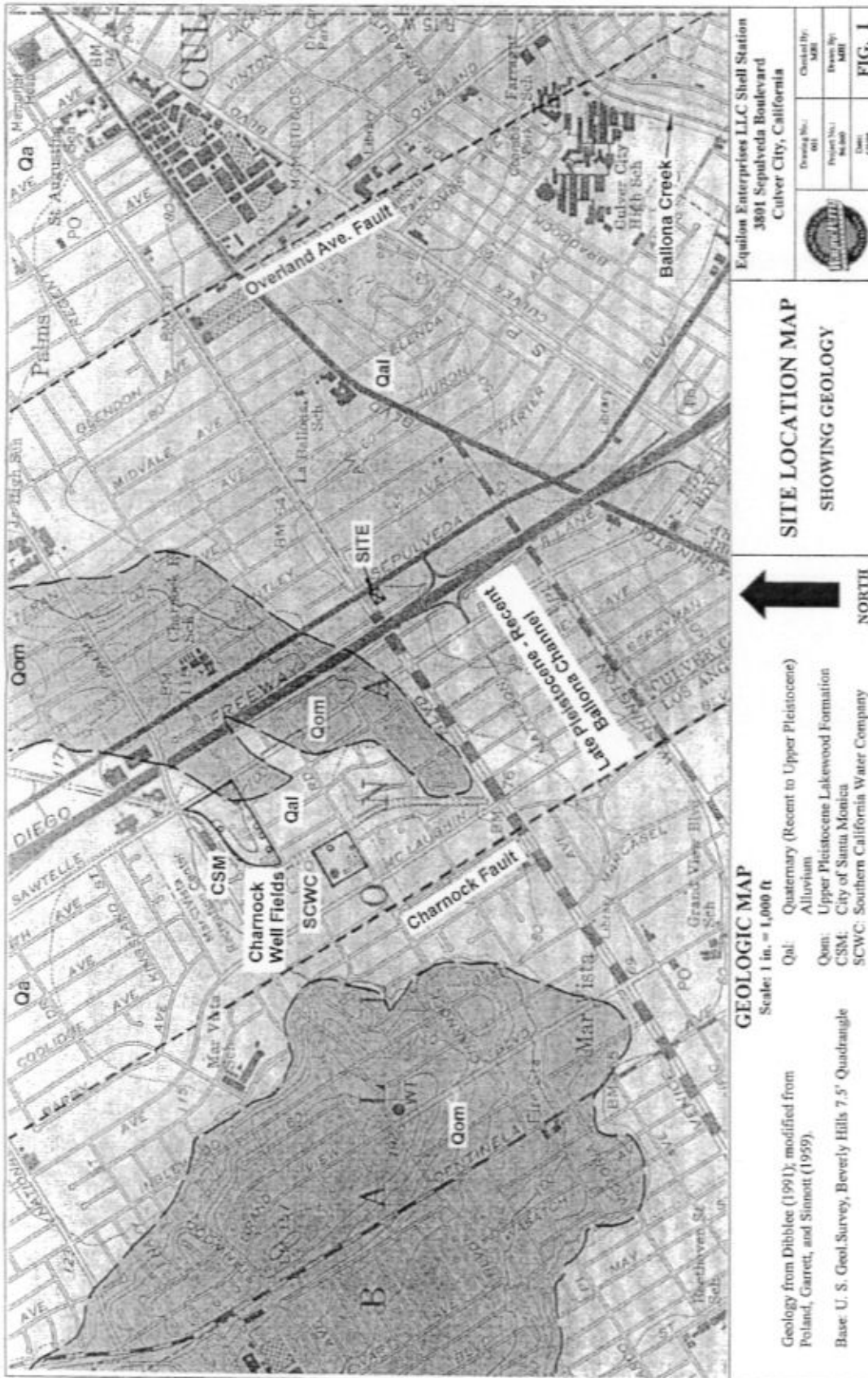
TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection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

ACRONYMS AND ABBREVIATIONS

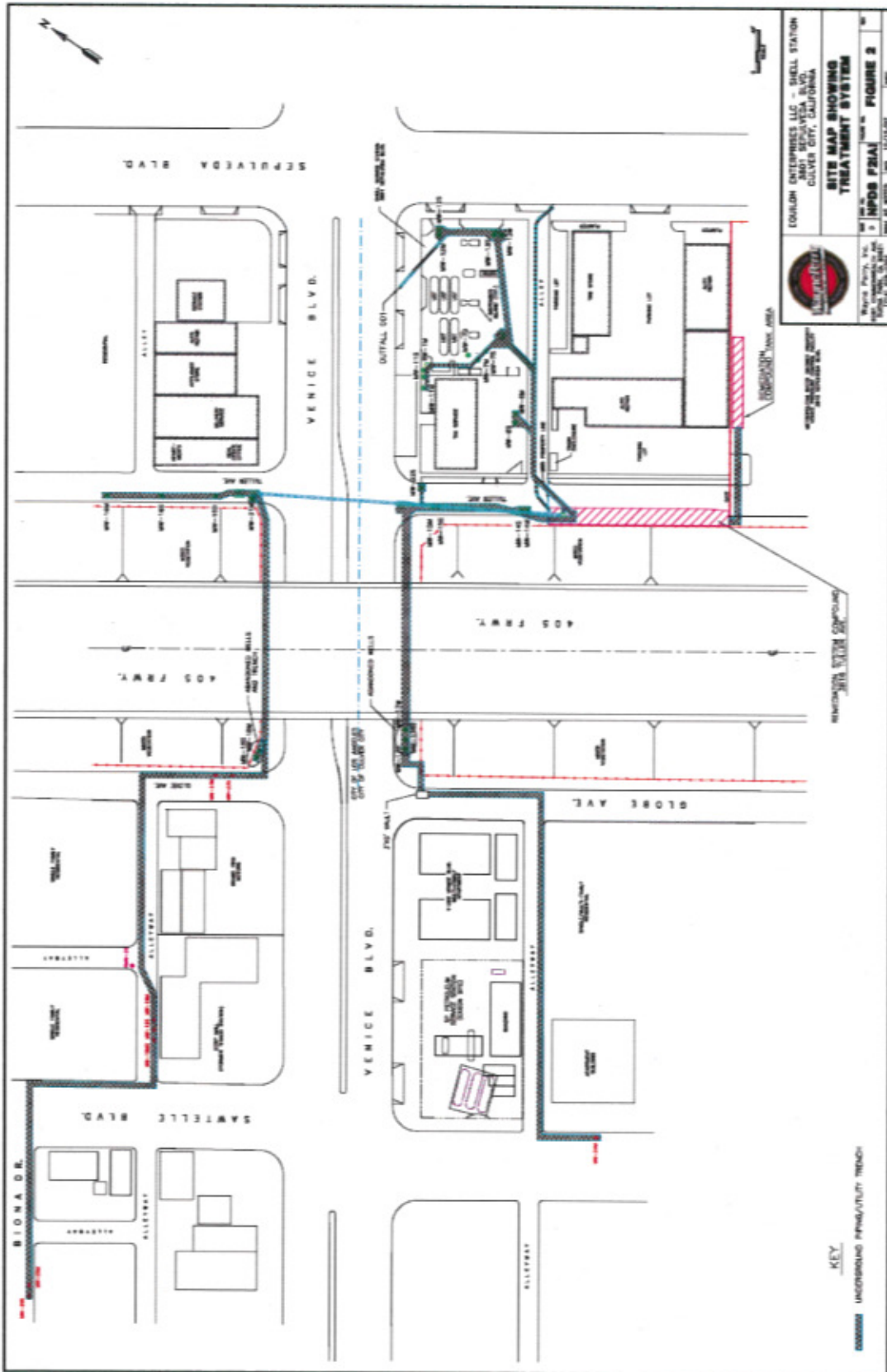
AMEL	Average Monthly Effluent Limitation
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices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

NSPS	New Source Performance Standards
NTR.....	National Toxics Rule
OAL.....	Office of Administrative Law
PAHs.....	Polynuclear Aromatic Hydrocarbons
pg/L.....	picograms per liter
PMEL.....	Proposed Maximum Daily Effluent Limitation
PMP.....	Pollutant Minimization Program
POTW.....	Publicly Owned Treatment Works
ppm.....	parts per million
ppb.....	parts per billion
QA.....	Quality Assurance
QA/QC.....	Quality Assurance/Quality Control
Ocean Plan.....	Water Quality Control Plan for Ocean Waters of California
Los Angeles Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RPA.....	Reasonable Potential Analysis
SCP.....	Spill Contingency Plan
SIP.....	State Implementation Policy (Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California)
SMR.....	Self Monitoring Reports
State Water Board.....	California State Water Resources Control Board
SWPPP.....	Storm Water Pollution Prevention Plan
TAC.....	Test Acceptability Criteria
Thermal Plan.....	Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California
TIE.....	Toxicity Identification Evaluation
TMDL.....	Total Maximum Daily Load
TOC.....	Total Organic Carbon
TRE.....	Toxicity Reduction Evaluation
TSD.....	Technical Support Document
TSS.....	Total Suspended Solid
TU _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

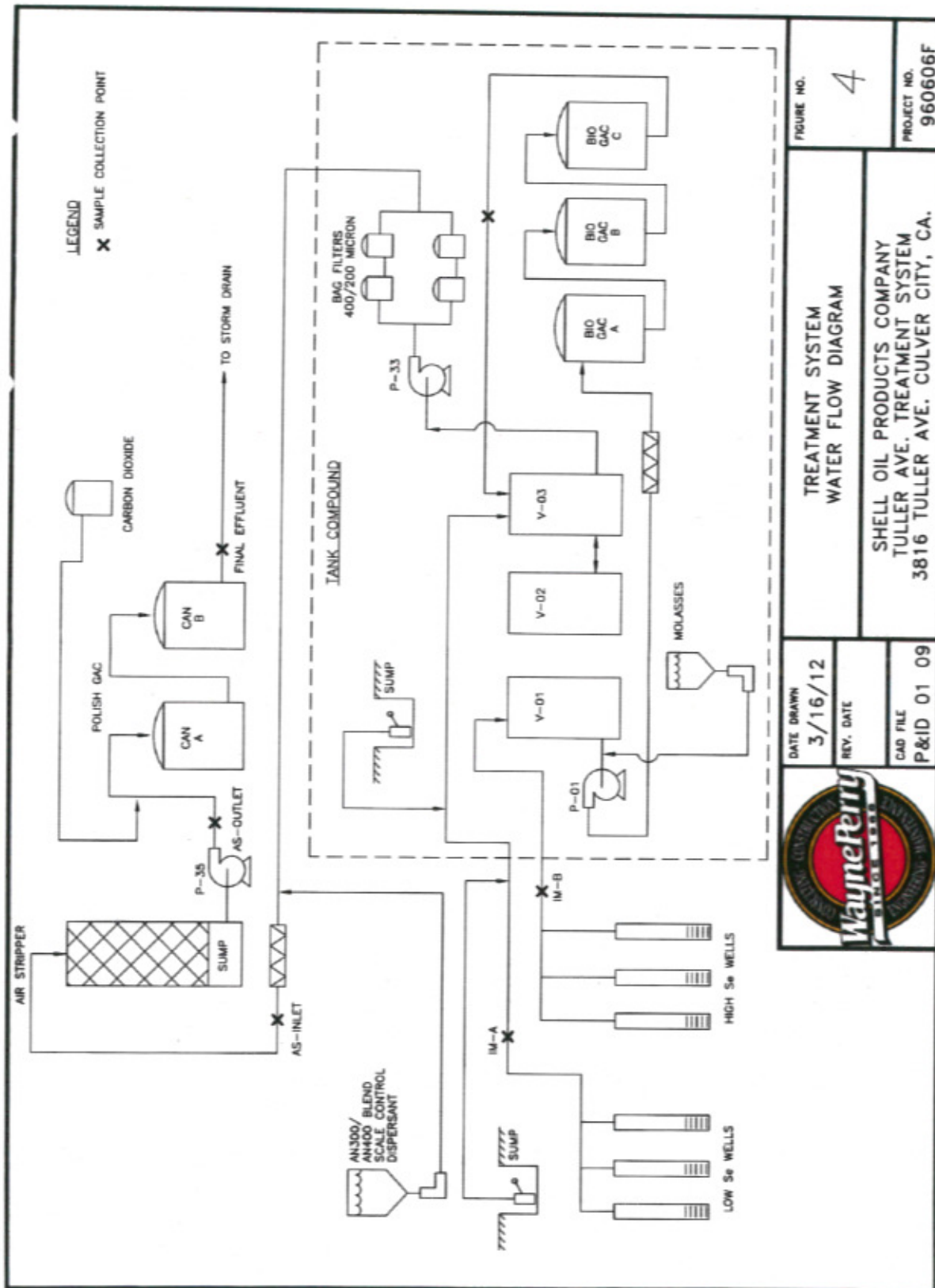
ATTACHMENT B1 – SITE LOCATION MAP



ATTACHMENT B2 – SITE MAP SHOWING TREATMENT SYSTEM



ATTACHMENT C – FLOW SCHEMATIC



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

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

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

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

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

F. Inspection and Entry

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

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

G. Bypass

1. Definitions

- i. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [section 122.41(m)(1)(i)].
 - ii. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [section 122.41(m)(1)(ii)].
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below [section 122.41(m)(2)].

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

H. Upset

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

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

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

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

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

III. STANDARD PROVISIONS – MONITORING

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

in Part 503 unless other test procedures have been specified in this Order [section 122.41(j)(4) and section 122.44(i)(1)(iv)].

IV. STANDARD PROVISIONS – RECORDS

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

V. STANDARD PROVISIONS – REPORTING

I. Duty to Provide Information

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

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

II. Signatory and Certification Requirements

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

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

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

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

III. Monitoring Reports

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

IV. Compliance Schedules

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

V. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall

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

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

VI. Planned Changes

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

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

VII. Anticipated Noncompliance

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

VIII. Other Noncompliance

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

IX. Other Information

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

VI. STANDARD PROVISIONS – ENFORCEMENT

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

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

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

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

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

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

- d. The level established by the Los Angeles Regional Water Board in accordance with section 122.44(f) [section 122.42(a)(1)(iv)].
- 2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [section 122.42(a)(2)]:
 - e. 500 micrograms per liter ($\mu\text{g}/\text{L}$) [section 122.42(a)(2)(i)];
 - f. 1 milligram per liter (mg/L) for antimony [section 122.42(a)(2)(ii)];
 - g. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [section 122.42(a)(2)(iii)]; or
 - h. The level established by the Los Angeles Regional Water Board in accordance with section 122.44(f) [section 122.42(a)(2)(iv)].

