

**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/losangeles>

**ORDER NO. R4-2018-XXXX
NPDES NO. CA0000809**

**WASTE DISCHARGE REQUIREMENTS
FOR EQUILON ENTERPRISES LLC DBA SHELL OIL PRODUCTS US
SHELL OIL PRODUCTS US-CARSON DISTRIBUTION FACILITY**

The following Discharger is subject to waste discharge requirements (WDRs) set forth in this Order:

Table 1. Discharger Information

Discharger	Equilon Enterprises LLC dba Shell Oil Products US
Name of Facility	Shell Oil Products US-Carson Distribution Facility
Facility Address	20945 South Wilmington Avenue
	Carson, CA 90810
	Los Angeles County
The United States Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as a major discharge.	

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Treated Storm Water	33° 50' 44.17" N	-118° 16' 03.13" W	Dominguez Channel Estuary

Table 3. Administrative Information

This Order was adopted on:	September 13, 2018
This Order shall become effective on:	November 1, 2018
This Order shall expire on:	October 31, 2023
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs 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 United States Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as follows.	Major discharge

I, Deborah J. Smith, 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 September 13, 2018.

Deborah J. Smith, Executive Officer

CONTENTS

I.	Facility Information	3
II.	Findings	3
III.	Discharge Prohibitions	3
IV.	Effluent Limitations and Discharge Specifications	5
	A. Final Effluent Limitations – Discharge Point 001	5
	B. Sediment Limitations.....	7
	C. Sediment Performance Goals	8
	D. Land Discharge Specifications—Not Applicable.....	8
	E. Recycling Specifications—Not Applicable	8
V.	Receiving Water Limitations	9
	A. Surface Water Limitations	9
	B. Groundwater Limitations—Not Applicable	10
VI.	Provisions	10
	A. Standard Provisions	10
	B. Monitoring and Reporting Program (MRP) Requirements	12
	C. Special Provisions.....	12
VII.	Compliance Determination	16
	A. Single Constituent Effluent Limitation.....	16
	B. Effluent Limitations Expressed as a Sum of Several Constituents.....	16
	C. Effluent Limitations Expressed as a Median.....	16
	D. Multiple Sample Data.....	17
	E. Average Monthly Effluent Limitation (AMEL)	17
	F. Maximum Daily Effluent Limitations (MDEL)	18
	G. Instantaneous Minimum Effluent Limitation	18
	H. Instantaneous Maximum Effluent Limitation.....	18
	I. Median Monthly Effluent Limitation (MMEL)	18
	J. Chronic Toxicity	18
	K. Mass and Concentration Limitations	19
	L. Bacterial Standards and Analyses	19

TABLES

Table 1.	Discharger Information	1
Table 2.	Discharge Location	1
Table 3.	Administrative Information.....	1
Table 4.	Effluent Limitations at Discharge Point 001	5
Table 5.	Sediment Limitations.....	7
Table 6.	Sediment Performance Goals	8

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. 6108).....	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 (micrograms/liter(µg/L)).....	H-1
Attachment I – List of Priority Pollutants.....	I-1

**T
E
N
T
A
T
I
V
E**

I. FACILITY INFORMATION

Information describing the Shell Oil Products US-Carson Distribution Facility (Facility) is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

II. FINDINGS

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

- A. Legal Authorities.** This Order serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the 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 United States Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the Water Code (commencing with section 13370) and state regulations (including title 27, California Code of Regulation, section 22561 et. seq.). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.
- B. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes Findings for this Order. Attachments A through E and G through I are also incorporated into this Order.
- C. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet.
- D. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED that this Order supersedes Order No. R4-2013-0097 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for violations of the previous Order.

III. DISCHARGE PROHIBITIONS

- A.** Wastes discharged shall be limited to a maximum of 5 million gallons per day (MGD) of treated storm water runoff via Discharge Point 001. The discharge of wastes from accidental spills or other sources is prohibited.
- B.** Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, the Dominguez Channel Estuary, or other waters of the State, are prohibited.
- C.** Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or a nuisance as defined by section 13050 of the Water Code.

T
E
N
T
A
T
I
V
E

- D.** Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- E.** The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board (State Water Board) as required by the federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the federal CWA, and amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.
- F.** Discharge of oil or any residuary product of petroleum to waters of the State, except in accordance with waste discharge requirements or other provisions of Division 7 of the Water Code, is prohibited.
- G.** The discharge of any radiological, chemical, or biological warfare agent into the waters of the state is prohibited under Water Code section 13375.
- H.** 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.
- I.** 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.
- J.** Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.
- K.** The discharge of trash to surface waters of the State or the deposition of trash where it may be discharged into surface waters of the State is prohibited.

**T
E
N
T
A
T
I
V
E**

IV. 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 Monitoring and Reporting Program, Attachment E:

Table 4. Effluent Limitations at Discharge Point 001

Parameter	Units	Effluent Limitations			Performance Goals ¹
		Maximum Daily	Instantaneous		
			Minimum	Maximum	
Conventional Pollutants					
pH	s.u.	--	6.5	8.5	--
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	30	--	--	--
	lbs/day ²	1,251	--	--	--
Oil and Grease	mg/L	15	--	--	--
	lbs/day ²	626	--	--	--
Total Suspended Solids (TSS) ^{3,4}	mg/L	30	--	--	--
	lbs/day ²	1,251	--	--	--
Non-conventional Pollutants					
Ammonia (as N)	mg/L	0.233 ⁵	--	--	--
Phenolic Compounds	mg/L	1.0	--	--	--
	lbs/day ²	41.7	--	--	--
Settleable Solids	ml/L	0.3	--	--	--
Sulfides	mg/L	0.1	--	--	--
	lbs/day ²	4.2	--	--	--
Temperature	°F	--	--	86	--
Turbidity	NTU	75	--	--	--
Total Petroleum Hydrocarbons (TPH) ⁶	µg/L	100	--	--	--
	lbs/day ²	4.2	--	--	--
Xylenes	µg/L	21	--	--	--
	lbs/day ²	0.88	--	--	--
Bacteria	7				--
Chronic Toxicity	Pass or Fail, % Effect	Pass or % Effect <50	--	--	--
Priority Pollutants					
Cadmium, Total Recoverable ³	µg/L	--	--	--	15
Copper, Total Recoverable ⁴	µg/L	6.1	--	--	--
	lbs/day ²	0.26	--	--	--
Lead, Total Recoverable ⁴	µg/L	14	--	--	--
	lbs/day ²	0.58	--	--	--
Mercury, Total Recoverable	µg/L	0.10	--	--	--
	lbs/day ²	0.0042	--	--	--
Nickel, Total Recoverable	µg/L	14	--	--	--
	lbs/day ²	0.58	--	--	--

T
E
N
T
A
T
I
V
E

Parameter	Units	Effluent Limitations			Performance Goals ¹
		Maximum Daily	Instantaneous		
			Minimum	Maximum	
Zinc, Total Recoverable ⁴	µg/L	140	--	--	--
	lbs/day ²	5.9	--	--	--
Benzene	µg/L	21	--	--	--
	lbs/day ²	0.88	--	--	--
Ethylbenzene	µg/L	21	--	--	--
	lbs/day ²	0.88	--	--	--
Toluene	µg/L	21	--	--	--
	lbs/day ²	0.88	--	--	--
Benzo(a)Anthracene ^{4,8}	µg/L	0.098	--	--	--
	lbs/day ²	0.0041	--	--	--
Benzo(a)Pyrene ^{4,8}	µg/L	0.098	--	--	--
	lbs/day ²	0.0041	--	--	--
Chrysene ^{4,8}	µg/L	0.098	--	--	--
	lbs/day ²	0.0041	--	--	--
Pyrene ^{4,8}	µg/L	22068	--	--	--
	lbs/day ²	920	--	--	--
Chlordane ³	µg/L	0.0012	--	--	--
	lbs/day ²	4.9E-05	--	--	--
4,4'-DDT	µg/L	0.0012	--	--	--
	lbs/day ²	4.9E-05	--	--	--
Dieldrin ³	µg/L	0.00028	--	--	--
	lbs/day ²	1.2E-05	--	--	--
Total PCBs ^{4,9}	µg/L	0.00034	--	--	--
	lbs/day ²	1.4E-05	--	--	--