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP NO. 8030)

Table of Contents

I.	General Monitoring Provisions	E-2
II.	Monitoring Locations	E-5
III.	Influent Monitoring Requirements – Not applicable.....	E-5
IV.	Effluent Monitoring Requirements-- MONITORING LOCATION EFF-001	E-5
V.	Whole Effluent Toxicity Testing Requirements.....	E-9
	A. Acute Toxicity	E-9
	B. Chronic Toxicity	E-10
	C. Quality Assurance	E-12
	D. Preparation of an Initial Investigation TRE Workplan	E-12
	E. Steps in Toxicity Reduction Evaluation and Toxicity Identification Evaluation.....	E-12
	F. Ammonia Removal.....	E-14
	G. Reporting.....	E-14
VI.	Land Discharge Monitoring Requirements – Not Applicable	E-16
VII.	Reclamation Monitoring Requirements – Not Applicable	E-16
VIII.	Receiving Water Monitoring Requirements – Surface Water	E-16
	A. Visual Monitoring of Receiving Water Sampling Points.....	E-16
IX.	Other Monitoring Requirements	E-16
	A. Storm Water Monitoring.....	E-16
	B. SWPPP Status and Effectiveness Report	E-17
X.	Reporting Requirements	E-17
	A. General Monitoring and Reporting Requirements	E-17
	B. Self Monitoring Reports (SMRs).....	E-17
	C. Other Reports.....	E-20

List of Tables

Table E-1.	Monitoring Station Locations.....	E-5
Table E-2.	Effluent Monitoring – Monitoring Location EFF-001.....	E-5
Table E-2b.	Sediment Monitoring -- Monitoring Location EFF-001.....	E-6
Table E-3.	Monitoring Periods and Reporting Schedule	E-17

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) NO. 8030

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

I. GENERAL MONITORING PROVISIONS

- I. A wastewater effluent monitoring station shall be established at the sample port at the end of the treatment train at the 3816 Tuller Avenue treatment site; this location [Monitoring Location EFF-001 (Latitude 34° 00' 44" N, Longitude 118° 25' 01" W)] is representative of the discharge from Discharge Point 001 (Latitude 34° 00' 45" N, Longitude 118° 25' 02" W). All sampling stations shall be located where representative samples of that effluent can be obtained.
- II. Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.
- III. The Los Angeles Regional Water Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
- IV. Pollutants shall be analyzed using the analytical methods described in sections 136.3, 136.4, and 136.5 (revised May 18, 2012); or, where no methods are specified for a given pollutant, by methods approved by this Los Angeles Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.
- V. 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.
- VI. Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the Department of Public Health or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP".
- VII. The monitoring reports shall specify the analytical method used, the Method Detection Limit (MDL), and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:

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

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

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

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

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

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

- IX. Water/wastewater samples must be analyzed within allowable holding time limits as specified in section 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Los Angeles Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.
- X. All analyses shall be accompanied by the chain of custody, including but not limited to date 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.
- XI. 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.
- XII. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. Unless otherwise specified in the analytical method, duplicate samples must be analyzed at a frequency of 5% (1 in 20 samples) with at least one if there is fewer than 20 samples in a batch. A batch is defined as a single analytical run encompassing no more than 24 hours from start to finish. A similar frequency shall be maintained for analyzing spiked samples.
- XIII. When requested by the Los Angeles Regional Water Board or USEPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.
- XIV. 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.
- XV. In the event wastes are transported to a different disposal site during the report period, the following shall be reported in the monitoring report:
1. Types of wastes and quantity of each type;
 2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and

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

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

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

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

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description (include Latitude and Longitude when available)
001	EFF-001	At the sample port at the end of the treatment train at the 3816 Tuller Avenue treatment site (Latitude 34° 00' 44" N, Longitude 118° 25' 01" W)

III. INFLUENT MONITORING REQUIREMENTS – NOT APPLICABLE

IV. EFFLUENT MONITORING REQUIREMENTS--MONITORING LOCATION EFF-001

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

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total Flow	gal/day	---	1/Day	1
pH	pH Units	Grab	1/Week	1
Temperature	°F	Grab	1/Week	1
BOD ₅ @20°C	mg/L	Grab	1/Month	1
Oil and Grease	mg/L	Grab	1/Month	1
Settleable Solids	ml/L	Grab	1/Month	1
Total Suspended Solids (TSS)	mg/L	Grab	1/Month	1
Turbidity	NTU	Grab	1/Month	1
General Minerals ²	mg/L	Grab	1/Month	1
Nitrate + Nitrite (as N)	mg/L	Grab	1/Month	1
Sulfides	mg/L	Grab	1/Month	1
Ethylene dibromide	µg/L	Grab	1/Month	1
Methanol	µg/L	Grab	1/Month	1
Methyl tertiary butyl ether	µg/L	Grab	1/Month	1
Naphthalene	µg/L	Grab	1/Month	1
Tertiary butyl alcohol	µg/L	Grab	1/Month	1
Tetrachloroethylene	µg/L	Grab	1/Month	1
Total petroleum hydrocarbons	µg/L	Grab	1/Month	1
Xylene	µg/L	Grab	1/Month	1
Copper, Total Recoverable	µg/L	Grab	1/Month	1
Lead, Total Recoverable	µg/L	Grab	1/Month	1
Selenium, Total Recoverable	µg/L	Grab	1/Month	1
Zinc, Total Recoverable	µg/L	Grab	1/Month	1
Benzene	µg/L	Grab	1/Month	1
1,1-dichloroethane	µg/L	Grab	1/Month	1
1,1-dichloroethylene	µg/L	Grab	1/Month	1
Ethylbenzene	µg/L	Grab	1/Month	1
Tetrachloroethylene	µg/L	Grab	1/Month	1

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Toluene	µg/L	Grab	1/Month	1
1,1,1-trichloroethane	µg/L	Grab	1/Month	1
Trichloroethylene	µg/L	Grab	1/Month	1
Acute Toxicity ²	% Survival	Grab	1/Year	1
Chronic Toxicity ²	TU _c	Grab	1/Quarter	1
Remaining Priority Pollutants ³	µg/L	Grab	1/Year ⁴	1

¹ Pollutants shall be analyzed using the analytical methods described in Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP. Where no methods are specified for a given pollutant, the methods must be approved by the Los Angeles Regional Water Board or the State Water Board.² General Minerals shall include, calcium, iron, magnesium, manganese, potassium, sodium, chloride, hardness, sulfate, and total dissolved solids.

² Refer to Section V, Whole Effluent Toxicity Testing Requirements

³ Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II of the Limitations and Discharge Requirements of this Order

⁴ Priority Pollutants may be sampled annually provided that sampling results indicate levels below both the MDELs and AMELs. In the event that levels exceed these limits additional monitoring will be required as per the provisions of Section VI.F (Compliance Determination, Average Monthly Effluent Limitation) of this Order.

Table E-2b. Sediment Monitoring – Monitoring Location EFF-001⁶

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Cadmium, Total Recoverable	mg/kg	Grab	1/Year ¹ (First discharge of the year)	2
Copper, Total Recoverable	mg/kg	Grab	1/Year ¹ (First discharge of the year)	2
Lead, Total Recoverable	mg/kg	Grab	1/Year ¹ (First discharge of the year)	2
Silver, Total Recoverable	mg/kg	Grab	1/Year ¹ (First discharge of the year)	2
Zinc, Total Recoverable	mg/kg	Grab	1/Year ¹ (First discharge of the year)	2
Chlordane	µg/kg	Grab	1/Year ¹ (First discharge of the year)	2
DDTs ³	µg/kg	Grab	1/Year ¹ (First discharge of the year)	2
Total PCBs ⁴	µg/kg	Grab	1/Year ¹ (First discharge of the year)	2
Total PAHs ⁵	µg/kg	Grab	1/Year ¹ (First discharge of the year)	2

¹ Monitoring is only required during years in which a discharge occurs. Annual samples shall be collected during the first discharge of the year. Sampling shall be performed 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 the first safe opportunity, and the reason for the delay shall be included in the report.

² Pollutants shall be analyzed in accordance with USEPA or ASTM methodologies where such methods exist. Where no USEPA or ASTM methods exist, the State Board or Los Angeles Regional Water Board shall approve the use of other methods. Analytical tests shall be conducted by laboratories certified by the California Department of Public Health in accordance with Water Code section 13176.

³ The State Water Resources Control Board Water Quality Control Plan for Enclosed Bays and Estuaries—Part 1 Sediment Quality, August 25, 2009 (Sediment Quality Plan), listed chemical analytes needed to characterize sediment contamination exposure and effect. According to Attachment A of the Sediment Quality Plan, DDTs shall mean the sum of: o,p'-DDE, o,p'-DDD, o,p'-DDT, p,p'-DDD, p,p'-DDE, and p,p'-DDT.

⁴ According to Attachment A of the Sediment Quality Plan, total PCBs (polychlorinated biphenyls) shall mean the sum of the following PCB congeners: 2,4'-Dichlorobiphenyl, 2,2',5'-Trichlorobiphenyl, 2,4,4'-Trichlorobiphenyl, 2,2',3,5'-Tetrachlorobiphenyl, 2,2',5,5'-Tetrachlorobiphenyl, 2,3',4,4'-Tetrachlorobiphenyl, 2,2',4,5,5'-Pentachlorobiphenyl, 2,3,3',4,4'-Pentachlorobiphenyl, 2,3',4,4',5'-Pentachlorobiphenyl, 2,2',3,3',4,4'-Hexachlorobiphenyl, 2,2',3,4,4',5'-Hexachlorobiphenyl, 2,2',4,4',5,5'-Hexachlorobiphenyl, 2,2',3,3',4,4',5'-Heptachlorobiphenyl, 2,2',3,4,4',5,5'-Heptachlorobiphenyl, 2,2',3,4',5,5',6'-Heptachlorobiphenyl, 2,2',3,3',4,4',5,6'-Octachlorobiphenyl, 2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl, and Decachlorobiphenyl.

⁵ According to the Sediment Quality Plan, total PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of: Acenaphthene, Anthracene, Biphenyl, Naphthalene, 2,6-dimethylnaphthalene, Fluorene, 1-methylnaphthalene, 2-methylnaphthalene, 1-methylphenanthrene, Phenanthrene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(e)pyrene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Perylene, and Pyrene.

⁶ Monitoring of the sediment will not be required when the effluent monitoring complies with the stipulations enumerated in Section III.B, paragraph 2 (Page 8) of this Order.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity

1. Definition of Acute Toxicity.

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

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

2. Acute Toxicity Effluent Monitoring Program.

- a. Method. The Discharger shall conduct acute toxicity tests on 24-hour composite 100% effluent samples, generally by methods specified in Part 136 which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, October 2002, USEPA, Office of Water, Washington D.C. (EPA/821-R-02-012) or a more recent edition to ensure compliance. Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.
- b. Test Species. The fathead minnow, *Pimephales promelas* (Acute Toxicity Test Method 2000.0), shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish effluent. However, if the salinity of the receiving water is between 1 to 32 parts per thousand (ppt), the Discharger may have the option of using the inland silverslide, *Menidia beryllina* (Acute Toxicity Test Method 2006.0), instead of the topsmelt. The method for topsmelt (Larval Survival and Growth Test Method 1006.0) is found in USEPA's *Short-term Method for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, First Edition, August 1995 (EPA/600/R-95/136).
- c. Alternate Reporting. For the acute toxicity testing with topsmelt, the Discharger may elect to report the results or endpoint from the first 96 hours of the chronic toxicity test as the results of the acute toxicity test, using USEPA's August 1995 method (EPA/600/R-95/136) to conduct the chronic toxicity test.
- d. Acute Toxicity Accelerated Monitoring. If either of the above requirements (sections 1.a and 1.b) is not met, the Discharger shall conduct six additional tests, approximately every two weeks, over a 12-week period. The Discharger shall ensure that they receive results of a failing toxicity test within 24 hours of the close of the test and the additional tests shall begin within 5 business days of the receipt of the result. If the additional tests indicate compliance with the toxicity limitation, the Discharger may resume regular testing.

e. Toxicity Identification Evaluation (TIE).

- i. If the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall immediately begin a Toxicity Identification Evaluation (TIE) and implement the Initial Investigation Toxicity Reduction Evaluation (TRE) workplan. The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the requirements.
- ii. If the initial test and any of the additional six acute toxicity bioassay test results are less than 70% survival, the Discharger shall immediately begin a TIE and implement the Initial Investigation TRE workplan. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the requirements.

B. Chronic Toxicity

1. Definition of Chronic Toxicity.

Chronic toxicity measures a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or ambient waters compared to that of the control organisms. Chronic toxicity shall be measured in TU_c , where $TU_c = 100/NOEC$. The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

This Order includes a chronic testing toxicity limit defined as an exceedance of 1.0 TU_c in a critical life stage test for 100% effluent. (The monthly median for chronic toxicity of 100% effluent shall not exceed, 1 TU_c in a critical life stage test.)

2. Chronic Toxicity Effluent Monitoring Program.

a. Test Species and Methods.

- i. The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite 100% effluent samples. For freshwater discharge, the Discharger shall conduct the chronic toxicity test in accordance with USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, October 2002 (EPA/821/R-02/013) or a more recent edition. For brackish effluent, the Discharger shall conduct the chronic toxicity test in accordance with USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms*, First Edition, August 1995 (EPA/600/R-95/136) or *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, Third Edition, October 2002, (EPA/821/R-02/014), or a more recent edition.

- ii. The Discharger shall conduct tests as follows: with a vertebrate, an invertebrate, and a plant for the first three suites of tests. After the screening period, monitoring shall be conducted using the most sensitive species.
 - iii. The Discharger shall conduct the first chronic toxicity test screening for three consecutive months in the first required chronic toxicity testing. Re-screening is required every 24 months. The Discharger shall re-screen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrates that the same species is the most sensitive, then re-screening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.
 - iv. In brackish waters, the presence of chronic toxicity may be estimated as specified using West Coast marine organisms according to USEPA's *Short-Term Methods for Estimating Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms*, August 1995 (EPA/600/R-95/136), or a more recent edition.
 - v. After the screening period, monitoring shall be conducted quarterly using the most sensitive species.
 - vi. Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.
- b. Chronic Toxicity Accelerated Monitoring.

If the chronic toxicity of the effluent exceeds the monthly median limit of 1.0 TU_c, the Discharger shall conduct six additional tests, approximately every two weeks, over a 12-week period. The Discharger shall ensure that they receive results of a failing chronic toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 5 business days of the receipt of the result.

- i. If any three out of the initial test and the six additional tests results exceed 1.0 TU_c, the Discharger shall immediately implement the Initial Investigation TRE workplan.
- ii. If implementation of the Initial Investigation TRE workplan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the normal sampling frequency required in Table E-2 of this MRP.
- iii. If all of the six additional tests required above do not exceed 1 TU_c, then the Discharger may return to the normal sampling frequency.
- iv. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required, then the accelerated testing schedule may be terminated, or used

as necessary in performing the TRE/TIE, as determined by the Executive Officer.

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. Preparation of an Initial Investigation TRE Workplan

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

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

E. Steps in Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE)

1. If the results of the implementation of the Facility's Initial Investigation TRE workplan indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 30 days of completion of the Initial Investigation TRE. The detailed workplan shall include, but not be limited to:

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

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

3. The Discharger shall initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the USEPA acute manual, chronic manual, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA/600/R-92/081 (Phase III) as guidance.
4. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required V.A.2.d and V.B.2.b of this MRP, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.

5. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance determination, if appropriate.
6. The Los Angeles 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.

F. Ammonia Removal

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

G. Reporting

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

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

1. The full report shall be submitted on or before the end of the month in which the SMR is submitted.
2. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the acute toxicity average limit or chronic toxicity limit or trigger and (4) printout of the ToxCalc or CETIS (Comprehensive Environmental Toxicity Information System) program results.
3. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test:
 - a. Sample date(s);
 - b. Test initiation date;
 - c. Test species;
 - d. End point values for each dilution (e.g., number of young, growth rate, percent survival);
 - e. 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.
5. The Discharger shall notify by telephone or electronically, the Los Angeles Regional Water Board of any toxicity exceedance of the limit or trigger within 24 hours of receipt of the results followed by a written report within 14 calendar days of receipt of the results. The verbal or electronic notification shall include the exceedance and the plan the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit,

with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECLAMATION MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

A. Visual Monitoring of Receiving Water Sampling Points

1. A visual observation station shall be established near EFF-001, discharge point to the storm sewer.
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 visual 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.

IX. OTHER MONITORING REQUIREMENTS

A. Storm Water Monitoring

1. **Rainfall Monitoring.** The Discharger shall measure and record the rainfall on each day of the month. This information shall be included in the monitoring report for that quarter.
2. **Visual Observation.** The Discharger shall make visual observations of all storm water discharge locations on at least one storm event per month that produces a significant storm water discharge to observe the presence of floating and suspended materials, oil and grease, discoloration, turbidity, and odor. A "significant storm

water discharge" is a continuous discharge of storm water for a minimum of one hour, or the intermittent discharge of storm water for a minimum of 3 hours in a 12-hour period.

B. SWPPP Status and Effectiveness Report

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

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the report shall so state.
3. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.
4. The Discharger shall inform the Los Angeles 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 Los Angeles Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit SMRs as searchable PDF documents. SMR documents that are less than 10 megabytes (MB) should be

emailed to losangeles@waterboards.ca.gov. Documents that are 10 MB or larger should be transferred to a disk and mailed to the address listed in section XI.B.8.c of this MRP. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

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

Table E-3. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
1/Day	Permit effective date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	May 1 August 1 November 1 February 1
1/Week	Permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
1/Month	Permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
1/Quarter	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
2/Year	Closest of January 1 or July 1 following (or on) permit effective date	January 1 through June 30 July 1 through December 31	August 1 February 1
1/Year	January 1 following (or on) permit effective date	January 1 through December 31	February 1

4. Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in Part 136.
5. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
 - a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

- b. Sample results less than the ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
 - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
6. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment H of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).
 7. Multiple Sample Data. When determining compliance with an AMEL or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
 - a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
 - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

8. The Discharger shall submit SMRs in accordance with the following requirements:

- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
- b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
- c. SMRs must be submitted to the Los Angeles Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

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

C. Other Reports

1. The Discharger shall report the results of any special studies, acute toxicity testing, TRE/TIE, SWPPP, BMPP, and SCP required by Special Provisions – VI.C.2 and 3 of this Order. The Discharger shall report the progress in satisfaction of compliance schedule dates specified in Special Provisions – VI.C.7 of this Order. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.
2. Within 90 days of the effective date of this permit, the Discharger is required to submit the following to the Los Angeles Regional Water Board:
 - a. Initial Investigation TRE workplan
 - b. Updated SWPPP
 - c. Pollutant Minimization Program (PMP)
3. By March 1 of each year, the Discharger shall submit an annual report to the Los Angeles Regional Water Board. The report shall contain the following:
 - a. Both tabular and graphical summaries of the monitoring data obtained during the previous year,

- b. A discussion on the compliance record and the corrective actions taken or planned to bring the discharge into full compliance with the waste discharge requirements,
 - c. A report discussing the following: 1) operation/maintenance problems; 2) changes to the facility operations and activities; 3) potential discharge of the pollutants associated with the changes and how these changes are addressed in the BMPP; 3) calibration of flow meters or other equipment/device used to demonstrate compliance with effluent limitations of this Order.
 - d. A report summarizing the quantities of all chemicals, listed by both trade and chemical names, which are used at the facility and which are discharged or have the potential to be discharged (See Section IX.B of the MRP, Attachment E).
 - e. A report on the status of the implementation and the effectiveness of the SWPPP and PMP.
4. This Los Angeles Regional Water Board requires the Discharger to file with the Los Angeles Regional Water Board, within 90 days after the effective date of this Order, a technical report on his preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:
- a. Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.
 - b. Evaluate the effectiveness of present facilities and procedures and state when they become operational.
 - c. Describe facilities and procedures needed for effective preventive and contingency plans.
 - d. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule contingent interim and final dates when they will be constructed, implemented, or operational.

This Los Angeles 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

Table of Contents

I.	Permit Information.....	F-3
II.	Facility Description.....	F-4
	A. Description of Wastewater Treatment or Controls.....	F-5
	B. Discharge Points and Receiving Waters.....	F-6
	C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data.....	F-6
	D. Compliance Summary.....	F-7
	E. Planned Changes.....	F-8
III.	Applicable Plans, Policies, and Regulations.....	F-8
	A. Legal Authorities.....	F-8
	B. California Environmental Quality Act (CEQA).....	F-8
	C. State and Federal Laws, Regulations, Policies, and Plans.....	F-8
	D. Impaired Water Bodies on CWA 303(d) List.....	F-10
	E. Other Plans, Policies and Regulations – Not Applicable.....	F-12
IV.	Rationale For Effluent Limitations and Discharge Specifications.....	F-12
	A. Discharge Prohibitions.....	F-13
	B. Technology-Based Effluent Limitations.....	F-14
	C. Water Quality-Based Effluent Limitations (WQBELs).....	F-15
	D. Final Effluent Limitations.....	F-29
	E. Interim Effluent Limitations – Not Applicable.....	F-35
	F. Land Discharge Specifications – Not Applicable.....	F-35
	G. Reclamation Specifications – Not Applicable.....	F-35
V.	Rationale for Receiving Water Limitations.....	F-35
	A. Surface Water.....	F-35
	B. Groundwater – Not Applicable.....	F-35
VI.	Rationale for Monitoring and Reporting Requirements.....	F-35
	A. Influent Monitoring – Not Applicable.....	F-35
	B. Effluent Monitoring.....	F-35
	C. Whole Effluent Toxicity Testing Requirements.....	F-36
	D. Receiving Water Monitoring.....	F-36
	E. Sediment Monitoring Requirements.....	F-36
	F. Other Monitoring Requirements.....	F-37
VII.	Rationale for Provisions.....	F-37
	A. Standard Provisions.....	F-37
	B. Special Provisions.....	F-37
VIII.	Public Participation.....	F-38
	A. Notification of Interested Parties.....	F-38
	B. Written Comments.....	F-39
	C. Public Hearing.....	F-40
	D. Nature of Hearing.....	F-40
	E. Parties to the Hearing.....	F-40
	F. Public Comments and Submittal of Evidence.....	F-41
	G. Hearing Procedure.....	F-41

H. Waste Discharge Requirements PetitionsF-41
I. Information and CopyingF-41
J. Register of Interested PersonsF-42
K. Additional Information.....F-42

List of Tables

Table F-1. Facility Information.....F-3
Table F-2. Historic Effluent Limitations and SMR Data – Discharge Point 001F-6
Table F-3. Basin Plan Beneficial UsesF-9
Table F-4. Summary of Technology-based Effluent Limitations – Discharge Points 001..F-15
Table F-5. Applicable Water Quality CriteriaF-18
Table F-6. WLAs for Ballona Creek for Discharge Point 001F-19
Table F-7. Summary of Reasonable Potential Analysis – Discharge Point 001F-21
Table F-8. Summary of Water Quality-based Effluent Limitations – Discharge Point 001 F-28
Table F-9. Summary of Final Effluent Limitations – Discharge Point 001F-32
Table F-10. Summary of Final Sediment Limitations for Discharge Point 001.....F-31

ATTACHMENT F – FACT SHEET

As described in section II of this Order, the Los Angeles Regional Water Board incorporates this Fact Sheet as findings of the Los Angeles Regional Water Board supporting the issuance of this Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the Facility.

Table F-1. Facility Information

WDID	4B191312001
Discharger	Equilon Enterprises, LLC dba Shell Oil Products US
Name of Facility	Shell Service Station #204-1944-0100
Facility Address	3801 Sepulveda Boulevard
	Culver City, CA 90230
	Los Angeles County
Facility Contact, Title and Phone	Joseph Lentini, Senior Project Manager, (310) 376-0649
Authorized Person to Sign and Submit Reports	Joseph Lentini, Senior Project Manager, (310) 376-0649 M.L. Elmore, Attorney-in-Fact, Equilon Enterprises, LLC
Mailing Address	20945 S. Wilmington Avenue, Carson CA 90810
Billing Address	Same as above
Type of Facility	Industrial (SIC code: 5541 Gasoline Service Station)
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	A
Pretreatment Program	N/A
Reclamation Requirements	N/A
Facility Permitted Flow	0.576 MGD of treated groundwater and storm water
Facility Design Flow	0.576 MGD of treated groundwater and storm water
Watershed	Ballona Creek Watershed
Receiving Water	Ballona Creek Reach 2
Receiving Water Type	Inland Surface Water

- A. Equilon Enterprises, LLC dba Shell Oil Products US (hereinafter Discharger) previously operated Shell Service Station #204-1944-0100 (hereinafter Facility), a service station with a remotely-located groundwater treatment system. The Facility is located at 3801 Sepulveda Boulevard, Culver City, California. The groundwater treatment system, which

has been operating since 1999, is located at 3816 Tuller Avenue, Culver City, California.

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

- B. The Facility discharges wastewater (treated stormwater and groundwater) to Ballona Creek Reach 2, a water of the United States, via a storm drain. The Discharger was previously regulated by Order R4-2008-0007 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0064289 adopted on March 6, 2008, and expired on February 10, 2013. The terms and conditions of the current Order have been administratively extended and remain in effect until new Waste Discharge Requirements and an NPDES permit are adopted pursuant to this Order. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.
- C. The Discharger filed a report of waste discharge and submitted an application for reissuance of its Waste Discharge Requirements (WDRs) and NPDES permit on April 24, 2012. The application was deemed complete on June 20, 2012. A site visit was conducted on October 11, 2012, to observe operations and collect additional data to develop permit limitations and conditions.

II. FACILITY DESCRIPTION

The Facility is located at the southwest corner of the intersection of Sepulveda and Venice Boulevards, at 3801 Sepulveda Boulevard in Culver City, California, as shown in the Site Location Map (Attachment B-1). The service station, currently operated by Tesoro Corporation, contains five, 12,000-gallon double-walled fiberglass underground storage tanks, four dispenser islands, and a kiosk. The groundwater treatment site is located on Metropolitan Water District (MWD) property (MWD Venice Pressure Control Facility) at 3816 Tuller Avenue, approximately 160 feet southwest of the Shell site.

The Facility is located near the City of Santa Monica's Charnock Wellfield and the Southern California Water Company Wellfield. The Charnock Wellfields drew water from the Charnock Sub-Basin consisting of the Shallow Unnamed Aquifer, and the Upper Silverado Aquifer, prior to their shut down in 1996 due to methyl tertiary butyl ether (MTBE) pollution. Groundwater pumped from the Charnock Wellfields was used for public distribution as municipal supply water. The Los Angeles Regional Water Board has identified the Facility as a potential source site contributing to the MTBE pollution of the Charnock Sub-Basin. The service station operations reportedly began in January 1940. Historically, station operations consisted of retail gasoline sales and automobile repair and maintenance. The site is currently an active service station with five 12,000-gallon double wall fiberglass underground storage tanks used to store gasoline and diesel; four dispenser islands; and a kiosk.

Investigations performed in the past at the site and in the vicinity of the site have indicated that the soil and groundwater are contaminated with total petroleum hydrocarbons (as gasoline), benzene, toluene, ethylbenzene, xylene, MTBE, tertiary butyl alcohol (TBA), and

other associated petroleum constituents. The soil and groundwater cleanup plans for the site were approved by the Los Angeles Regional Water Board and United States Environmental Protection Agency (U.S. EPA) on June 21, 1999. The remediation systems have been operational since 1999.

In addition, in a letter dated September 23, 2011, the Facility requested that the permit be amended to address the treatment and discharge of the stormwater which accumulates in the containment areas of the groundwater treatment system. The groundwater treatment system includes two separate containment areas; the Main Compound (total area 3,100 ft²) and the Tank Compound (total area 1,100 ft²). Stormwater within each containment area drains to a sump and is automatically pumped into the treatment system influent piping. The Discharger estimated annual volume of stormwater treated by the system is 16,000 gallons, or 44 gallons per day averaged over 365 days (assuming 12 inches of rainfall annually, with 50% of the collected stormwater lost to evaporation). Stormwater is treated using filtration, air stripping, and activated carbon prior to discharge.

A. Description of Wastewater Treatment or Controls

The remediation consists of soil vapor and groundwater extraction and treatment prior to discharge. The current active pumping well array consists of Wells MW-7M (located on station property); MW-8M and MW-11M (located on adjoining property west of the site); MW-14M and MW-15M (located southwest of the site on Tuller Avenue); MW-24M (located southwest of the site on Sawtelle Boulevard); MW-23S and MW-23M (located west of the site on Globe Avenue); MW-19S (located west of the site near Sawtelle Boulevard); and MW-25S (located west of the site on Biona Drive) as identified in Attachment B-2—Site Map Showing Treatment System. Wells designated "S" are screened within the Shallow Aquifer (SA) and wells designated "M" are screened within the Upper Silverado Aquifer (USA). During the site visit conducted October 11, 2012, Shell representatives (staff from Wayne Perry, Inc., a consulting firm representing the Equilon Enterprises) indicated that, since the submission of the ROWD in April 2012, Well MW-8S (located on adjoining property west of the site) is no longer active (remediation at that well might be completed but the well may be used again if the Facility determines that it is necessary) and Well MW-11S (located on the former Joffe property adjacent to the northwest side of the site) has been activated. In the future, wells may be added to or removed from the active pumping array as necessary to optimize groundwater remediation. The maximum combined groundwater pump rate will not exceed 400 gallons per minute (576,000 gallons per day).