1. Performance goals are intended to ensure that effluent concentrations and mass discharges do not exceed levels currently achieved by the permitted facility. These performance goals are not considered as limitations or standards for the regulation of the Facility. They act as triggers to determine when sediment monitoring is required for this category of pollutants.
2. The mass limitations are based on a maximum flow of 5 MGD and is calculated as follows:
Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.
3. During each reporting period, if effluent monitoring results exceed both a TSS effluent limitation and an effluent limitation or performance goal for cadmium, chlordane or dieldrin as specified in Table 4 of this Order; then the Discharger has not demonstrated attainment with the sediment performance goals as specified in Table 6 of this Order; and the Discharger is required to implement the sediment monitoring program for that priority pollutant. The Discharger shall begin the sediment monitoring program during the first discharge event following the effluent exceedance. An effluent sediment monitoring result at or below the sediment performance goal in Table 6 of this Order demonstrates attainment with the sediment performance goal and additional sediment monitoring for those pollutants is not required. An effluent sediment monitoring result that is above the sediment performance goal in Table 6 constitutes an exceedance of the performance goal. Annual sediment monitoring is required for the pollutant(s) until the data demonstrates compliance with the performance goals in Table 6.
4. During each reporting period, if effluent monitoring results exceed both a TSS effluent limitation and an effluent limitation for copper, lead, zinc, 4,4'-DDT, total PCBs, benzo(a)anthracene, benzo(a)pyrene, chrysene or pyrene as specified in Table 4 of this Order; then the Discharger has not demonstrated compliance with the sediment limitations in Table 5 of this Order and the Discharger is required to implement the sediment monitoring program for that priority pollutant. The Discharger shall begin the sediment monitoring program during the first discharge event following the effluent exceedance. An effluent sediment monitoring result at or below the sediment limitation in Table 5 of this Order demonstrates compliance with the sediment limitation and additional sediment monitoring for that pollutant is not required. An effluent sediment monitoring result that is above the sediment limitation in Table 5

T
E
N
T
A
T
I
V
E

- requires additional sediment monitoring during discharge, but not more frequently than once per year, until the three-year average concentration for sediment monitoring results is at or below the sediment limitation.
5. The daily maximum concentration of un-ionized ammonia shall not exceed 0.233 mg/L. The un-ionized ammonia concentration must be converted to total ammonia using the implementation procedure in the Basin Plan Amendment – Salt Water Ammonia Objectives for Inland Surface Waters (Regional Board Resolution No. 2004-022).
 6. TPH equals the sum of TPH(C₄-C₁₂), TPH(C₁₃-C₂₂), and TPH(C₂₃+).
 7. Effluent limitations for total and fecal coliform bacteria are described below:
 - a. Geometric Mean Limits
 - i. Total coliform density shall not exceed 1,000/100 ml.
 - ii. Fecal coliform density shall not exceed 200/100 ml.
 - iii. Enterococcus shall not exceed 35/100 ml.
 - b. Single Sample Limits
 - i. Total coliform density shall not exceed 10,000/100 ml.
 - ii. Fecal coliform density shall not exceed 400/100 ml.
 - iii. Enterococcus density shall not exceed 104/100 ml.
 - iv. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-coliform exceeds 0.1.
 8. Per page 13 of Attachment A to Resolution No. R11-008 CTR human health criteria were not established for total PAHs. Therefore, the CTR criterion for individual PAHs of 0.049 µg/L is applied to benzo(a)anthracene, benzo(a)pyrene, and chrysene. The CTR criterion for pyrene of 11,000 µg/L is assigned as an individual WLA to pyrene. Effluent limitations for these pollutants were calculated based on the above criteria using SIP procedures.
 9. CTR human health criterion for PCBs applies to total PCBs, e.g., the sum of all congener or isomer or homolog or arachlor analyses.

1. Interim Effluent Limitations—Not Applicable

B. Sediment Limitations

The Harbor Toxics TMDL establishes interim concentration-based sediment waste load allocations (WLAs) in the Dominguez Channel Estuary that are to be achieved on March 23, 2012 (upon the effective date of the TMDL). The sediment WLAs that are applicable to the Discharger are established as sediment limitations in this Order as indicated in the table below:

Table 5. Sediment Limitations

Pollutant	Limitation	Units
Copper	220.0	mg/kg in dry sediment
Lead	510.0	µg/kg in dry sediment
Zinc	789.0	µg/kg in dry sediment
DDT	1.727	µg/kg in dry sediment
PAHs	31.60	µg/kg in dry sediment
PCBs	1.490	µg/kg in dry sediment

Compliance with the sediment limitations may be demonstrated via any one of three different means:

1. Demonstrate that the sediment quality condition of Unimpacted or Likely Unimpacted via the interpretation and integration of multiple lines of evidence as defined in the SQO Part 1, is met; or
2. Meet the limitations in bed sediment over a three-year averaging period; or
3. Meet the limitations in the discharge over a three-year averaging period.

C. Sediment Performance Goals

The Harbor Toxics TMDL establishes final concentration-based sediment waste load allocations (WLAs) in the Dominguez Channel Estuary that must be attained by March 23, 2032 (20 years after the effective date of the TMDL). Until that deadline, these sediment WLAs are applicable to the Discharger as performance goals in this Order as indicated in the table below:

Table 6. Sediment Performance Goals

Pollutant	Performance Goal ¹	Units
Cadmium, Total Recoverable	1.2	mg/kg in dry sediment
Chlordane	0.5	µg/kg in dry sediment
Dieldrin	0.02	µg/kg in dry sediment
¹ . In this Order, Sediment Performance Goals are not enforceable limitations. Rather, exceedance of a Sediment Performance Goal triggers annual sediment monitoring for the pollutant(s) until the data demonstrates attainment with the goal.		

Attainment of the sediment performance goal for cadmium may be demonstrated via any one of three means:

1. The cadmium sediment performance goal is met. The Discharger may collect sufficient effluent sample to provide an adequate amount of effluent sediments (suspended solids) for sediment analysis.
2. The qualitative sediment condition of Unimpacted or Likely Unimpacted via the interpretation and integration of multiple lines of evidence as defined in the Sediment Quality Plan is met.
3. The sediment performance goal is met in bed sediments over a 3-year averaging period. The Discharger may choose to conduct bed sediment monitoring as specified in the MRP (Attachment E) to demonstrate compliance with this condition.

Attainment of the sediment performance goals for chlordane and dieldrin may be demonstrated via any one of four means:

1. Fish tissue targets are met in species resident to the TMDL waterbodies. (A site-specific study to determine resident species shall be submitted to the Executive Officer for approval.)
2. The chlordane and dieldrin sediment performance goals are met.
3. Sediment numeric targets to protect fish tissue are met in bed sediments over a three-year averaging period.
4. Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan, as amended to address contaminants in resident finfish and wildlife.

D. Land Discharge Specifications—Not Applicable

E. Recycling Specifications—Not Applicable

**T
E
N
T
A
T
I
V
E**

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

The discharge shall not cause the following in the Dominguez Channel Estuary:

1. The pH of the receiving water shall not be depressed below 6.5 or raised above 8.5 as a result of the discharge. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of waste discharge. Natural conditions shall be determined on a case-by-case basis.
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
 - a. Rolling 30-day Geometric Mean Limits
 - i. Total coliform density shall not exceed 1,000/100 ml.
 - ii. Fecal coliform density shall not exceed 200/100 ml.
 - iii. Enterococcus density shall not exceed 35/100 ml.
 - b. Single Sample Maximum
 - i. Total coliform density shall not exceed 10,000/100 ml.
 - ii. Fecal coliform density shall not exceed 400/100 ml.
 - iii. Enterococcus density shall not exceed 104/100 ml.
 - iv. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.
4. The mean annual dissolved oxygen concentration to fall below 7.0 mg/L. No single determination of dissolved oxygen shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations.
5. Exceed total ammonia (as N) concentrations specified in the Regional Water Board Resolution 2004-022, *Amendment to the Water Quality Control 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"* adopted on March 4, 2004. 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. Where natural turbidity is between 0 to 50 NTU, increases in turbidity shall not exceed 20%. Where natural turbidity is greater than 50 NTU, increases in turbidity shall not exceed 10%.
8. 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.
9. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
10. 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.
11. Accumulation of bottom deposits or aquatic growths.

T
E
N
T
A
T
I
V
E

12. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
13. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
14. 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.
15. Alteration of turbidity, or apparent color beyond present natural background levels.
16. Damage, discolor, or formation of sludge deposits on flood control structures or facilities, or overloading of the design capacity.
17. Degradation of surface water communities and populations including vertebrate, invertebrate, and plant species.
18. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
19. Nuisance, or adversely affect beneficial uses of the receiving water.
20. Violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or State Water Board. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

B. Groundwater Limitations—Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D.
2. 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. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management programs developed to comply with NPDES permits issued by the Regional Water Board to local agencies.
 - b. 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.
 - c. 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.
 - d. Oil or oily material, chemicals, refuse, or other wastes that constitute a condition of pollution or nuisance shall not be stored or deposited in areas where they may be

T
E
N
T
A
T
I
V
E

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.