Shell treats the groundwater and any collected stormwater using a combination of treatment technologies. Groundwater and stormwater flows into the first of three (4,500-gallon) inlet surge tanks. From this surge tank, a portion of the water flows through three (5,000-pound) granulated activated carbon bioreactors fed by a molasses feed for selenium removal. The wastewater is then filtered and treated with scale control and scale inhibitor/dispersant aids for control of iron and manganese. Wastewater is then pumped through either one, two, or three air stripping columns for removal of total petroleum hydrocarbons (as gasoline), benzene, toluene, ethylbenzene, xylene, and MTBE and then treated with carbon dioxide to adjust pH (previously pH had been adjusted as the last step in the treatment process, but this new system was added at

this point in the treatment process, approximately mid-way through the previous permit term). Finally, the water is pumped through two (5,000-pound) granular activated carbon adsorbers for polishing and TBA removal prior to discharge.

In the project description submitted with the ROWD and permit renewal application package, the Discharger indicates, with regard to the groundwater treatment system, that: *“Operating experience with the groundwater treatment system has shown that TPH-G, BTEX, and MTBE are generally removed in the air stripper down to non-detect levels by physical air stripping. Tertiary butyl alcohol (TBA) is also removed in the air stripper, through a combination of physical stripping and biodegradation. TBA that is not removed in the air stripping tower is removed in the GAC vessels through adsorption and/or biodegradation.”*

B. Discharge Points and Receiving Waters

The Discharge Point No. 001 is a Culver City storm drain located on Venice Boulevard near the intersection of Venice Boulevard and Sepulveda Boulevard (Latitude 34°00'45", Longitude 118°25'02"). The treated groundwater flows approximately 1.5 miles to Ballona Creek, a water of the United States.

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

Effluent limitations and monitoring data contained in the existing Order for discharges from Discharge Point 001 (Monitoring Location EFF-001) are summarized in Table F-2, below.

Table F-2. Historic Effluent Limitations and SMR Data – Discharge Point 001

Parameter	Units ¹	Average Monthly Effluent Limitations	Maximum Daily Effluent Limitations	Range of Reported Values
Flow	gpd	--	576,000	96,864 – 367,433
Temperature	°F	--	86	54 – 73
pH	S.U.	--	6.5 – 8.5	6.82 – 8.52
Oil and Grease	mg/L	10	15	2.0 – 4.4
	lbs/day	48	72	1.8 – 12.1
Total Settleable Solids	ml/L	0.1	0.3	<0.1
Total Suspended Solids	mg/L	50	75	1.0 - 4
	lbs/day	240	721	0.859 – 4.57
Turbidity	NTU	50	75	0.08 – 3.1
Hydrogen peroxide	mg/L	--	5	<0.2
	lbs/day	--	24	ND
Lead ²	µg/L	9.8	31	0.0583 – 1.19
	lbs/day	0.05	0.2	0.0002 – 0.0011
Benzene	µg/L	--	1	<0.14
	lbs/day	--	0.005	ND
Selenium ² (Final)	µg/L	4.5	6.8	<0.5 – 3.81
	lbs/day	0.02	0.03	ND – 0.004
Selenium ²	µg/L	--	20	0.94 – 11.6

Parameter	Units ¹	Average Monthly Effluent Limitations	Maximum Daily Effluent Limitations	Range of Reported Values
(Interim Ending 10/21/09)	lbs/day	--	0.1	0.002 – 0.026
1,1-Dichloroethane	µg/L	--	5	<0.27
	lbs/day	--	0.02	ND
1,1-Dichloroethylene	µg/L	3.2	6	<0.4
	lbs/day	0.02	0.03	ND
Ethylbenzene	µg/L	--	700	<0.22
	lbs/day	--	3.4	ND
Ethylene dibromide	µg/L	--	0.05	<0.02
	lbs/day	--	0.0002	ND
Methyl tertiary butyl ether	µg/L	--	13	<0.26
	lbs/day	--	0.06	ND
Naphthalene	µg/L	--	17	<0.5
	lbs/day	--	0.1	ND
Tertiary butyl alcohol	µg/L	--	12	<3.5
	lbs/day	--	0.06	ND
Tetrachloroethylene	µg/L	--	5	<0.51
	lbs/day	--	0.02	ND
Toluene	µg/L	--	150	<0.24
	lbs/day	--	0.72	ND
Total petroleum hydrocarbons	µg/L	--	100	<50
	lbs/day	--	0.48	ND
1,1,1-Trichloroethane	µg/L	--	200	<0.3
	lbs/day	--	1	ND
Trichloroethylene	µg/L	--	5	<0.3
	lbs/day	--	0.02	ND
Xylene	µg/L	--	1750	<0.71
	lbs/day	--	8.4	ND
Acute Toxicity	% survival		³	⁵
Chronic Toxicity	TU _c		⁴	⁵

ND = Non-detect

¹ Mass-based effluent limitations are based on a maximum discharge flow rate of 576,000 gpd.

² Expressed as Total Recoverable

³ 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.

⁴ The monthly median for chronic toxicity of 100% effluent shall not exceed 1 TU_c in a critical life stage test.

⁵ See Section II.D. for a toxicity compliance summary.

D. Compliance Summary

The Facility exceeded the chronic toxicity trigger of 1 TU_c for survival for *Ceriodaphnia dubia* (water flea) on October 13, 2008. The Facility initiated accelerated monitoring. The trigger was exceeded on December 1, December 15, 2008, and January 6, 2009. Per the requirements of the previous Order, the Facility submitted a Toxicity Reduction Evaluation (TRE) Action Plan on February 18, 2009. Per this TRE Action Plan, the Facility installed a carbon dioxide injection system to better control pH in the discharge

and perform a site clean-up to remove debris and bird waste. The Facility has not exceeded the chronic toxicity trigger since this time.

E. Planned Changes

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

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). 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 Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters.

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt a NPDES permit is exempt from the provisions of CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

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

1. Water Quality Control Plans. The Los Angeles Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (hereinafter Basin Plan) on June 13, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Ballona Creek are as follows:

Table F-3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Ballona Creek Reach 2	<p><u>Existing:</u> Non-contact Water Recreation (REC-2); Limited Water Contact Recreation (L-REC1)</p> <p><u>Potential:</u> Municipal and domestic water supply (MUN); Water Contact Recreation (REC-1); Warm Freshwater Habitat (WARM); and Wildlife Habitat (WILD)</p>

2. **Thermal Plan.** The State Water Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California (Thermal Plan) on January 7, 1971, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. Requirements of this Order implement the Thermal Plan and a white paper developed by Los Angeles Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. A maximum effluent temperature limitation of 85°F was determined to be appropriate for protection of aquatic life and is included in this Order.
3. **Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Table 3-1 through Table 3-4. However, those ammonia objectives were revised on March 4, 2004, by the Los Angeles Regional Water Board with the adoption of Resolution 2004-022, *Amendment to the Water Quality Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters Not Characteristic of Freshwater (including enclosed bays, estuaries and wetlands)* with the Beneficial Use designations for protection of "Aquatic Life". The ammonia Basin Plan amendment was approved by the Office of Administrative Law and the USEPA on September 14, 2004 and May 19, 2005, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with USEPA's 1999 ammonia criteria update.
4. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain federal water quality criteria for priority pollutants.
5. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters*,

Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Los Angeles Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

6. **Antidegradation Policy.** Federal regulation at 40 C.F.R. section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16. Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Los Angeles Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.
7. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) restrict 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.
8. **Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state, including protecting rare and endangered species. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

D. Impaired Water Bodies on CWA 303(d) List

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Los Angeles Regional Water Board plans to develop and adopt total maximum daily loads (TMDLs) that will specify wasteload allocations (WLAs) for point sources and load allocations (LAs) for non-point sources, as appropriate.

The USEPA approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2010 303(d) list and have been scheduled for TMDL development. Ballona Creek is listed for cadmium (sediment), coliform bacteria, cyanide, copper (dissolved), lead, selenium, toxicity, trash, virus (enteric) and zinc. The downstream, Ballona Creek Estuary, is listed for cadmium, chlordane (tissue & sediment), coliform bacteria, copper, DDT (tissue & sediment), lead (sediment), PAHs (sediment), PCBs (tissue & sediment), sediment toxicity, shellfish harvesting advisory, silver and zinc (sediment). The Ballona Creek Wetlands are listed for exotic vegetation, habitat alterations, hydromodification, reduced tidal flushing and trash.

Ballona Creek Metals TMDL: The TMDL for metals in Ballona Creek was approved by the Los Angeles Regional Water Board on July 7, 2005 (Resolution R05-007). The State Water Board approved the TMDL on October 20, 2005; OAL and USEPA approvals were received on December 9, 2005 and December 22, 2005, respectively. A revised metals TMDL was adopted by the Los Angeles Regional Water Board on September 6, 2007 (Resolution 2007-015). State Water Board, OAL, and USEPA approval occurred on June 17, 2008, October 6, 2008, and October 29, 2009, respectively. This metals TMDL designates WLAs for point sources to Ballona Creek, including those regulated through minor NPDES permits. For minor NPDES permits, the TMDL states, "Permit writers may translate applicable waste load allocations into effluent limits for the minor and general NPDES permits by applying the effluent limitation procedures in Section 1.4 of the State Water Resources Control Board's Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California or other applicable engineering practices authorized under federal regulations."

This permit implements the applicable WLAs as required in the TMDL, by applying the effluent limitation calculations provided in Section 1.4 of the SIP. Concentration-based WLAs are established for copper, lead, selenium, and zinc.

Ballona Creek Trash TMDL: The Ballona Creek Trash TMDL was adopted by the Los Angeles Regional Water Board on September 9, 2001. The TMDL established a numeric target of zero trash in Ballona Creek. The TMDL was to be implemented via storm water permits in a phased reduction for a period of 10 years. The Ballona Creek Trash TMDL was approved by the State Water Board on February 19, 2002, the OAL on July 18, 2002, and by USEPA on August 1, 2002. The TMDL became effective on August 28, 2002. The Los Angeles Regional Water Board made minor revisions to the TMDL and the Revised Ballona Creek Trash TMDL was adopted by the Los Angeles Regional Water Board on March 4, 2004 (Resolution 2004-0023). The State Water Board approved the TMDL on September 30, 2004 and OAL approved it on February 8, 2005. The Ballona Creek Trash TMDL became effective on August 11, 2005. This Trash TMDL will be implemented through the Municipal Separate Storm Sewer Systems (MS4) NPDES Permit Program.

Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacteria TMDL: The Ballona Creek Bacteria TMDL was approved by the Los Angeles Regional Water Board on June 8, 2006 (Resolution 2006-011). The State Water Board approved the TMDL on November 15, 2006; OAL and USEPA approvals were received on February 22, 2007, and March 26, 2007, respectively. The TMDL became effective on April 27, 2007. This Bacteria TMDL will be implemented through the MS4 NPDES Permit Program. A reconsideration of certain technical matters of this TMDL was approved by the Los Angeles Regional Water Board on June 7, 2012 (Resolution R12-008). This reconsideration is awaiting approval from the State Water Board, OAL, and USEPA.

Ballona Creek Estuary Toxic Pollutants TMDL: The Ballona Creek Estuary Toxic Pollutants TMDL was approved by the Los Angeles Regional Water Board on July 7, 2005 (Resolution R05-008). The State Water Board approved the TMDL on October 20, 2005; OAL and USEPA approvals were received on December 9, 2005 and December 22, 2005 respectively. The TMDL became effective on January 11, 2006. This Toxic Pollutants TMDL assigned concentration-based WLAs for sediments with respect to cadmium, copper, lead, silver, zinc, chlordane, DDTs, total PCBs and total PAHs to the minor NPDES permittees that discharge to Ballona Creek Estuary or its tributaries. This permit implements the applicable WLAs as required in this TMDL.

The provisions of this permit implement and are consistent with the assumptions and requirements of all waste load requirements established in the TMDLs applicable to discharges from this facility.

E. Other Plans, Policies and Regulations – Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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

The existing permit established effluent limitations for a number of pollutants believed to be present in the discharge of treated groundwater, but was not specific in the basis for this determination. The Facility is remediating groundwater contaminated as a result of operations at an automobile service station. Effluent limitations for Discharge Point 001 in the previous Order were established for TSS, oil and grease, and settleable solids because they are parameters typically used to characterize wastewater and treated groundwater; thus effluent limitations for these parameters have been established in this Order. Constituents contributing to turbidity are commonly present in groundwater and stormwater runoff; thus effluent limitations for turbidity were established in the previous Order, and will be established in this Order. Total petroleum hydrocarbons (as gasoline), benzene,

toluene, ethylbenzene, xylene, methyl tertiary butyl ether (MTBE), tertiary-butyl alcohol (TBA), tetrachloroethylene, 1,1-dichloroethane, 1,1-dichloroethylene, 1,1,1-trichloroethane, trichloroethylene, ethylene dibromide, and naphthalene are constituents commonly associated with the contaminated groundwater from this type of facility and prior investigations of the site have indicated that the soil and groundwater are contaminated with these pollutants. For the period from April 2008 through March 2012, the quarterly monitoring data for these parameters were all non-detects. However, since the detected concentrations of these contaminants in the groundwater provided the basis for initiating the cleanup, they will be retained to ensure the continued proper operation of the treatment system. An effluent limitation for acute toxicity and chronic toxicity are prescribed in the Order. Toxicity is an indicator of the combined effect of pollutants contained in the discharge. In addition, the previous Order established effluent limitations for hydrogen peroxide. During the site visit conducted October 11, 2012, the facility representatives indicated hydrogen peroxide has not been added to the wastewater since 2004 and in 2007, the Facility removed all hydrogen peroxide storage tanks from the site. The Discharger requested the Los Angeles Regional Water Board consider discontinuing the requirements for monitoring hydrogen peroxide. Given that there should be no potential for hydrogen peroxide to be in the discharge from this Facility; therefore, this Order discontinues effluent limitations and monitoring requirements for hydrogen peroxide.

Effluent limitations for copper, lead, selenium, and zinc are based on WLAs in the Ballona Creek Metals TMDL.

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

A. Discharge Prohibitions

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

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3.

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

- a. Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

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

2. Applicable Technology-Based Effluent Limitations

ELGs have not been developed for the discharges from groundwater treatment facilities or stormwater runoff from these facilities, thus, no effluent limitations based on ELGs are prescribed in this permit.

The previous Order states that effluent limitations for oil and grease, total settleable solids, total suspended solids, total petroleum hydrocarbons, and turbidity are water quality-based, however, an appropriate water-quality basis could not be identified. These are parameters typically used to monitor treatment performance at similar facilities and instead appear to be based upon BPJ and technology-based limits established by the Los Angeles Regional Water Board in other similar permits. The proposed permit also includes these limits, but characterizes them as technology-based based on BPJ in accordance with section 125.3. BPJ is the method used by permit writers to develop technology-based NPDES permit conditions on a case-by-case basis using all reasonably available and relevant data. BPJ limits are established in cases where effluent limitation guidelines are not available for a particular pollutant of concern. Authorization for BPJ limits is found under section 401(a)(1) of the Clean Water Act and under section 125.3. Therefore, the limitations for these pollutants were determined on a case-by-case basis and are similar to those established for similar facilities within the Los Angeles Region.

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

Table F-4. Summary of Technology-based Effluent Limitations – Discharge Points 001

Parameter	Units	Effluent Limitations	
		Monthly Average	Maximum Daily
Oil and Grease	mg/L	10	15
	lbs/day	48	72
Total Settleable Solids	ml/L	0.1	0.3
Total Suspended Solids	mg/L	50	75
	lbs/day	240	360
Turbidity	NTU	50	75

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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

40 C.F.R. section 122.44(d)(1)(i) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable

potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 C.F.R. section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

The specific procedures for determining reasonable potential and, if necessary, calculating WQBELs for the discharge of treated groundwater and stormwater 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 Los Angeles Regional Water Board adopted a Basin Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The beneficial uses applicable to the Ballona Creek Reach 2 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 Ballona Creek. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with section 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time. The CTR criteria for fresh water or human health for consumption of organisms, whichever is more stringent, are used to determine the need for water quality-based effluent limitations in this Order to protect the beneficial uses of Ballona Creek, a water of the United States in the vicinity of the discharge.

Some water quality criteria are hardness dependent. The Discharger did not provide hardness data for the receiving water (Ballona Creek) as part of their required CTR monitoring. The immediate receiving water is a storm drain, and is typically dry; the effluent water makes up most of the flow in the channel. The storm drain enters the receiving water approximately one mile from the facility; therefore, the sampling of receiving water was not feasible. Thus, hardness measurements were taken of the

effluent. The minimum hardness value reported for the effluent was 280 mg/L as CaCO₃. This value is used for determining reasonable potential to exceed hardness-dependent criteria for certain metals.

Table F-5 summarizes the applicable water quality criteria/objective for priority pollutants for which effluent limitations exist in the previous Order or that were reported in detectable concentrations in the groundwater and stormwater discharges through Discharge Point 001 evaluated based on data submitted to the Los Angeles Regional Water Board. These criteria were used in conducting the RPA for this Order.

Table F-5. Applicable Water Quality Criteria

CTR No.	Constituent	Selected Criteria	CTR/NTR Water Quality Criteria					
			Freshwater		Saltwater		Human Health for Consumption of:	
			Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms only
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1	Antimony	4,300	--	--				4,300
2	Arsenic	150	340	150				--
4	Cadmium	5.53	14.43	5.53				
5a	Chromium, III	481.01	4035.53	481.01				--
5b	Chromium, VI	11.43	16.29	11.43				--
6	Copper	22.49	36.93	22.49				--
7	Lead	11.80	302.80	11.80				--
9	Nickel	124.64	1121.06	124.64				4,600
10	Selenium	5	20	5				--
11	Silver	23.85	23.85	--				--
13	Zinc	286.68	286.68	286.68				--
19	Benzene	71	--	--				71
28	1,1-Dichloroethane	NC	--	--				--
30	1,1-Dichloroethylene	3.2	--	--				3.2
33	Ethylbenzene	29,000	--	--				29,000
35	Methyl Chloride	NC	--	--				
38	Tetrachloroethylene	8.85	--	--				8.85
39	Toluene	200,000	--	--				200,000
41	1,1,1-Trichloroethane	NC	--	--				--
43	Trichloroethylene	81	--	--				81
56	Acenaphthene	2,700	--	--				2,700
58	Anthracene	110,000	--	--				110,000
60	Benzo(a)Anthracene	0.049	--	--				0.049
61	Benzo(a)Pyrene	0.049	--	--				0.049
73	Chrysene	0.049	--	--				0.049
74	Dibenzo(a,h)Anthracene	0.049	--	--				0.049
86	Flouranthene	370	--	--				370
87	Flourene	14,000	--	--				14,000
94	Naphthalene	NC	--	--				--
99	Phenanthrene	NC	--	--				--
100	Pyrene	11,000	--	--				11,000
107	Chlordane	0.00059	2.4	0.0043				0.00059
108	4,4'-DDT	0.00059	1.1	0.001				0.00059
109	4,4'-DDE	0.00059	--	--				0.00059
110	4,4'-DDD	0.00084	--	--				0.00084
119-125	Total PCBs	0.00017	--	0.014				0.00017

N/A

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

"NC" indicates there are no criteria that are applicable to that particular pollutant.

On July 7, 2005, the Los Angeles Regional Water Board adopted Resolution R05-007 that established metals TMDLs for the Ballona Creek. An amendment to the metals TMDL for Ballona Creek was adopted by the Los Angeles Regional Water Board on September 6, 2007 (Resolution 2007-015). State Water Board, OAL, and USEPA approvals occurred on June 17, 2008, October 6, 2008, and October 29, 2009, respectively. This amendment designates WLAs for point sources to Ballona Creek, including those regulated through minor NPDES permits. For minor NPDES permits, the TMDL states, "Permit writers may translate applicable waste load allocations into effluent limits for the minor and general NPDES permits by applying the effluent limitation procedures in Section 1.4 of the State Water Resources Control Board's Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California or other applicable engineering practices authorized under federal regulations."

The amendment establishes concentration-based dry-weather waste load allocations (WLAs) and wet-weather WLAs for copper, lead, selenium, and zinc in discharges to Ballona Creek.

Table F-6 summarizes the applicable dry-weather and wet-weather WLAs which are applicable to the discharge from this Facility through Discharge Point 001 to Ballona Creek.

Table F-6. WLAs for Ballona Creek for Discharge Point 001

Parameter	Units	WLA	
		Dry-Weather	Wet-Weather
Copper	µg/L	24	18
Lead	µg/L	13	59
Selenium	µg/L	5	5
Zinc	µg/L	304	119

On July 7, 2005, the Los Angeles Regional Water Board adopted the Ballona Creek Estuary Toxic Pollutants TMDL (Resolution No. R05-008). The State Water Board approved the TMDL on October 20, 2005; OAL and USEPA approvals were received on December 9, 2005, and December 22, 2005, respectively. This TMDL Became effective on January 11, 2006. The Toxic Pollutants TMDL assigned concentration-based WLAs for sediments with respect to cadmium, copper, lead, silver, zinc, chlordane, DDTs, total PCBs, and total PAHs to the minor NPDES permittees that discharge to Ballona Creek Estuary or its tributaries. This Order implements the applicable WLAs as required in the TMDL.

3. Determining the Need for WQBELs

In accordance with Section 1.3 of the SIP, the Los Angeles Regional Water Board conducts a reasonable potential analysis (RPA) for each priority pollutant with an

applicable criterion or objective to determine if a WQBEL is required in the permit. The Los Angeles Regional Water Board analyzes effluent and receiving water data and identifies the maximum observed effluent concentration (MEC) and maximum background concentration (B) in the receiving water for each constituent. To determine reasonable potential, the MEC and the 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 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. Section 1.3 of the SIP provides the procedures for determining reasonable potential. The SIP specifies three triggers to complete an 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 Los Angeles Regional Water Board to conduct the RPA. Upon review of the data, and if the Los Angeles Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

Based on the RPA, there is reasonable potential to exceed water quality criteria at Discharge Serial No. 001 for selenium. There is also no statistical reasonable potential for the volatiles that the treatment system is used to remove. The fact that these contaminants were not detected is the result of the effective operation of the treatment system. However, since these contaminants are present in the groundwater prior to treatment, the limits for these volatiles and for selenium have been retained based on best professional judgment and Trigger 3, which includes other related information.

In addition to the RPA results, the Metals TMDL for Ballona Creek (Resolution 2007-015) establishes WLAs for point source dischargers to Ballona Creek for copper, lead, selenium, and zinc. Thus, reasonable potential has been established for these constituents. Consistent with the implementation portion of the Metals TMDL for Ballona Creek, effluent limitations have been calculated pursuant to Section 1.4 of the SIP based on the specified WLAs. The numeric target portion of the Metals TMDL for Ballona Creek specifies when the wet-weather and dry-weather criteria are applicable. Wet-weather effluent limitations are applicable when the flow in Ballona Creek is 40 cubic feet per second (cfs) or greater. Dry-weather effluent limitations are applicable when the flow in Ballona Creek is less than 40 cfs.

The Ballona Creek Estuary Toxic Pollutants TMDL establishes WLAs for cadmium, copper, lead, selenium, silver, zinc, chlordane, DDTs, Total PCBs, and Total PAHs in sediment. Effluent at this facility is primarily comprised of groundwater that has been effectively treated to remove sediments prior to discharge. When the amount of settleable solids and total suspended solids (TSS) present in the effluent are consistent with the levels reported during the past five years the Discharger will likely have difficulty collecting enough water to conduct sediment analysis. Therefore to ensure compliance with the WLAs established in the TMDL effluent limits are included and monitoring of the following parameters will be required: settleable solids, TSS, cadmium, copper, lead, silver, zinc, chlordane, DDTs (includes 4,4'-DDT, 4,4'-DDE, and 4,4'-DDD), Total PCBs (includes PCB-1016, PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, and PCB-1260), and PAHs (includes acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenz(a,h)anthracene, fluoranthene, flourene, naphthalene, phenanthrene and pyrene.

Table F-7. Summary of Reasonable Potential Analysis – Discharge Point 001

CTR No.	Constituent	Applicable Water Quality Criteria (C)	Max Effluent Conc. (MEC)	Maximum Detected Receiving Water Conc. (B)	RPA Result - Need Limit?	Reason
		µg/L	µg/L	µg/L		
1	Antimony	4,300	0.94	--	N	MEC<C
2	Arsenic	150	3.12	--	N	MEC<C
4	Cadmium	5.53	0.0594	--	Y	TMDL ²
5a	Chromium, III	481.01	0.583	--	N	MEC<C
5b	Chromium, VI	11.43	0.12	--	N	MEC<C
6	Copper	22.49	9.82	--	Y	TMDL ³
7	Lead	11.80	1.19	--	Y	TMDL ³
9	Nickel	124.64	6.02	--	N	MEC<C
10	Selenium	5	11.6	--	Y	MEC>C, TMDL ³
11	Silver	23.85	All are ND	--	Y	TMDL ²
13	Zinc	286.68	192	--	Y	TMDL ³
19	Benzene	71	All are ND	--	Y	BPJ ¹
28	1,1-Dichloroethane	NC	All are ND	--	N	--
30	1,1-Dichloroethylene	3.2	All are ND	--	Y	BPJ ¹
33	Ethylbenzene	29,000	All are ND	--	Y	BPJ ¹
35	Methyl Chloride	NC	0.77	--	N	--
38	Tetrachloroethylene	8.85	All are ND	--	Y	BPJ ¹
39	Toluene	200,000	All are ND	--	Y	BPJ ¹
41	1,1,1-Trichloroethane	NC	All are ND	--	N	--
43	Trichloroethylene	81	All are ND	--	Y	BPJ ¹
56	Acenaphthene	2,700	All are ND	--	Y	TMDL ²
58	Anthracene	110,000	All are ND	--	Y	TMDL ²

CTR No.	Constituent	Applicable Water Quality Criteria (C)	Max Effluent Conc. (MEC)	Maximum Detected Receiving Water Conc. (B)	RPA Result - Need Limit?	Reason
		µg/L	µg/L	µg/L		
60	Benzo(a)Anthracene	0.049	All are ND	--	Y	TMDL ²
61	Benzo(a)Pyrene	0.049	All are ND	--	Y	TMDL ²
73	Chrysene	0.049	All are ND	--	Y	TMDL ²
74	Dibenzo(a,h)Anthracene	0.049	All are ND	--	Y	TMDL ²
86	Flouranthene	370	All are ND	--	Y	TMDL ²
87	Flourene	14,000	All are ND	--	Y	TMDL ²
94	Naphthalene	NC	All are ND	--	N	--
99	Phenanthrene	NC	All are ND	--	N	--
100	Pyrene	11,000	All are ND	--	Y	BPJ ²
107	Chlordane	0.00059	All are ND	--	Y	BPJ ²
108	4,4'-DDT	0.00059	All are ND	--	Y	BPJ ²
109	4,4'-DDE	0.00059	All are ND	--	Y	BPJ ²
110	4,4'-DDD	0.00084	All are ND	--	Y	BPJ ²
119-125	Total PCBs	0.00017	All are ND	--	Y	BPJ ²
¹ BPJ = Best Professional Judgment. Based on Trigger 3—other information—the fact that these VOCs are present in the groundwater prior to treatment indicates that a WQBEL is required. ² Limits for these constituents are necessary to demonstrate compliance with Ballona Creek Estuary Toxic Pollutants TMDL limits for sediment. ³ Limits for these constituents are necessary to meet requirements of the Ballona Creek Metals TMDL.						

4. WQBEL Calculations

- a. If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one or more of the three procedures contained in Section 1.4 of the SIP. These procedures include:
 - i. If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).
 - ii. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).
 - iii. Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Los Angeles Regional Water Board.
- b. WQBELs for copper, lead, selenium, and zinc have been developed for discharges through Discharge Point 001 based on the WLAs established in the Ballona Creek Metals TMDL and following the procedures specified in Section 1.4 of the SIP.

- c. Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this Order, no dilution credit is included. However, in accordance with the reopener provision in Section VI.C.1.e, this Order may be reopened upon the submission by the Discharger of adequate information to establish appropriate dilution credits or a mixing zone, as determined by the Los Angeles Regional Water Board.
- d. WQBELs Calculation Example

Using copper concentration detected from Discharge Point 001 as an example, the following demonstrates how WQBELs were established for this Order. The tables in Attachment J summarize the development and calculation of all WQBELs for this Order using the process described below.