- e. 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.
- f. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - v. Violation of any term or condition contained in this Order;
 - vi. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
 - vii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- g. 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.
- h. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Water Board as soon as they know or have reason to believe that they have begun or expect to begin to use or manufacture intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.
- i. In the event of any change in name, ownership, or control of these waste disposal facilities, the Discharger shall notify this Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Regional Water Board.
- j. 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.

- k. 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.
- l. 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

T
E
N
T
A
T
I
V
E

subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

- m. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the 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 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.
- n. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Wat. Code § 1211.)
- o. The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Special Provisions

1. Reopener Provisions

- a. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the federal CWA, and amendments thereto, the Regional Water Board may revise and modify this Order in accordance with such more stringent standards.
- b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.
- c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 C.F.R., parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new MLs.
- d. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for the Dominguez Channel Estuary or tributaries thereto.
- e. 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.
- f. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide for dilution credits or a mixing zone, as may be appropriate.

T
E
N
T
A
T
I
V
E

- g. This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 C.F.R. sections 122.44, 122.62 to 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, and 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.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. **Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan.** The Discharger shall submit to the Regional Water Board an Initial Investigation TRE workplan (1-2 pages) within 90 days of the effective date of this permit. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected. See section V of the Monitoring and Reporting Program (Attachment E) for an overview of TRE requirements.
- b. **Sediment Monitoring Program**
- Effluent sediment monitoring is only required when triggered in accordance with Footnotes 3 and 4 to Table 4 of this Order. During each reporting period, if effluent monitoring results exceed both a TSS effluent limit and an effluent limit or performance goal for cadmium, chlordane, dieldrin, copper, lead, zinc, 4,4'-DDT, total PCBs, benzo(a)anthracene, benzo(a)pyrene, chrysene, or pyrene as specified in Table 4 of this Order; then the Discharger shall implement the sediment monitoring program for that priority pollutant. The Discharger shall begin the sediment monitoring program during the first discharge event following the effluent exceedance. Annual sediment monitoring is required for the pollutant(s) until the data demonstrates compliance with the sediment limitations or performance goals in Tables 5 and 6.
- c. **Harbor Toxics TMDL Water Column, Sediment and Fish Tissue Monitoring for Dominguez Channel, Torrance Lateral and Dominguez Channel Estuary.**
- As defined in the Harbor Toxics TMDL, the Discharger is a "responsible party" because it is an "Individual Industrial Permittee". As such, the Discharger, either alone, or as part of a collaborating group, is responsible for monitoring water and sediment discharges. The Discharger, by itself, or as part of a collaborative monitoring effort (Responsible Parties), is required to prepare and submit a Monitoring and Reporting Plan (Monitoring Plan) and Quality Assurance Project Plan (QAPP), following TMDL Element – Monitoring Plan regulatory provisions in Attachment A to Resolution R11-008. The TMDL requires that the Monitoring Plan and QAPP shall be submitted 20 months after the effective date (March 23, 2012) of the TMDL for public review and subsequent Executive Officer approval. Since the effective date of this Order exceeds the deadline for the Monitoring Plan and QAPP, the Discharger shall join a group already formed or develop a site-specific monitoring plan. If the Discharger decides to join a group already formed, the Discharger shall notify the Regional Water Board within 90 days of the effective date of the Order. If the Discharger decides to develop a site-specific Monitoring Plan with a QAPP, the Discharger shall notify the Regional Water Board within 90 days of the effective date of the Order and submit the proposed Monitoring Plan and QAPP to the Regional Water Board within 12 months of the effective date of the Order for public comment and the Regional Water Board Executive Officer approval. The Discharger shall begin

T
E
N
T
A
T
I
V
E

monitoring 6 months after the Monitoring Plan and QAPP are approved by the Executive Officer, unless otherwise directed by the Executive Officer. The compliance monitoring program shall include water column, sediment, and fish tissue monitoring.

The Monitoring Plan shall include the following components:

i. **Water Column Monitoring**

Water samples and total suspended solids (TSS) samples shall be collected during two wet weather events and one dry weather event each year. TSS shall be collected at several depths during wet weather events. The first large storm event of the season shall be included as one of the wet weather monitoring events. Water samples and TSS samples shall be analyzed for a suite of compounds including, at a minimum, lead, zinc, copper, DDT, PCBs, benzo[a]anthracene, benzo[a]pyrene, chrysene, phenanthrene, and pyrene. Sampling shall be designed to collect sufficient volumes of suspended solids to allow for analysis of the pollutants in the bulk sediment.

In addition, temperature, dissolved oxygen, pH, electrical conductivity, and receiving water flow shall be monitored during each sampling event.

ii. **Sediment Monitoring**

Sediment samples shall be collected in the Dominguez Channel Estuary.

- (a) If compliance will be determined based on achieving sediment quality targets, sediment chemistry samples shall be collected every two years for analysis of general sediment quality constituents and the full chemical suite as specified in the Water Quality Control Plan for Enclosed Bays and Estuaries, Part 1 (SQO Part 1), Attachment A and Table 6. In addition, benthic community effects shall be assessed in the Dominguez Channel Estuary.
- (b) If compliance will be determined based on the SQO compliance method, sediment chemistry samples shall also be collected every 5 years (in addition to, and in between, the sediment triad sampling events as described below), beginning after the first sediment triad event, to evaluate trends in general sediment quality constituents and listed constituents relative to sediment quality targets. Chemistry data without accompanying sediment triad data shall be used to assess sediment chemistry trends and shall not be used to determine compliance.

Sediment quality objective evaluation as detailed in the SQO Part 1 (sediment triad sampling) shall be performed every 5 years in coordination with the Biological Baseline and Bight regional monitoring programs, if possible. Sampling and analysis for the full chemical suite, two toxicity tests and four benthic indices as specified in the SQO Part 1 is observed, results shall be highlighted in annual reports and further analysis and evaluation to determine causes and remedies shall be required in accordance with the Executive Officer approved Monitoring Plan. Locations for sediment triad assessment and the methodology for combining results from sampling locations to determine sediment conditions shall be specified in the Monitoring Plan. The sampling design shall be in compliance with Section VII.E of SQO Part 1.

T
E
N
T
A
T
I
V
E

iii. **Fish Tissue Monitoring**

Fish tissue samples shall be collected every two years from the Dominguez Channel Estuary and analyzed for chlordane, dieldrin, toxaphene, DDT, and PCBs. The target species in the Dominguez Channel Estuary shall be selected based on residency, local abundance and fish size at the time of field collection. Tissues analyzed shall be based on the most common preparation for the selected fish species.

iv. **Sampling and Analysis Plan**

The Sampling and Analysis Plan must be proposed based on methods or metrics described in the State Water Board Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality (Resolution 2008-0070 – SQO Part 1), and the U.S.EPA or American Society for Testing and Materials (ASTM). The plan shall include a list of chemical analytes for the water column and sediment.

v. **Quality Assurance Project Plan**

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

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

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

The Discharger shall submit to the Regional Water Board, within 90 days of the effective date of this Order:

- a. An updated **Storm Water Pollution Prevention Plan (SWPPP)** that describes site specific management practices for minimizing contamination of storm water runoff and for preventing contamination of storm water runoff from being discharged directly to the waters of the state. The SWPPP shall address the following specific areas of concern: petroleum storage tanks, equipment washing, vehicle traffic, chemicals storage, or other industrial activity with the potential to impact water quality. The SWPPP shall be developed in accordance with the requirements in Attachment G.

The SWPPP shall also specify Best Management Practices (BMPs) that will be implemented to reduce the discharge of pollutants in storm water. In particular the Discharger shall focus on improving secondary containment and good housekeeping practices. Further, the Discharger shall assure the storm water discharge from the facility would neither cause, nor contribute to the exceedance of water, and that the unauthorized discharges (i.e. spills, dry weather discharge) to the receiving water have been effectively prohibited.

- b. An updated **Best Management Practices Plan (BMPP)** that will be implemented to reduce the discharge of pollutants to the receiving water. The BMPP shall include site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material and trash from being discharged to waters of the State. Further, the Discharger shall ensure that the storm water discharges from the Facility

T
E
N
T
A
T
I
V
E

would neither cause nor contribute to a nuisance in the receiving water, and that unauthorized discharges (i.e. spills) to the receiving water have been effectively prohibited. In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material and trash discharge to surface waters. The BMPP can be included and submitted with the SWPPP.