Concentration-Based Effluent Limitations

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

Calculation of aquatic life AMEL and MDEL:

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

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

- Where
- C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order, there are no hardness-dependent criteria; however, a pH of 6.6 s.u. was used for pH-dependent criteria.
 - D = The dilution credit, and
 - B = The ambient background concentration

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

$$\text{ECA} = C$$

Where a WLA has been established through a TMDL for a parameter, the WLA replacing C and is set equal to the ECA.

For copper, the applicable water quality criteria are:

$$\text{WLA}_{\text{wet}} = 18 \mu\text{g/L} = \text{ECA}_{\text{acute}}$$

$$WLA_{dry} = 24 \mu\text{g/L} = ECA_{chronic}$$

Step 2: For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. The dry-weather WLAs are based on chronic CTR criteria. The wet-weather WLAs are based on acute CTR criteria. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 3 of the SIP and will not be repeated here.

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

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

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

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

No. of Samples	CV	ECA Multiplier _{acute 99}	ECA Multiplier _{chronic 99}
39	0.68	0.29	0.49

$$LTA_{wet} = 18 \mu\text{g/L} \times 0.29 = 5.18 \mu\text{g/L}$$

$$LTA_{dry} = 24 \mu\text{g/L} \times 0.49 = 11.73 \mu\text{g/L}$$

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

Since acute criteria will be used to develop the wet-weather effluent limitations and chronic criteria will be used to develop the dry-weather effluent limitations we only have one criterion for each condition, thus both LTAs (wet and dry) will be used.

Step 4: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as Average Monthly Effluent Limitations (AMEL) and Maximum Daily Effluent Limitation (MDEL). The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the coefficient of variation (CV) of the data set, the number of samples (for AMEL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of

using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

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

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

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

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

No. of Samples Per Month	CV	Multiplier _{MDEL 99}	Multiplier _{AMEL 95}
4 (default)	0.68	3.48	1.63

$$AMEL_{\text{wet}} = 5.18 \times 1.63 = 8.5 \mu\text{g/L}$$

$$MDEL_{\text{wet}} = 5.18 \times 3.48 = 18 \mu\text{g/L}$$

$$AMEL_{\text{dry}} = 11.73 \times 1.63 = 19 \mu\text{g/L}$$

$$MDEL_{\text{dry}} = 11.73 \times 3.48 = 41 \mu\text{g/L}$$

Calculation of human health AMEL and MDEL:

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

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

This step is not applicable for the permit because none of the criteria for the provided WLAs are based on human health criteria.

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

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

This step is not applicable for the permit because none of the criteria for the provided WLAs are based on human health criteria.

Step 7: Select the lower of the AMEL and MDEL based on aquatic life and human health as the WQBEL for the Order.

For the parameters subject to the Metals TMDL, such as copper, a comparison is not necessary and the effluent limitations are applied directly:

For copper:

AMEL _{wet}	MDEL _{wet}	AMEL _{dry}	MDEL _{dry}
8.5 µg/L	18 µg/L	19 µg/L	41 µg/L

The wet-weather based effluent limitations are applicable when the maximum daily flow in Ballona Creek is 40 cfs or more. The dry-weather effluent limitations are applicable when the maximum daily flow in Ballona Creek is less than 40 cfs.

Effluent limitations for copper, lead, and zinc have been calculated as demonstrated above. For selenium, however, since this Metals TMDL has assigned only one criterion as both chronic and acute criteria, the calculated effluent limitations for selenium will apply to both wet and dry weather conditions.

For those parameters for which numeric water quality criteria exist in the CTR (i.e., benzene, 1,1-dichloroethylene, ethylbenzene, tetrachloroethylene, toluene, and trichloroethylene), an RPA was conducted to evaluate the need for WQBELs. Where the effluent monitoring data do not demonstrate statistical reasonable potential and data indicates that they are present in the groundwater prior to treatment, this Order retains effluent limits and monitoring requirements from the existing permit. Further, for those parameters where there are no applicable water quality criteria (i.e., 1,1-dichloroethane, ethylene dibromide, MTBE, naphthalene, tertiary-butyl alcohol, total petroleum hydrocarbons, 1,1,1-trichloroethane, and xylene) this Order retains the effluent limitations and monitoring requirements from the existing permit. Finally, the previous Order established effluent limitations for hydrogen peroxide. During the site visit conducted October 11, 2012, the facility representatives indicated hydrogen peroxide has not been added to the wastewater since 2004 and in 2007, the Facility removed all hydrogen peroxide storage tanks from the site. Given that there should be no potential for hydrogen peroxide to be in the discharge from this Facility, this Order discontinues effluent limitations and monitoring requirements for hydrogen peroxide.

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 this Order.

The Basin Plan lists temperature requirements for the receiving waters and references the Thermal Plan. Based on the requirements of the Thermal Plan and a white paper developed by Los Angeles Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and*

Enclosed Bays in the Los Angeles Region, a maximum effluent temperature limitation of 86 °F is included in the proposed permit. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. A maximum effluent temperature limitation of 86°F was determined to be appropriate for protection of aquatic life and is included in this Order.

6. Whole Effluent Toxicity (WET)

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses in aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota.

a. Acute Toxicity Limitation:

This Order includes acute toxicity limitations and requires acute toxicity monitoring. In accordance with the Basin Plan, the acute toxicity objective for discharges dictates that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Acute toxicity provisions in the Order are derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate acute toxicity monitoring and take further actions to identify the source of toxicity and to reduce acute toxicity.

b. Chronic Toxicity Limitation:

In addition to the Basin Plan requirements, section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. The discharge from Discharge Point 001 has been determined to have the reasonable potential to contribute chronic toxicity in receiving waters.

Chronic toxicity limits from the previous permit are included in this Order. These limits were derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate chronic toxicity monitoring

and take further actions to identify the source of toxicity and to reduce chronic toxicity. The monthly median limit of 1.0 TUC for chronic toxicity is based on *USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity (WET) Programs (Final)* May 31, 1996 (Chapter 2 – Developing WET Permitting Conditions, page 2-8). In cases where the effluent receives no dilution or where mixing zones are not allowed, the 1.0 TUC chronic criterion should be expressed as a monthly median. The “median” is defined as the middle value in a distribution, above which and below which lie an equal number of values. For example, if the results of the WET testing for a month were 1.5, 1.0, and 1.0 TUC, the median would be 1.0 TUC.

7. Results of WQBEL Calculations

Table F-8. Results of Water Quality-based Effluent Limitation Calculations – Discharge Point 001

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Temperature	°F	--	--	--	86
pH	s.u.	--	--	6.5	8.5
Cadmium, Total Recoverable	µg/L	4.5	9	--	--
Copper, Total Recoverable (Dry) ¹	µg/L	19	41	--	--
Copper, Total Recoverable (Wet) ²	µg/L	8.5	18	--	--
Lead, Total Recoverable (Dry)	µg/L	9	24	--	--
Lead, Total Recoverable (Wet)	µg/L	22	59	--	--
Selenium, Total Recoverable (Dry)	µg/L	3.9	8.7	--	--
Selenium, Total Recoverable (Wet)	µg/L	2.2	5.0	--	--
Silver, Total Recoverable	µg/L	12	24	--	--
Zinc, Total Recoverable (Dry)	µg/L	178	540	--	--
Zinc, Total Recoverable (Wet)	µg/L	39	119	--	--
Benzene ⁵	µg/L	71	142	--	--
1,1-Dichloroethylene ⁵	µg/L	3.2	6.4	--	--
Ethylbenzene ⁵	µg/L	29,000	58,000	--	--
Tetrachloroethylene ⁵	µg/L	8.9	17.8	--	--
Toluene ⁵	µg/L	200,000	401,000	--	--
Trichloroethylene ⁵	µg/L	81	162	--	--
Acenaphthene ⁶	µg/L	2,700	5,420	--	--
Anthracene ⁶	µg/L	110,000	221,000	--	--
Benzo(a)Anthracene ⁶	µg/L	0.049	0.098	--	--

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Benzo(a)Pyrene ⁶	µg/L	0.049	0.098	--	--
Chrysene ⁶	µg/L	0.049	0.098	--	--
Dibenzo(a,h)Anthracene ⁶	µg/L	0.049	0.098	--	--
Flouranthene ⁶	µg/L	370	742	--	--
Flourene ⁶	µg/L	14,000	28,100	--	--
Pyrene ⁶	µg/L	11,000	22,100	--	--
Chlordane ⁶	µg/L	0.00059	0.00118	--	--
4,4'-DDT ⁶	µg/L	0.00059	0.00118	--	--
4,4'-DDE ⁶	µg/L	0.00059	0.00118	--	--
4,4'-DDD ⁶	µg/L	0.00084	0.00169	--	--
Total PCBs ⁶	µg/L	0.00017	0.00034	--	--
Acute Toxicity	% survival	3			
Chronic Toxicity	TU _c	4			

- ¹ Dry-weather effluent limitations are applicable when the maximum daily flow in Ballona Creek is less than 40 cubic feet per second (cfs).
- ² Wet-weather effluent limitations are applicable when the maximum daily flow in Ballona Creek is equal to or greater than 40 cfs.
- ³ For any three consecutive 96-hour static or continuous flow bioassay tests must be at least 90%, with no single test producing less than 70% survival.
- ⁴ The monthly median for chronic toxicity of 100% effluent shall not exceed 1 TU_c in a critical life stage test.
- ⁵ WQBELs calculated for these constituents exceed the limits in the existing permit. The Discharger has remained in compliance with the existing limits. Therefore, to satisfy anti-backsliding requirements the existing limits will be retained.
- ⁶ Limits for these constituents added to demonstrate compliance with requirements of the Ballona Creek Estuary Toxic Pollutants TMDL.

D. Final Effluent Limitations

Effluent limitations for discharges of treated groundwater and storm water from Discharge Point 001 for oil and grease, total suspended solids, settleable solids, and turbidity are included consistent with Order R4-2008-0007. They are based on BPJ-based technology-based limitations established for similar facilities in the region. The Los Angeles Regional Water Board has determined that these numeric effluent limitations continue to be applicable to the Facility.

Further, effluent limitations for temperature and pH are included in the proposed Order for Discharge Point 001 in order to comply with requirements of the Basin Plan and Thermal Plan.

WQBELs for copper, lead, selenium, and zinc are newly established in this proposed Order based on the WLAs included in the Ballona Creek Metals TMDL.

1. Satisfaction of Anti-Backsliding Requirements

Section 402(o) of the CWA establishes statutory language prohibiting the backsliding of effluent limits. CWA Section 402(o)(2) outlines specific exceptions to the general prohibition against revising an existing technology based effluent limit that was developed on a case-by-case basis using best professional judgment to reflect less stringent effluent guidelines in a renewed, reissued, or modified permit. CWA Section 402(o)(2) provides that relaxed limitations may be allowed where:

- There have been material and substantial alternations or additions to the permitted facility that justify the relaxation.
- New information (other than revised regulations, guidance, or test methods) is available that was not available at the time of permit issuance and that would have justified a less stringent effluent limitation. If the effluent limitation was based on water quality standards, any changes must result in a decrease in pollutants discharged.
- Technical mistakes or mistaken interpretation of the law were made in issuing the permit under CWA section 402(a)(1)(b).
- Good cause exists because of events beyond the permittee's control (e.g. natural disasters) and for which there is no reasonably available remedy.
- The permit has been modified under CWA sections 301(c), 301(g), 301(h), 301(i), 301(k), 301(n), or 316(a).
- The permittee has installed and properly operated and maintained required treatment facilities but still has been unable to meet the effluent limitations (relaxation may be allowed only to the treatment levels actually achieved).

Limits for hydrogen peroxide have not been included since the facility no longer uses it and the data collected during the permit term did not demonstrate reasonable potential. This is new information and in this case the removal of the limit is allowed as per the exception to the anti-backsliding requirements.

This permit includes limits for lead and selenium that are based on the Ballona Creek TMDL for metals. This has resulted in less stringent limits for lead (both wet and dry weather) and less stringent daily maximum dry-weather selenium limits. These changes are acceptable as they are modifications resulting from CWA section 303(d)(4)(A).

As indicated in footnote 5 of Table F-8, the existing limits for benzene, 1,1-dichloroethane, 1,1-dichloroethylene, ethyl benzene, tetrachloroethylene, toluene, 1,1,1-trichloroethane, trichloroethylene, and naphthalene are retained as they are more stringent than the calculated WQBELs and the facility has been able to meet the existing limits for these constituents.

2. Satisfaction of Antidegradation Policy

40 CFR section 131.12 requires that the state water quality standards include an anti-degradation policy consistent with the federal policy. The State Water Board

established California's antidegradation policy in State Water Board Resolution 68-16. Resolution 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Los Angeles Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

The final limitations in this Order hold the Discharger to performance levels that will not cause or contribute to water quality impairment. This Order does not provide for an increase in the permitted design flow. Further, compliance with these requirements will result in the use of best practicable treatment or control of the discharge.

The permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and WQBELs for individual pollutants. Restrictions on these pollutants are discussed in section IV.B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements per sections 419.22(e)(2), 419.23(e)(2), and 419.24(e)(2).