- c. An updated **Spill Prevention Control and Countermeasure (SPCC) Plan** that shall be site-specific and shall cover all areas of the Facility including the tank farm. The SPCC shall describe the preventive (failsafe) and contingency (cleanup) plans for controlling discharges, and for minimizing the effects of such events.

Each plan shall cover all areas of the Facility and shall include an updated drainage map for the Facility. The Discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge points; describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material; and address the feasibility of containment and/or treatment of storm water. The plans shall be reviewed annually and at the same time. Updated information shall be submitted within 30 days of revision.

The Discharger shall implement the SWPPP, BMPP, and SPCC Plan within 10 days of the approval by the Executive Officer or no later than 90 days after submission to the Regional Water Board, whichever comes first. The Discharger shall continue to implement any existing and previously approved SWPPP until an updated SWPPP is approved by the Executive Officer or until the stipulated 90-day period after the updated SWPPP submittal has occurred.

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

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

5. **Other Special Provisions—Not Applicable**

6. **Compliance Schedules—Not Applicable**

VII. **COMPLIANCE DETERMINATION**

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

A. **Single Constituent Effluent Limitation**

If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML) (see Reporting Requirement I.H. 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

T
E
N
T
A
T
I
V
E

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

D. Multiple Sample Data

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

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

E. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsections B and D 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). However, an alleged violation of the AMEL will be considered one violation for the purpose of assessing mandatory minimum penalties. 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. If multiple samples are taken the Discharger will only be considered out of compliance for days when the discharge occurs. For anyone 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 each day of the month for that parameter;
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 same calendar 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 ML (see Reporting Requirement I.I 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.I of the MRP), the median value of

T
E
N
T
A
T
I
V
E

these four samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median shall be the lower of the two middle values.

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

F. Maximum Daily Effluent Limitations (MDEL)

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

G. Instantaneous Minimum Effluent Limitation

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

H. Instantaneous Maximum Effluent Limitation

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

I. Median Monthly Effluent Limitation (MMEL)

If the median of daily discharges over a calendar month exceeds the MMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of noncompliance in a 31-day month). However, an alleged violation of the MMEL will be considered one violation for the purpose of assessing State mandatory minimum penalties. If no sample (daily discharge) is taken over a calendar month, no compliance determination can be made for that month with respect to effluent violation determination, but compliance determination can be made for that month with respect to reporting violation determination.

J. Chronic Toxicity

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

Mean discharge IWC response $\leq 0.75 \times$ Mean control response.

A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent Effect" at the discharge

T
E
N
T
A
T
I
V
E

IWC is defined and reported as $((\text{Mean control response} - \text{Mean discharge IWC response}) / \text{Mean control response}) \times 100$.

The Maximum Daily Effluent Limitation (MDEL) for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed using the TST approach, results in "Fail" and the "Percent Effect" is ≥ 0.50 .

The Median Monthly Effluent Limitation (MMEL) for chronic toxicity is exceeded and a violation will be flagged when the median of no more than three independent chronic toxicity tests conducted within the same calendar month—analyzed using the TST approach—results in "Fail". During a calendar month, exactly three independent toxicity tests are required when one toxicity test results in "Fail".

K. Mass and Concentration Limitations

Compliance with mass effluent limitations and concentration effluent limitations for the same parameter shall be determined separately. When the concentration for a parameter in a sample is reported as ND or DNQ, the corresponding mass emission rate determined using that sample concentration shall also be reported as ND or DNQ.

L. Bacterial Standards and Analyses

The geometric mean used for determining compliance with bacterial standards is calculated using the following equation:

$$\text{Geometric Mean} = (C_1 \times C_2 \times \dots \times C_n)^{1/n}$$

Where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL or CFU/100 mL) found on each day of sampling. For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for *Enterococcus*). The detection method used for each analysis shall be reported with the results of the analysis.

Detection methods used for coliforms (total and fecal) and *Enterococcus* shall be those presented in Table 1A of 40 C.F.R. section 136 (revised July 1, 2017), unless alternate methods have been approved by USEPA pursuant to part 136 or improved methods have been determined by the Executive Officer and/or USEPA.

T
E
N
T
A
T
I
V
E

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 controls, and operation maintenance procedures, which can be applied before, during, and/or after pollution-producing activities.

Bioaccumulative

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

Carcinogenic

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

Coefficient of Variation (CV)

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

Daily Discharge

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

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

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

Detected, but Not Quantified (DNQ)

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

T
E
N
T
A
T
I
V
E

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.

Dry Weather

Dry weather limitations apply when wet weather conditions are not met. As per the Harbor Toxics TMDL, wet weather conditions apply to any day when the maximum daily flow measured at a location within the Dominguez Channel is equal to or greater than 62.7 cubic feet per second (cfs).

EC25

EC25 is a point estimate of the toxicant concentration that would cause an observable adverse effect (e.g., death, immobilization, or serious incapacitation) in 25 percent of the test organisms.

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 wasteload 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).

T
E
N
T
A
T
I
V
E

Four-Day Average of Daily Maximum Flows

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

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 reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 C.F.R. part 136, Attachment B.

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.

Persistent Pollutants

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

T
E
N
T
A
T
I
V
E

Pollutant Minimization Program (PMP)

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

Pollution Prevention

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

Reporting Level (RL)

The RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the 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.

Significant Storm Event

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

Source of Drinking Water

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

Standard Deviation (σ)

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

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

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

T
E
N
T
A
T
I
V
E

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.)

Wet Weather

As per the Harbor Toxics TMDL, wet weather conditions apply to any day when the maximum daily flow measured at a location within the Dominguez Channel is equal to or greater than 62.7 cubic feet per second (cfs).

**T
E
N
T
A
T
I
V
E**

ACRONYMS AND ABBREVIATIONS

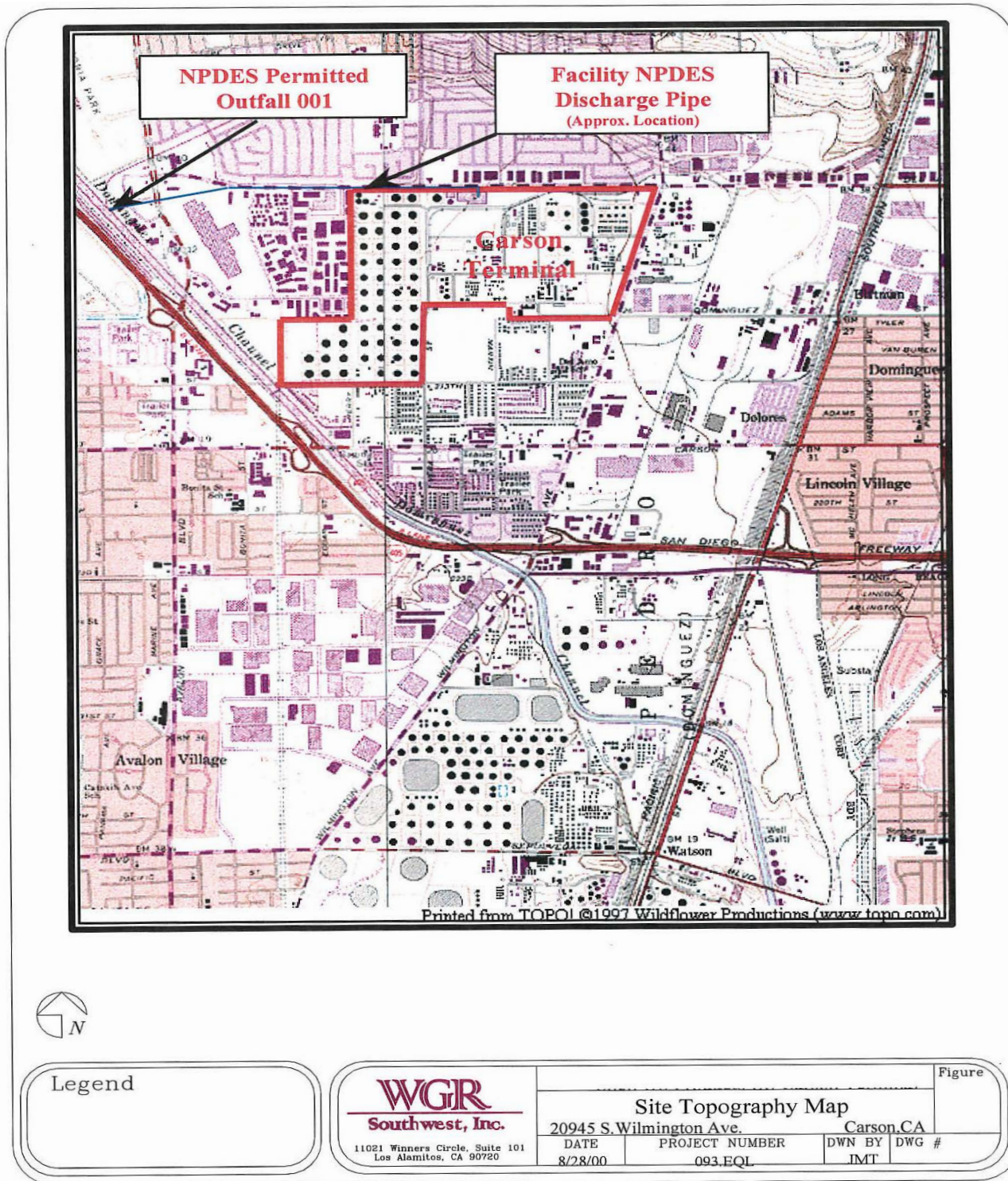
AMEL	Average Monthly Effluent Limitation
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	<i>Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i>
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
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
C.F.R.	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	Water Code
Discharger	Equilon Enterprises LLC dba Shell Oil Products US
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	State Water Resources Control Board, Drinking Water Division, Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Facility	Shell Oil Products US-Carson Distribution Facility
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
IWC	In-stream Waste Concentration
LA	Load Allocations
LOEC	Lowest Observed Effect Concentration
µg/L	micrograms per Liter
mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
ND	Not Detected
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NTR	National Toxics Rule
OAL	Office of Administrative Law
PMEL	Proposed Maximum Daily Effluent Limitation
PMP	Pollutant Minimization Plan

T
E
N
T
A
T
I
V
E

POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
Ocean Plan	<i>Water Quality Control Plan for Ocean Waters of California</i>
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RPA	Reasonable Potential Analysis
SCP	Spill Contingency Plan
Sediment Quality Plan	<i>Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality</i>
SIP	State Implementation Policy (<i>Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California</i>)
SMR	Self-Monitoring Reports
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	Test Acceptability Criteria
Thermal Plan	<i>Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California</i>
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document (<i>Technical Support Document For Water Quality-based Toxics Control</i> (EPA/505/2-90-001,1991))
TSS	Total Suspended Solid
TST	Test of Significant Toxicity
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

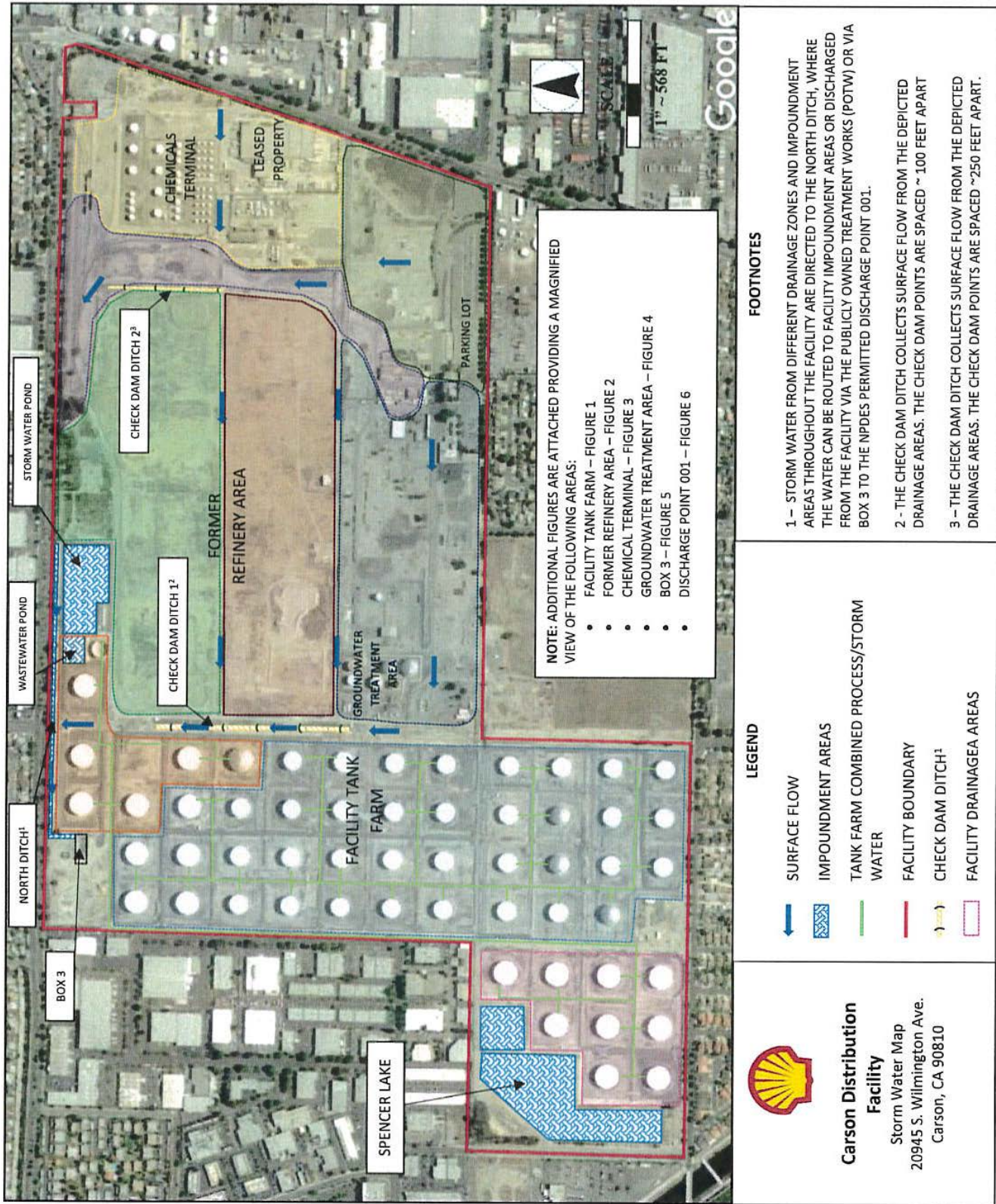
**T
E
N
T
A
T
I
V
E**

ATTACHMENT B – MAPS
MAP B-1: FACILITY LOCATION



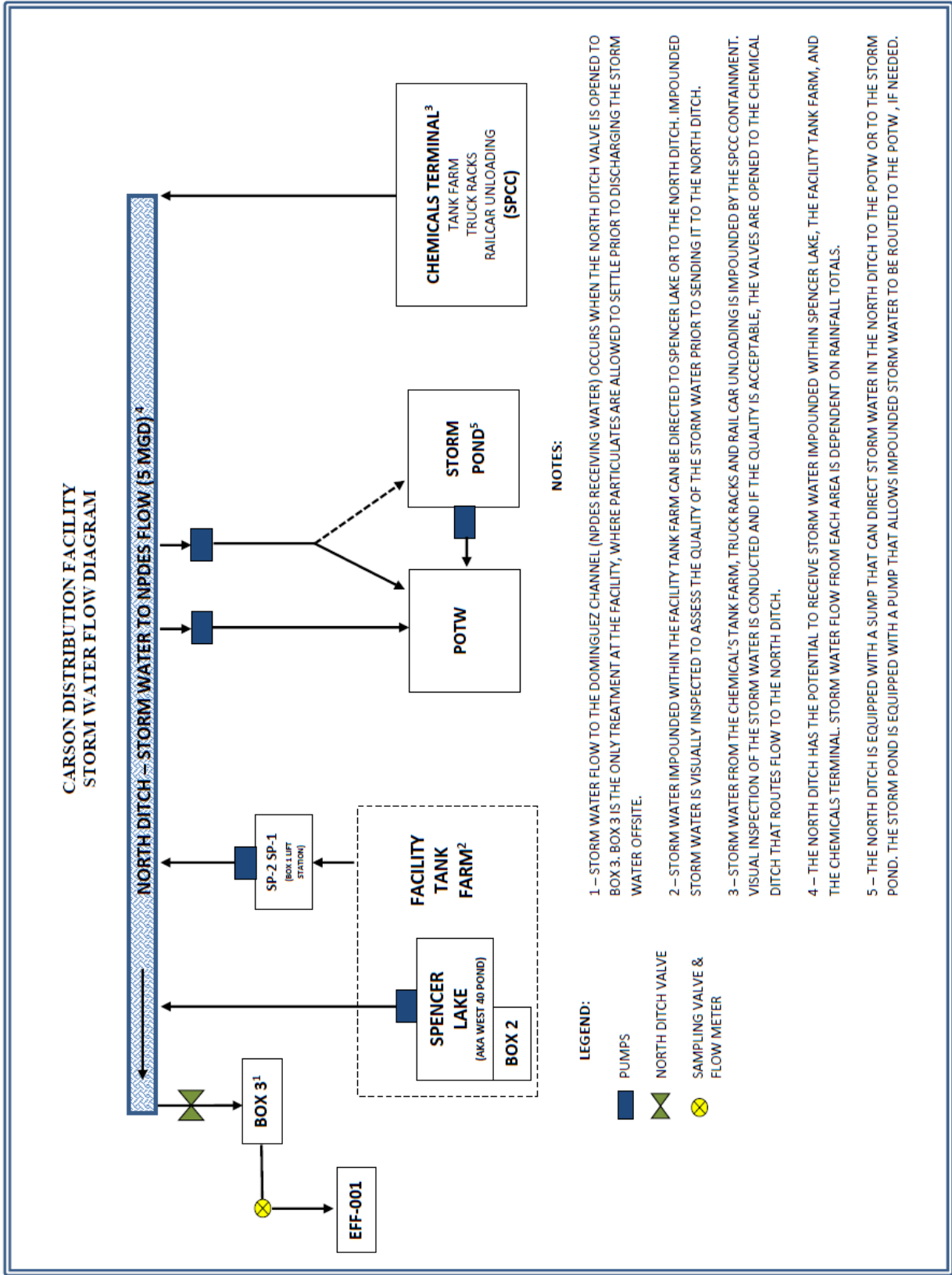
**T
E
N
T
A
T
I
V
E**

MAP B-2: SITE PLAN



T
E
N
T
A
T
I
V
E

ATTACHMENT C – FLOW SCHEMATIC



T
E
N
T
A
T
I
V
E

ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the Water Code and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 C.F.R. § 122.41(a); Wat. Code, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants 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. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative),

T
E
N
T
A
T
I
V
E

upon the presentation of credentials and other documents, as may be required by law, to (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i); Wat. Code, §§ 13267, 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 (33 U.S.C. § 1318(a)(4)(B)(i); 40 C.F.R. § 122.41(i)(1); Wat. Code, §§ 13267, 13383);
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(2); Wat. Code, §§ 13267, 13383);
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(3); Wat. Code, §§ 13267, 13383); 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. (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 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. (40 C.F.R. § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 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 (40 C.F.R. § 122.41(m)(4)(i)(B)); and
 - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

**T
E
N
T
A
T
I
V
E**

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 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 prior notice, if possible at least 10 days before the date of the bypass. As of December 21, 2020, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(i).)
 - b. Unanticipated bypass. The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). As of December 21, 2020, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 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. (40 C.F.R. § 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. (40 C.F.R. § 122.41(n)(2).)
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 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) (40 C.F.R. § 122.41(n)(3)(iii)); and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

**T
E
N
T
A
T
I
V
E**

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. §§ 122.41(l)(3), 122.61.)

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)

B. Monitoring must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 C.F.R. part 136 for the analysis of pollutants or pollutant parameters or as required under 40 C.F.R. chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:

1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
2. The method has the lowest ML of the analytical methods approved under 40 C.F.R. part 136 or required under 40 C.F.R. chapter 1, subchapter N for the measured pollutant or pollutant parameter.

In the case of pollutants or pollutant parameters for which there are no approved methods under 40 C.F.R. part 136 or otherwise required under 40 C.F.R. chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 C.F.R. §§ 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

T
E
N
T
A
T
I
V
E

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, §§ 13267, 13383.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, V.B.5, and V.B.6 below. (40 C.F.R. § 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. (40 C.F.R. § 122.22(a)(1).)
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

T
E
N
T
A
T
I
V
E

- a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 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.) (40 C.F.R. § 122.22(b)(2)); and
 - c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
4. All permit applications shall be signed by a general partner or the proprietor, respectively. (40 C.F.R. § 122.22(a)(2).)
5. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 C.F.R. § 122.22(a)(3).)
6. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 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.) (40 C.F.R. § 122.22(b)(2)); and
 - c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
7. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)
8. 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

T
E
N
T
A
T
I
V
E

belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 C.F.R. § 122.22(d).)