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

Table F-9. Summary of Final Effluent Limitations – Discharge Point 001

Parameter	Units	Effluent Limitations				Basis ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
pH	S.U.	--	--	6.5	8.5	BP
Temperature	°F	--	--		86	TP, WP
Oil and Grease	mg/L	10	15	--	--	BPJ, E
	lbs/day ²	48	72	--	--	
Settleable Solids	ml/L	0.1	0.3	--	--	BPJ, E
Total Suspended Solids	mg/L	50	75	--	--	BPJ, E
	lbs/day ²	240	360	--	--	
Turbidity	NTU	50	75	--	--	E
Cadmium, Total Recoverable	µg/L	4.5	9	--	--	TMDL(T)
	lbs/day	0.022	0.043	--	--	
Copper, Total Recoverable (Dry) ³	µg/L	19	41	--	--	TMDL(M)
	lbs/day	0.091	0.20	--	--	
Copper, Total Recoverable (Wet) ⁴	µg/L	8.5	18	--	--	TMDL(M)
	lbs/day	0.041	0.086	--	--	
Lead, Total Recoverable (Dry)	µg/L	9	24	--	--	TMDL(M)
	lbs/day	0.043	0.115	--	--	
Lead, Total Recoverable (Wet)	µg/L	22	59	--	--	TMDL(M)
	lbs/day	0.11	0.28	--	--	
Selenium, Total Recoverable (Dry)	µg/L	3.9	8.7	--	--	TMDL(M)
	lbs/day	0.019	0.042	--	--	
Selenium, Total Recoverable (Wet)	µg/L	2.2	5.0	--	--	TMDL(M)
	lbs/day	0.011	0.024	--	--	
Silver, Total Recoverable	µg/L	12	24	--	--	TMDL(T)
	lbs/day	0.058	0.115	--	--	
Zinc, Total Recoverable (Dry)	µg/L	180	542	--	--	BPJ, E
	lbs/day	0.9	2.6	--	--	
Zinc, Total Recoverable (Wet)	µg/L	39	119	--	--	BPJ, E
	lbs/day	0.19	0.57	--	--	
Benzene ⁷	µg/L	--	1	--	--	BPJ, E
	lbs/day	--	0.005	--	--	
1,1-Dichloroethane	µg/L	--	5	--	--	BPJ, E
	lbs/day	--	0.02	--	--	
1,1-Dichloroethylene ⁷	µg/L	3.2	6	--	--	BPJ, E
	lbs/day	0.02	0.03	--	--	
Ethylbenzene ⁷	µg/L	--	700	--	--	BPJ, E
	lbs/day	--	3.4	--	--	
Ethylene dibromide	µg/L	--	0.05	--	--	BPJ, E
	lbs/day	--	0.0002	--	--	
Methyl tertiary butyl ether	µg/L	--	13	--	--	BPJ, E
	lbs/day	--	0.06	--	--	
Napthalene	µg/L	--	17	--	--	BPJ, E
	lbs/day	--	0.1	--	--	

Parameter	Units	Effluent Limitations				Basis ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Tertiary butyl alcohol	µg/L	--	12	--	--	BPJ, E
	lbs/day	--	0.06	--	--	
Tetrachloroethylene ⁷	µg/L	--	5	--	--	BPJ, E
	lbs/day	--	0.02	--	--	
Toluene ⁷	µg/L	--	150	--	--	BPJ, E
	lbs/day	--	0.72	--	--	
Total petroleum hydrocarbons	µg/L	--	100	--	--	BPJ, E
	lbs/day	--	0.48	--	--	
1,1,1-Trichloroethane	µg/L	--	200	--	--	BPJ, E
	lbs/day	--	1	--	--	
Trichloroethylene ⁷	µg/L	--	5	--	--	BPJ, E
	lbs/day	--	0.02	--	--	
Xylene	µg/L	--	1750	--	--	BPJ, E
	lbs/day	--	8.4	--	--	
Acenaphthene ⁸	µg/L	2,700	5,420	--	--	TMDL(T)
	lbs/day	13	26	--	--	
Anthracene ⁸	µg/L	110,000	221,000	--	--	TMDL(T)
	lbs/day	528	1,060	--	--	
Benzo(a)Anthracene ⁸	µg/L	0.049	0.098	--	--	TMDL(T)
		0.00024	0.0005	--	--	
Benzo(a)Pyrene ⁸	µg/L	0.049	0.098	--	--	TMDL(T)
		0.00024	0.0005	--	--	
Chrysene ⁸	µg/L	0.049	0.098	--	--	TMDL(T)
		0.00024	0.0005	--	--	
Dibenzo(a,h)Anthracene ⁸	µg/L	0.049	0.098	--	--	TMDL(T)
		0.00024	0.0005	--	--	
Flouranthene ⁸	µg/L	370	742	--	--	TMDL(T)
		1.78	3.56	--	--	
Flourene ⁸	µg/L	14,000	28,100	--	--	TMDL(T)
		67	135	--	--	
Pyrene ⁸	µg/L	11,000	22,100	--	--	TMDL(T)
		53	106	--	--	
Chlordane ⁸	µg/L	0.00059	0.00118	--	--	TMDL(T)
		0.000003	0.000006	--	--	
4,4'-DDT ⁸	µg/L	0.00059	0.00118	--	--	TMDL(T)
		0.000003	0.000006	--	--	
4,4'-DDE ⁸	µg/L	0.00059	0.00118	--	--	TMDL(T)
		0.000003	0.000006	--	--	
4,4'-DDD ⁸	µg/L	0.00084	0.00169	--	--	TMDL(T)
		0.000004	0.000008	--	--	
Total PCBs ⁸	µg/L	0.00017	0.00034	--	--	TMDL(T)
		0.0000008	0.0000016	--	--	

Parameter	Units	Effluent Limitations				Basis ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Acute Toxicity	% survival			5		BPJ, E
Chronic Toxicity	TU _c			6		BPJ, E

¹ E = Existing Limitation; BP = Basin Plan; TP = Thermal Plan; WP = White Paper; BPJ = Best Professional Judgment; TMDL(T) = Ballona Creek Estuary Toxic Pollutants TMDL; TMDL(M) = Ballona Creek Metals TMDL

² Mass-based (lbs/day) effluent limitations are based on a maximum discharge flow rate of 0.576 MGD.

³ Dry-weather effluent limitations are applicable when the maximum daily flow in Ballona Creek is less than 40 cubic feet per second (cfs).

⁴ Wet-weather effluent limitations are applicable when the maximum daily flow in Ballona Creek is equal to or greater than 40 cfs

⁵ The acute toxicity of the effluent shall be such that:

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

⁶ The monthly median for chronic toxicity of 100% effluent shall not exceed 1 TU_c in a critical life stage test.

⁷ WQBELs calculated for these constituents exceeded the limits in the existing permit. The Discharger has remained in compliance with the existing limits. Therefore, to satisfy anti-backsliding requirements the existing limits are retained.

⁸ Limits for these constituents added to demonstrate compliance with requirements of the Ballona Creek Estuary Toxic Pollutants TMDL.

4. Mass-based Effluent Limitations

Mass-based effluent limitations based upon a maximum discharge flow rate of 0.576 MGD, as noted in the Discharger's permit renewal application.

$$\text{Mass (lbs/day)} = \text{flowrate (mgd)} \times 8.34 \times \text{effluent limitation (mg/L)}$$

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

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

Flowrate = discharge flow rate (mgd)

Table F-10. Summary of Final Sediment Limitations for Discharge Point 001

Parameter	Units	Contaminant Waste Load Allocations	Basis ¹
Cadmium, Total Recoverable	mg/kg	1.2	TMDL
Copper, Total Recoverable	mg/kg	34	TMDL
Lead, Total Recoverable	mg/kg	46.7	TMDL
Silver, Total Recoverable	mg/kg	1.0	TMDL
Zinc, Total Recoverable	mg/kg	150	TMDL
Chlordane	µg/kg	0.5	TMDL
DDTs ¹	µg/kg	1.58	TMDL
Total PCBs ²	µg/kg	22.7	TMDL
Total PAHs ³	µg/kg	4,022	TMDL

¹ TMDL = Ballona Creek Estuary Toxic Pollutants TMDL

² The State Water Resources Control Board Water Quality Control Plan for Enclosed Bays and Estuaries—Part 1 Sediment Quality, August 25, 2009 (Sediment Quality Plan), listed chemical analytes needed to characterize sediment contamination exposure and effect. According to Attachment A of the Sediment Quality Plan, DDTs shall mean the sum of: o,p'-DDE, o,p'-DDD, o,p'-DDT, p,p'-DDD, p,p'-DDE, and p,p'-DDT.

³ According to Attachment A of the Sediment Quality Plan, total PCBs (polychlorinated biphenyls) shall mean the sum of the following PCB congeners: 2,4'-Dichlorobiphenyl, 2,2',5'-Trichlorobiphenyl, 2,4,4'-Trichlorobiphenyl, 2,2',3,5'-Tetrachlorobiphenyl, 2,2',5,5'-Tetrachlorobiphenyl, 2,3',4,4'-Tetrachlorobiphenyl, 2,2',4,5,5'-Pentachlorobiphenyl, 2,3,3',4,4'-Pentachlorobiphenyl, 2,3',4,4',5-Pentachlorobiphenyl, 2,2',3,3',4,4'-Hexachlorobiphenyl, 2,2',3,4,4',5'-Hexachlorobiphenyl, 2,2',4,4',5,5'-Hexachlorobiphenyl, 2,2',3,3',4,4',5-Heptachlorobiphenyl, 2,2',3,4,4',5,5'-Heptachlorobiphenyl, 2,2',3,4,4',5,5',6-Heptachlorobiphenyl, 2,2',3,3',4,4',5,6-Octachlorobiphenyl, 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl, and Decachlorobiphenyl.

⁴ According to Attachment A of the Sediment Quality Plan, total PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of: Acenaphthene, Anthracene, Biphenyl, Naphthalene, 2,6-dimethylnaphthalene, Fluorene, 1-methylnaphthalene, 2-methylnaphthalene, 1-methylphenanthrene, Phenanthrene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(e)pyrene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Perylene, and Pyrene.

E. Interim Effluent Limitations – Not Applicable

F. Land Discharge Specifications – Not Applicable

G. Reclamation Specifications – Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (section 131.12) and State Water Board Resolution 68-16. Receiving water limitations in this Order are included to ensure protection of beneficial uses of the receiving water and are based on the water quality objectives contained in the Basin Plan.

B. Groundwater – Not Applicable

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

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

A. Influent Monitoring – Not Applicable

B. Effluent Monitoring

The Order requires daily monitoring of effluent flow, weekly monitoring for pH and temperature, and monthly monitoring for oil and grease, settleable solids, TSS, turbidity, lead, selenium, nitrate+nitrite (as Nitrogen), sulfides, ethylene dibromide, methanol,

MTBE, naphthalene, TBA, tetrachloroethylene, TPH, xylene, benzene, 1,1-dichloroethane, 1,1-dichloroethylene, ethylbenzene, 1,1,1-trichloroethane, trichloroethylene, and toluene. Further, the proposed Order continues to require monthly monitoring for general minerals, but for clarity, includes a list of what is included in this group (i.e., calcium, iron, magnesium, manganese, potassium, sodium, chloride, hardness, sulfate, and total dissolved solids). In addition, in order to determine compliance with effluent limitations, the proposed monitoring plan establishes new monthly monitoring requirements for copper and zinc. Other priority pollutants are monitored annually.

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

D. Receiving Water Monitoring

1. Surface Water

This Order includes receiving water limitations and therefore, monitoring requirements are included in the MRP (Attachment E) to determine compliance with the receiving water limitations established in Limitations and Discharge Requirements, Receiving Water Limitations, Section V.A. The Discharger is 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, visible film or grease, and other observations detailed in the MRP.

The Discharger must provide maximum daily flow data for Ballona Creek with the quarterly monitoring reports for the days when discharges occur at the Facility. Flow data for Ballona Creek is currently monitored between Sawtelle Boulevard and Sepulveda Boulevard by Los Angeles County Department of Public Works at Stream Gage No. F38C-R. The Discharger shall report the maximum daily flow values from data collected by Los Angeles County at Stream Gage No. F38C-R. This information is necessary to determine the wet-weather and dry-weather conditions of the creek, as defined in the Ballona Creek Metals TMDL.

2. Groundwater – Not Applicable

E. Sediment Monitoring Requirements

The Ballona Creek Estuary Toxic Pollutants TMDL assigned concentrations-based WLAs for sediments with respect to cadmium, copper, lead, silver, zinc, chlordane, DDTs, Total PCBs, and Total PAHs for the minor NPDES permittees that discharge to Ballona Creek

Estuary or its tributaries. This Order implements the applicable WLAs for sediment. Effluent at this facility is primarily comprised of groundwater that has been effectively treated to remove sediments prior to discharge. When the amount of settleable solids and total suspended solids (TSS) present in the effluent are within the limits established in this Order it may be infeasible for the Discharger to collect enough water to obtain enough sediment to conduct analysis. The Discharger also performs effluent monitoring of the water column, including annual monitoring for priority pollutants. To verify that toxic substances are not present in the effluent limits for the following constituents have been included in this Order: cadmium, silver, chlordane, DDTs (includes 4,4'-DDT, 4,4'-DDE, and 4,4'-DDD), Total PCBs (includes PCB-1016, PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, and PCB-1260), and PAHs (includes acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, naphthalene, and pyrene).

F. Other Monitoring Requirements

1. Storm water monitoring requirements

The discharge is comprised of storm water runoff and treated groundwater. The collected storm water is treated along with the extracted groundwater prior to discharge. Since the discharge enters the storm drain and travels approximately one mile prior to entering Ballona Creek no visual observations are required.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

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

B. Special Provisions

1. Reopener Provisions

These provisions are based on section 123 and the previous Order. The Los Angeles Regional Water Board may reopen the permit to modify permit conditions

and requirements. Causes for modifications include the promulgation of new federal regulations, modification in toxicity requirements, or adoption of new regulations by the State Water Board or Los Angeles Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements – Not Applicable

3. Best Management Practices and Pollution Prevention

- a. Storm Water Pollution Prevention Plan.** The objective of this Order is to protect the beneficial uses of the receiving waters. To meet this objective, this Order requires the Discharger to update and continue to implement an updated SWPPP and address storm water runoff to the storm drain that discharges to Ballona Creek. This is consistent with the SWPPP requirements in the *NPDES General Permit for Storm Water Discharges Associated with Industrial Activity* (State Water Board Order 97-03-DWQ, NPDES Permit No. CAS000001). A SWPPP outlines site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into surface waters. This provision is based on section 122.44(k) and includes the requirement to develop a SWPPP.

4. Construction, Operation, and Maintenance Specifications

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

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

6. Other Special Provisions – Not Applicable

7. Compliance Schedules – Not Applicable

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for Equilon Enterprises, LLC dba Shell Oil Products US – Shell Service Station. As a step in the WDR adoption process, the Los Angeles Regional Water Board staff has developed tentative WDRs. The Los Angeles Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

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

The Los Angeles Regional Water Board's web address is <http://www.waterboards.ca.gov/losangeles> where the public has been provided access to the agenda including any changes in dates and locations.

B. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments must be submitted via email to losangeles@waterboards.ca.gov with a copy to tsiebels@waterboards.ca.gov.

To be responded to by staff, included in the Board's agenda folder and considered by the Los Angeles Regional Water Board, written comments were due at the Los Angeles Regional Water Board offices by 5:00 p.m. on **May 14, 2013**.

C. Public Hearing

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

Date: **June 6, 2013**
Time: **9:00 a.m.**
Location: **Metropolitan Water District of Southern California Board Room
700 North Alameda Street
Los Angeles, CA**

Interested persons were invited to attend. At the public hearing, the Los Angeles Regional Water Board heard testimony pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested 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.

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

D. Nature of Hearing

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

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

E. Parties to the Hearing

The following are the parties to this proceeding:

1. The applicant/permittee

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

F. Public Comments and Submittal of Evidence

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to the above address. To be evaluated and responded to by staff, included in the Board's agenda folder, and fully considered by the Board, written comments must be received no later than close of business **May 14, 2013**. Comments or evidence received after that date will be submitted, ex agenda, to the Board for consideration, but only included in administrative record with express approval of the Chair during the hearing. Additionally, if the Board receives only supportive comments, the permit may be placed on the Board's consent calendar, and approved without an oral testimony.