9. Any person providing the electronic signature for documents described in Standard Provisions – V.B.1, V.B.2, or V.B.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting V.B, and shall ensure that all relevant requirements of 40 C.F.R. part 3 (Cross-Media Electronic Reporting) and 40 C.F.R. part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R. § 122.22(e).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J and comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Regional Water Board or State Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance which 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 report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report 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.

For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (i.e., combined sewer overflow, sanitary sewer overflow, or bypass event), type of overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volume untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the event, and whether the noncompliance was related to wet weather.

**T
E
N
T
A
T
I
V
E**

2. As of December 21, 2020, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted to the Regional Water Board and must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J. The reports shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(6)(i).)
3. The following shall be included as information that must be reported within 24 hours:
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)
 - b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)
4. The Regional Water Board may waive the above required written report on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 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) (40 C.F.R. § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 C.F.R. § 122.41(l)(1)(ii).)

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). (40 C.F.R. § 122.41(l)(1)(ii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 C.F.R. § 122.41(l)(2).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting V.E and the applicable required data in appendix A to 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(7).)

T
E
N
T
A
T
I
V
E

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

J. Initial Recipient for Electronic Reporting Data

The owner, operator, or the duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 C.F.R. part 127 to the initial recipient defined in 40 C.F.R. section 127.2(b). USEPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 C.F.R. section 127.2(c)]. USEPA will update and maintain this listing. (40 C.F.R. § 122.41(l)(9).)

VI. STANDARD PROVISIONS – ENFORCEMENT

- A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13268, 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe (40 C.F.R. § 122.42(a)):

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):
 - a. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));
 - b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));
 - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or
 - d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)
2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(2)):
 - a. 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));
 - b. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or
 - d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

T
E
N
T
A
T
I
V
E

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP NO. 6108)

CONTENTS

I.	General Monitoring Provisions	E-2
II.	Monitoring Locations	E-5
III.	Influent Monitoring Requirements—NOT APPLICABLE	E-5
IV.	Effluent Monitoring Requirements	E-6
	A. Monitoring Location EFF-001	E-6
	B. Sediment Monitoring	E-9
V.	Whole Effluent Toxicity Testing Requirements	E-11
	A. Chronic Toxicity	E-11
	B. Preparation of an Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan	E-13
	C. Toxicity Reduction Evaluation (TRE) Process	E-13
	D. Reporting	E-14
VI.	Land Discharge Monitoring Requirements—NOT APPLICABLE	E-14
VII.	Recycling Monitoring Requirements—NOT APPLICABLE	E-14
VIII.	Receiving Water Monitoring Requirements	E-15
	A. Surface Water Monitoring (Monitoring Location RSW-001)	E-15
	B. Surface Water Monitoring (Monitoring Location RSW-002)	E-16
IX.	Other Monitoring Requirements	E-17
	A. Rainfall Monitoring	E-17
	B. Visual Monitoring	E-17
	C. Bed Sediment Monitoring Requirements for SED-001 (Harbor Toxics TMDL)	E-17
	D. Harbor Toxics TMDL Water Column, Sediment and Fish Tissue Monitoring	E-18
X.	Reporting Requirements	E-18
	A. General Monitoring and Reporting Requirements	E-18
	B. Self-Monitoring Reports (SMRs)	E-18
	C. Discharge Monitoring Reports (DMRs)	E-20
	D. Other Reports	E-21

TABLES

Table E-1.	Monitoring Station Locations	E-5
Table E-2.	Effluent Monitoring	E-6
Table E-3.	Effluent Sediment Monitoring	E-9
Table E-4.	Receiving Water Monitoring Requirements at Monitoring Location RSW-001	E-15
Table E-5.	Receiving Water Monitoring Requirements at Monitoring Location RSW-002	E-16
Table E-6.	Bed Sediment Monitoring Requirements for SED-001	E-18
Table E-7.	Monitoring Periods and Reporting Schedule	E-19

**T
E
N
T
A
T
I
V
E**

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP NO. 6108)

Section 308 of the federal Clean Water Act (CWA) and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of title 40 of the Code of Federal Regulations (40 C.F.R.) require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and California laws and/or regulations.

I. GENERAL MONITORING PROVISIONS

- A. An effluent sampling station shall be established for the point of discharge (Discharge Point 001 (Latitude 33° 50' 44.17" N, Longitude -118° 16' 03.13" W) and shall be located where representative samples of that effluent can be obtained.
- B. Effluent samples shall be taken downstream of any treatment works and prior to mixing with the receiving waters.
- C. The Regional Water Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
- D. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. sections 136.3, 136.4, and 136.5 (revised July 1, 2017); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Resources Control Board (State Water Board).
- E. Laboratories analyzing effluent samples and receiving water samples shall be certified by the State Water Board, Drinking Water Division, Environmental Laboratories 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.
- F. For any analysis 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.
- G. Each monitoring report must affirm in writing that *"all analyses were conducted at a laboratory certified for such analyses by the State Water Board or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP."*
- H. 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.

T
E
N
T
A
T
I
V
E

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.

- I. The MLs employed for effluent analyses to determine compliance with effluent limitations shall be lower than the effluent limitations established in this Order for a given parameter as per the 40 C.F.R. parts 122 and 136; *Use of Sufficiently Sensitive Test Methods for Permit Applications and Reporting*. 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.
- J. The MLs employed for effluent analyses not associated with determining compliance with effluent limitations in this Order shall be lower than the lowest applicable water quality objective, for a given parameter as per the 40 C.F.R. parts 122 and 136; *Use of Sufficiently Sensitive Test Methods for Permit Applications and Reporting*. Water quality objectives for parameters may be found in Chapter 3 of the Basin Plan and the CTR (40 C.F.R. section 131.38). If the ML value is not below the water quality objective, 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, the associated laboratory QA/QC procedures, reporting levels (RLs), and MDLs.

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

- 1. When the pollutant under consideration is not included in Attachment H;
 - 2. When the Discharger and Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in part 136 (revised August 28, 2017);
 - 3. When the Discharger agrees to use an ML that is lower than that listed in Attachment H;
 - 4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment H, and proposes an appropriate ML for their matrix; or,
 - 5. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the USEPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, the Regional Water Board, and the State Water Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.
- K. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 C.F.R. section 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.
 - L. Field analyses with short sample holding time such as pH, total chlorine residual, and temperature, may be performed using properly calibrated and maintained portable instruments by trained personnel acting on the Discharger's behalf, using methods in accordance with 40 C.F.R. part 136. All field instruments must be calibrated per manufacturer's instructions. A manual containing the standard operating procedures for all field analyses, including records of personnel proficiency, training, instruments calibration and maintenance, and quality control

T
E
N
T
A
T
I
V
E

procedures shall be maintained onsite, and shall be available for inspection by Regional Water Board staff. Information including instrument calibration, time of sample collection, time of analysis, name of analyst, quality assurance/quality control data, and measurement values shall be clearly documented during each field analysis and submitted to the Regional Water Board as part of the corresponding regular monitoring report.

- M.** All analyses shall be accompanied by the chain of custody, including but not limited to data and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.
- N.** 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.
- O.** 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.
- P.** The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study and submitted annually to the State Water Board at the following address:

State Water Resources Control Board
Quality Assurance Program Officer
Office of Information Management and Analysis
1001 I Street, Sacramento CA 95814
- Q.** 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.
- R.** In the event wastes are transported to a different disposal site during the reporting 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.

**T
E
N
T
A
T
I
V
E**

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

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order (latitude and longitude information in Table E-1 is approximate for administrative purposes):

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001 ¹	EFF-001	At the sampling valve located where representative samples of the treated effluent can be obtained. (Latitude 33° 50' 44.17" N, Longitude -118° 16' 03.13" W)
--	RSW-001	A sampling station shall be established at a location outside the influence of the effluent discharge location, approximately 50 feet upstream in the Dominguez Channel.
--	RSW-002	A sampling station shall be established at a location approximately 50 feet downstream from the effluent discharge location, in the Dominguez Channel.
¹ . Discharge Point No. 001 is at an off-site location. Monitoring Location EFF-001 is located on-site prior to the Facility's discharge entering the storm drain.		

The North latitude and West longitude information in Table 1 are approximate for administrative purposes.

III. INFLUENT MONITORING REQUIREMENTS—NOT APPLICABLE

T
E
N
T
A
T
I
V
E

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

Table E-2. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD ¹	Meter	Continuous	--
Conventional Pollutants				
pH	s.u.	Grab	1/Discharge Event ²	4
Biochemical Oxygen Demand (5-day @ 20 deg. C) (BOD) ³	mg/L	Grab	1/Discharge Event ²	4
Oil and Grease ³	mg/L	Grab	1/Discharge Event ²	4
Total Suspended Solids (TSS) ^{3,10,11}	mg/L	Grab	1/Discharge Event ²	4
Non-conventional Pollutants				
Chronic Toxicity	% Survival	Grab	1/Year	4,5
Ammonia, Total (as N) ³	mg/L	Grab	1/Discharge Event ²	4
Total Coliform	MPN/100 ml	Grab	1/Discharge Event ²	4
Fecal Coliform	MPN/100 ml	Grab	1/Discharge Event ²	4
<i>Enterococcus</i>	MPN/100 ml	Grab	1/Discharge Event ²	4
Diisopropyl Ether (DIPE) ³	µg/L	Grab	1/Year ⁶	4
Ethylene Dibromide (EDB)	µg/L	Grab	1/Year ⁶	4
Methyl Tert-butyl Ether (MTBE) ³	µg/L	Grab	1/Discharge Event ²	4
Phenolic Compounds ³	µg/L	Grab	1/Discharge Event ²	4
Settleable Solids	mg/L	Grab	1/Discharge Event ²	4
Sulfides ³	mg/L	Grab	1/Discharge Event ²	4
Tert-amyl Methyl Ether	µg/L	Grab	1/Year ⁶	4
Temperature	°F	Grab	1/Discharge Event ²	4
Total Petroleum Hydrocarbons (TPH) as Gasoline (C ₄ -C ₁₂) ³	µg/L	Grab	1/Discharge Event ²	EPA Method 503.1 or 8015B
TPH as Diesel (C ₁₃ -C ₂₂) ³	µg/L	Grab	1/Discharge Event ²	EPA Method 503.1, 8015B, or 8270
TPH as Waste Oil (C ₂₃₊) ³	µg/L	Grab	1/Discharge Event ²	EPA Method 503.1, 8015B, or 8270
Turbidity	NTU	Grab	1/Discharge Event ²	4
Xylenes ³	µg/L	Grab	1/Discharge Event ²	4
Priority Pollutants				
Antimony, Total Recoverable ³	µg/L	Grab	1/Year ⁶	4
Arsenic, Total Recoverable ³	µg/L	Grab	1/Discharge Event ²	4
Beryllium, Total Recoverable ³	µg/L	Grab	1/Year ⁶	4
Cadmium, Total Recoverable ^{3,10}	µg/L	Grab	1/Discharge Event ²	4
Chromium (III), Total Recoverable ³	µg/L	Grab	1/Year ⁶	4

T
E
N
T
A
T
I
V
E

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Chromium (VI), Total Recoverable ³	µg/L	Grab	1/Year ⁶	4
Copper, Total Recoverable ^{3,11}	µg/L	Grab	1/Discharge Event ²	4
Lead, Total Recoverable ^{3,11}	µg/L	Grab	1/Discharge Event ²	4
Mercury, Total Recoverable ³	µg/L	Grab	1/Discharge Event ²	4
Nickel, Total Recoverable ³	µg/L	Grab	1/Discharge Event ²	4
Selenium, Total Recoverable ³	µg/L	Grab	1/Discharge Event ²	4
Silver, Total Recoverable ³	µg/L	Grab	1/Discharge Event ²	4
Thallium, Total Recoverable ³	µg/L	Grab	1/Year ⁶	4
Zinc, Total Recoverable ^{3,11}	µg/L	Grab	1/Discharge Event ²	4
2,3,7,8-TCDD ³	µg/L	Grab	1/Discharge Event ²	4
Benzene ³	µg/L	Grab	1/Discharge Event ²	4
Ethylbenzene ³	µg/L	Grab	1/Discharge Event ²	4
Toluene ³	µg/L	Grab	1/Discharge Event ²	4
Acenaphthene ³	µg/L	Grab	1/Discharge Event ²	4
Anthracene ³	µg/L	Grab	1/Discharge Event ²	4
Benzo(a)anthracene ^{3,11}	µg/L	Grab	1/Discharge Event ²	4
Benzo(a)pyrene ^{3,11}	µg/L	Grab	1/Discharge Event ²	4
Chrysene ^{3,11}	µg/L	Grab	1/Discharge Event ²	4
Dibenzo(a,h)anthracene ³	µg/L	Grab	1/Discharge Event ²	4
Fluoranthene ³	µg/L	Grab	1/Discharge Event ²	4
Fluorene ³	mg/L	Grab	1/Discharge Event ²	4
Indeno(1,2,3-cd)pyrene ³	µg/L	Grab	1/Discharge Event ²	4
Pyrene ^{3,11}	µg/L	Grab	1/Discharge Event ²	4
Chlordane ^{3,10}	µg/L	Grab	1/Discharge Event ²	4
4',4-DDT ^{3,11}	µg/L	Grab	1/Discharge Event ²	4
Dieldrin ^{3,10}	µg/L	Grab	1/Discharge Event ²	4
Polychlorinated Biphenyls (PCBs) ^{3, 7, 11}	µg/L	Grab	1/Discharge Event ²	4
Remaining Priority Pollutants ^{3, 8}	µg/L	Grab	1/Year ⁶	4
TCDD Equivalents ^{3, 9}	µg/L	Grab	1/Year ⁶	4

T
E
N
T
A
T
I
V
E

- ¹ MGD= million gallons per day.
- ² During periods of extended or frequent discharge, no more than one sample per week is required. 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 at the first safe opportunity, and the reason for the delay shall be included in the report.