G. Hearing Procedure

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

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

H. Waste Discharge Requirements Petitions

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

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

I. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45

p.m., Monday through Friday. Copying of documents may be arranged through the Los Angeles Regional Water Board by calling (213) 576- 6600.

J. Register of Interested Persons

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

K. Additional Information

Requests for additional information or questions regarding this Order should be directed to Thomas Siebels at (213) 576-6756.

ATTACHMENT G – STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

I. Implementation Schedule

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

II. Objectives

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

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

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

III. Planning and Organization

A. Pollution Prevention Team

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

B. Review Other Requirements and Existing Facility Plans

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

IV. Site Map

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

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

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

IMPLEMENTATION PHASE

Train employees
Implement BMPs
Conduct recordkeeping and reporting

EVALUATION / MONITORING

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

The following information shall be included on the site map:

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

V. List of Significant Materials

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

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

VI. Description of Potential Pollutant Sources

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

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

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

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

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

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

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

6. **Soil Erosion.** Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.
- B. The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. This information should be summarized similar to Table B. The last column of Table B, "Control Practices", should be completed in accordance with Section A.8. below.

VII. Assessment of Potential Pollutant Sources

- A. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in A.6. above to determine:
 1. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and
 2. Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. Facility operators shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.
- B. Facility operators shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be present in storm water discharges and authorized non-storm water discharges.

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

VIII. Storm Water Best Management Practices

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

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

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

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

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

A. Non-Structural BMPs

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

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

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

B. Structural BMPs.

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

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

IX. Annual Comprehensive Site Compliance Evaluation

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

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

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

X. SWPPP General Requirements

- A. The SWPPP shall be retained on site and made available upon request of a representative of the Los Angeles Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.
- B. The Los Angeles 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 Los Angeles 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 Los Angeles 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 Los Angeles Regional Water Board and/or local agency that the revisions have been implemented.
- C. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (i) may significantly increase the quantities of pollutants in storm water discharge, (ii) cause a new area of industrial activity at the facility to be exposed to storm water, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.
- D. The SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a facility operator determines that the SWPPP is in violation of any requirement(s) of this Permit.
- E. When any part of the SWPPP is infeasible to implement due to proposed significant structural changes, the facility operator shall submit a report to the Los Angeles 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 Los Angeles Regional Water Board approval and/or modifications. Facility operators shall provide written notification to the Los Angeles Regional Water Board within 14 days after the SWPPP revisions are implemented.
- F. The SWPPP shall be provided, upon request, to the Los Angeles Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Los Angeles Regional Water Board under Section 308(b) of the Clean Water Act.

ATTACHMENT H – STATE WATER BOARD MINIMUM LEVELS (MICROGRAMS/LITER)

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

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

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

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

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

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

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

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

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

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

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

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

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

Techniques:

GC - Gas Chromatography

GCMS - Gas Chromatography/Mass Spectrometry

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

LC - High Pressure Liquid Chromatography

FAA - Flame Atomic Absorption

GFAA - Graphite Furnace Atomic Absorption

HYDRIDE - Gaseous Hydride Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

ICP - Inductively Coupled Plasma

ICPMS - Inductively Coupled Plasma/Mass Spectrometry

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

DCP - Direct Current Plasma

COLOR – Colorimetric

ATTACHMENT I – LIST OF PRIORITY POLLUTANTS

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

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

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

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

ATTACHMENT J – SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Final Report Attachment A
Draft Reasonable Potential Analysis (Per Sections 1.3 and 1.4 of BPP)

CTM	Parameter	Units	CV	MEC	Risk/Inlet	CTR Water Quality Criteria (ug/L)			Human Health for consumption (ug/L)	REASONABLE POTENTIAL ANALYSIS (RPA)				RPA Result - Report Limit?	Bases
						C acute + C chronic = CMC (ug/L)	C acute = CMC (ug/L)	C chronic = CCG (ug/L)		WQS & exposure	Are all B data points (Y/N)?	Are all B data points (Y/N)?	Enter the predicted B max conc (ug/L)		
70	oxytetracycline	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
71	2-Chlorophenol	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
72	4-Chlorophenol	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
73	Chloroform	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
74	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
75	1,2-Dichloroethane	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
76	1,2-Dichloroethene	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
77	1,4-Dichlorobenzene	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
78	1,1-Dichloroethene	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
79	Diethyl ether	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
80	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
81	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
82	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
83	2,4-Dichlorophenoxyacetic acid	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
84	Dimethyl Phthalate	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
85	1,2-Dibromodichloroethane	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
86	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
87	Dioxane	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
88	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
89	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
90	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
91	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
92	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
93	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
94	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
95	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
96	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
97	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
98	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
99	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
100	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
101	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
102	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
103	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
104	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
105	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
106	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
107	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
108	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
109	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
110	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
111	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
112	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
113	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
114	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
115	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
116	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
117	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
118	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
119	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)
120	Diethylamine	ug/L	0.0	No Criteria	0.0000	0.0000	0.0000	0.0000	0.0000	No	No	No	No	No	UC (Report NO MCL-C & M)

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

CMT#	Parameters	HUMAN HEALTH CALCULATIONS				ADVISED USE CALCULATIONS				LIMITS		Recommendation	Comment	
		AMEL In = ECA = G In O only	AMEL/AMEL- multiplier	MODEL In	Originator only	ECA acute multiplier (In 7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier at 0.5			MODEL eq at 0.5
1	Arsenic													No Limit
2	Beryllium													No Limit
3	Bromine													No Limit
4	Cadmium													No Limit
5a	Chromium (6)													No Limit
5b	Chromium (VI)													No Limit
6	Copper													No Limit
7	Lead													No Limit
8	Mercury													No Limit
9	Nickel													No Limit
10	Iron													No Limit
11	Vanadium													No Limit
12	Zinc													No Limit
13	Uranium													No Limit
14	Strontium													No Limit
15	Asbestos													No Limit
16	2,3,7,8 TCDF													No Limit
17	Aroclor													No Limit
18	Acrylonitrile													No Limit
19	Benzo(a)pyrene													No Limit
20	Benzo(b)fluoranthene													No Limit
21	Benzo(k)fluoranthene													No Limit
22	Chrysene													No Limit
23	Dibenz(a,h)anthracene													No Limit
24	Fluorene													No Limit
25	Indeno(1,2,3-cd)perylene													No Limit
26	Benzo(e)pyrene													No Limit
27	Benzo(g)perylene													No Limit
28	Benzo(i)perylene													No Limit
29	Benzo(j)perylene													No Limit
30	Benzo(l)perylene													No Limit
31	Benzo(m)perylene													No Limit
32	Benzo(n)perylene													No Limit
33	Benzo(o)perylene													No Limit
34	Benzo(p)perylene													No Limit
35	Benzo(q)perylene													No Limit
36	Benzo(r)perylene													No Limit
37	Benzo(s)perylene													No Limit
38	Benzo(t)perylene													No Limit
39	Benzo(u)perylene													No Limit
40	Benzo(v)perylene													No Limit
41	Benzo(w)perylene													No Limit
42	Benzo(x)perylene													No Limit
43	Benzo(y)perylene													No Limit
44	Benzo(z)perylene													No Limit
45	Benzo(aa)perylene													No Limit
46	Benzo(ab)perylene													No Limit
47	Benzo(ac)perylene													No Limit
48	Benzo(ad)perylene													No Limit
49	Benzo(ae)perylene													No Limit
50	Benzo(af)perylene													No Limit
51	Benzo(ag)perylene													No Limit
52	Benzo(ah)perylene													No Limit
53	Benzo(ai)perylene													No Limit
54	Benzo(aj)perylene													No Limit
55	Benzo(ak)perylene													No Limit
56	Benzo(al)perylene													No Limit
57	Benzo(am)perylene													No Limit
58	Benzo(an)perylene													No Limit
59	Benzo(ao)perylene													No Limit
60	Benzo(ap)perylene													No Limit
61	Benzo(aq)perylene													No Limit
62	Benzo(ar)perylene													No Limit
63	Benzo(as)perylene													No Limit
64	Benzo(at)perylene													No Limit
65	Benzo(au)perylene													No Limit
66	Benzo(av)perylene													No Limit
67	Benzo(aw)perylene													No Limit
68	Benzo(ax)perylene													No Limit
69	Benzo(ay)perylene													No Limit

CTR#	Parameters	Units	CV	MFC	C10 Water Quality Criteria (ug/L)		Human Health (at microconsumption of)		REASONABLE POTENTIAL ANALYSIS (RPA)									
					C acute = C chronic = CCG Int	C chronic = CCG Int	Ways & systems	Digestive Org	Are all B data points (Y/N)?	B Available (Y/N)?	Enter the data points min (ug/L)	Enter the pollutant B detected max (ug/L)	If all B is ND, is MFC < C?	If B < C, effluent limit required	Tier 3 - other info, Y	RPA Result - Meet Level?	Reason	
70	Barbituric Acid	ug/L	0.0	No Criteria													No Criteria	US (Hazard No. MD, DC & M)
71	2-Chlorophenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
72	2-Chlorophenyl Dipropyl Ether	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
73	2-Chlorophenyl Dipropyl Ether	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
74	2-Chlorophenyl Dipropyl Ether	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
75	2-Chlorophenyl Dipropyl Ether	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
76	1,3-Dichlorobenzene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
77	1,4-Dichlorobenzene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
78	3,3-Dichlorobenzene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
79	Diethyl Phthalate	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
80	Diethyl Phthalate	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
81	Di-n-Propyl Phthalate	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
82	2,4-Dinitrobenzene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
83	2,6-Dinitrobenzene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
84	Di-n-Octyl Phthalate	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
85	1,3-Diphenylpropane	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
86	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
87	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
88	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
89	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
90	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
91	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
92	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
93	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
94	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
95	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
96	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
97	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
98	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
99	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
100	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
101	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
102	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
103	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
104	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
105	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
106	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
107	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
108	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
109	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
110	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
111	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
112	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
113	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
114	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
115	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
116	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
117	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
118	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
119	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)
120	Phenanthrene	ug/L	0.0	No Criteria														US (Hazard No. MD, DC & M)

Notes:
 ND = Undetermined due to lack of data
 C = Water Quality Criteria
 B = Background receiving water data
 MFC = Maximum Feasible Concentration
 CV = Coefficient of Variation
 US = United States
 MD = Maryland
 DC = District of Columbia
 M = Massachusetts

CTER	Parameters	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS						LIMITS		Recommendation	Comment	
		AMEL In = ECA = C In D only	MOEL/AMEL multiplier	MOE(L/In)	ECA acute multiplier (p.3)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier p.5	AMEL in lbs	MOEL in lbs			MOEL/AMEL
1	Arsenic													No Limit	
2	Benzene													No Limit	
3	Chloroform													No Limit	
4	Cadmium													No Limit	
5a	Chromium (III)													No Limit	
5b	Chromium (VI)													No Limit	
6	Copper		2.12		0.20	5.22	0.40	0.22	1.63	6.46	3.45	18.00	0.2	14	
7	Lead		2.60		0.10	10.70	0.34	10.70	2.07	22.33	5.47	88.00	22	84	
8	Manganese				0.20	1.33	0.40	1.33	1.71	2.24	3.81	6.00	2.2	5.6	
9	Mercury													No Limit	
10	Nickel													No Limit	
11	Silver													No Limit	
12	Trifluoromethane													No Limit	
13	Zinc		3.20		0.12	14.73	0.22	14.73	2.07	38.32	6.00	119	20	119	
14	Cyanide													No Limit	
15	1,1,1-Trichloroethane													No Limit	
16	1,1,1,1-Tetra													No Limit	
17	Acrylonitrile													No Limit	
18	Asphalt													No Limit	
19	Benzene													No Limit	
20	Bromobenzene													No Limit	
21	Carbon Tetrachloride													No Limit	
22	Chlorobenzene													No Limit	
23	Chloroacetylene													No Limit	
24	Chloroethane													No Limit	
25	2-Chloroethyl ethyl ether													No Limit	
26	Chloroform													No Limit	
27	Dichloromethane													No Limit	
28	1,1-Dichloroethane													No Limit	
29	1,2-Dichloroethane													No Limit	
30	1,1,1-Trichloroethane													No Limit	
31	1,1,2-Trichloroethane													No Limit	
32	1,1,2,2-Tetrachloroethane													No Limit	
33	1,1,2,2,2-Pentachloroethane													No Limit	
34	1,1,1,1-Tetra													No Limit	
35	1,1,1,2-Tetra													No Limit	
36	1,1,2,2-Tetra													No Limit	
37	1,1,2,2,2-Penta													No Limit	
38	1,1,2,2,2-Penta													No Limit	
39	1,1,2,2,2-Penta													No Limit	
40	1,2-Dichloroethane													No Limit	
41	1,1,1-Trichloroethane													No Limit	
42	1,1,2-Trichloroethane													No Limit	
43	1,1,2,2-Tetrachloroethane													No Limit	
44	1,1,2,2,2-Pentachloroethane													No Limit	
45	2-Chloroethyl ethyl ether													No Limit	
46	2-Chloroethyl ethyl ether													No Limit	
47	2-Chloroethyl ethyl ether													No Limit	
48	1,1,1,1-Tetra													No Limit	
49	1,1,1,2-Tetra													No Limit	
50	1,1,2,2-Tetra													No Limit	
51	1,1,2,2,2-Penta													No Limit	
52	1,1,2,2,2-Penta													No Limit	
53	1,1,2,2,2-Penta													No Limit	
54	1,1,2,2,2-Penta													No Limit	
55	1,1,2,2,2-Penta													No Limit	
56	1,1,2,2,2-Penta													No Limit	
57	1,1,2,2,2-Penta													No Limit	
58	1,1,2,2,2-Penta													No Limit	
59	1,1,2,2,2-Penta													No Limit	
60	1,1,2,2,2-Penta													No Limit	
61	1,1,2,2,2-Penta													No Limit	
62	1,1,2,2,2-Penta													No Limit	
63	1,1,2,2,2-Penta													No Limit	
64	1,1,2,2,2-Penta													No Limit	
65	1,1,2,2,2-Penta													No Limit	
66	1,1,2,2,2-Penta													No Limit	
67	1,1,2,2,2-Penta													No Limit	
68	1,1,2,2,2-Penta													No Limit	
69	1,1,2,2,2-Penta													No Limit	
70	1,1,2,2,2-Penta													No Limit	