If there is no discharge to surface waters, then no monitoring is required. In the corresponding monitoring report, the Discharger will indicate under statement of perjury that no discharge to surface water occurred during the reporting period.
- ³ The mass emission (lbs/day) for the discharge shall be calculated and reported using the measured concentration and the actual flow rate measured at the time of discharge, using the formula.

$$M = 8.34 \times C_e \times Q$$
 where: M = mass discharge for a pollutant, lbs/day
 C_e = measured concentration for a pollutant, mg/L
 Q = actual discharge flow rate, MGD
- ⁴ Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; for priority pollutants, the methods must meet the lowest MLs specified in Attachment 4 of the SIP, provided as Attachment H in this Order. Where no methods are specified for a given pollutant, the methods must be approved by the Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select a sufficiently sensitive method from the listed methods and corresponding ML necessary to demonstrate compliance with applicable effluent limitations.
- ⁵ Refer to section V of this Fact Sheet: Whole Effluent Toxicity Testing Requirements.
- ⁶ Annual samples shall be collected during the first hour of the first discharge event of the year.
- ⁷ PCBs shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.
- ⁸ Priority Pollutants as defined by the CTR defined in Finding II.I of the Limitations and Discharge Requirements of this Order, and included as Attachment I.
- ⁹ TCDD equivalents is 2,3,7,8-Tetrachlorodibenzodioxin (TCDD) plus 16 dioxin as furan congeners. TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

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

where: C_x = concentration of dioxin or furan congener x

TEF_x = TEF for congener x

Toxicity Equivalency Factors

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

10. During each reporting period, if effluent monitoring results exceed both a TSS effluent limitation and an effluent limitation or performance goal for cadmium, chlordane or dieldrin as specified in Table 4 of this Order; then the Discharger has not demonstrated attainment with the sediment performance goals as specified in Table 6 of this Order; and the Discharger is required to implement the sediment monitoring program for that priority pollutant. The Discharger shall begin the sediment monitoring program during the first discharge event following the effluent exceedance. An effluent sediment monitoring result at or below the sediment performance goal in Table 6 of this Order demonstrates attainment with the sediment performance goal and additional sediment monitoring for those pollutants is not required. An effluent sediment monitoring result that is above the sediment performance goal in Table 6 constitutes an exceedance of the performance goal. Annual sediment monitoring is required for the pollutant(s) until the data demonstrates compliance with the performance goals in Table 6.
11. During each reporting period, if effluent monitoring results exceed both a TSS effluent limitation and an effluent limitation for copper, lead, zinc, 4,4'-DDT, total PCBs, benzo(a)anthracene, benzo(a)pyrene, chrysene or pyrene as specified in Table 4 of this Order; then the Discharger has not demonstrated compliance with the sediment limitations in Table 5 of this Order and the Discharger is required to implement the sediment monitoring program for that priority pollutant. The Discharger shall begin the sediment monitoring program during the first discharge event following the effluent exceedance. An effluent sediment monitoring result at or below the sediment limitation in Table 5 of this Order demonstrates compliance with the sediment limitation and additional sediment monitoring for that pollutant is not required. An effluent sediment monitoring result that is above the sediment limitation in Table 5 requires additional sediment monitoring during discharge, but not more frequently than once per year, until the three-year average concentration for sediment monitoring results is at or below the sediment limitation.

B. Sediment Monitoring

Sediment monitoring is only required during years in which an exceedance occurs as described in Footnotes 1 and 3 to the following table. As indicated in sections IV.B and IV.C of this Order, the Discharger may choose to demonstrate compliance with the sediment limitations or attainment of the sediment performance goals via effluent sediment monitoring or the monitoring of bed sediments. The sediment sampling shall be conducted according to methods or metrics described in 40 C.F.R. part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act* and the State Water Board Sediment Quality Plan.

For effluent sediment monitoring, the Discharger must sample the discharge at EFF-001 following final treatment, prior to the discharge entering the receiving water. The exact location of the sampling point must be stipulated in the initial self-monitoring report. The Discharger must collect sufficient effluent sample to provide an adequate amount of effluent sediments (suspended solids) for sediment analyses.

For bed sediment monitoring, the Discharge must collect bed sediment samples from the Dominguez Channel Estuary. The exact location of the sampling point must be stipulated in the initial self-monitoring report.

Table E-3. Sediment Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Copper, Total Recoverable	mg/kg	Grab	1/Year ¹	²
Lead, Total Recoverable	mg/kg	Grab	1/Year ¹	²
Zinc, Total Recoverable	mg/kg	Grab	1/Year ¹	²
Cadmium, Total Recoverable	mg/kg	Grab	1/Year ³	²
Chlordane	µg/kg	Grab	1/Year ³	²
Dieldrin	µg/kg	Grab	1/Year ³	²
DDT ⁴	mg/kg	Grab	1/Year ¹	²

T
E
N
T
A
T
I
V
E

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
PAHs ⁵	mg/kg	Grab	1/Year ¹	2
PCBs ⁶	mg/kg	Grab	1/Year ¹	2

- During each reporting period, if effluent monitoring results exceed both a TSS effluent limitation and an effluent limitation for copper, lead, zinc, 4,4'-DDT, total PCBs, benzo(a)anthracene, benzo(a)pyrene, chrysene or pyrene as specified in Table 4 of this Order; then the Discharger has not demonstrated compliance with the sediment limitations in Table 5 of this Order and the Discharger is required to implement the sediment monitoring program for that priority pollutant. The Discharger shall begin the sediment monitoring program during the first discharge event following the effluent exceedance. An effluent sediment monitoring result at or below the sediment limitation in Table 5 of this Order demonstrates compliance with the sediment limitation and additional sediment monitoring for that pollutant is not required. An effluent sediment monitoring result that is above the sediment limitation in Table 5 requires additional sediment monitoring during discharge, but not more frequently than once per year, until the three-year average concentration for sediment monitoring results is at or below the sediment limitation.
- Pollutants shall be analyzed in accordance with U.S.EPA or ASTM methodologies where such methods exist. Where no U.S.EPA or ASTM methods exist, the State Board or Regional Water Board shall approve the use of other methods. Analytical tests shall be conducted by laboratories certified by the State Water Board in accordance with Water Code section 13176.
- During each reporting period, if effluent monitoring results exceed both a TSS effluent limitation and an effluent limitation or performance goal for cadmium, chlordane or dieldrin as specified in Table 4 of this Order; then the Discharger has not demonstrated attainment with the sediment performance goals as specified in Table 6 of this Order; and the Discharger is required to implement the sediment monitoring program for that priority pollutant. The Discharger shall begin the sediment monitoring program during the first discharge event following the effluent exceedance. An effluent sediment monitoring result at or below the sediment performance goal in Table 6 of this Order demonstrates attainment with the sediment performance goal and additional sediment monitoring for those pollutants is not required. An effluent sediment monitoring result that is above the sediment performance goal in Table 6 constitutes an exceedance of the performance goal. Annual sediment monitoring is required for the pollutant(s) until the data demonstrates compliance with the performance goals in Table 6.
- The *State Water Board Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality*, August 25, 2009, (known as Sediment Quality Plan, Attachment A) listed chemical analytes needed to characterize sediment contamination exposure and effect. According to Sediment Quality Plan, DDTs shall mean the sum of 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD and 2,4'-DDD.
- 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.
- According to 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.

T
E
N
T
A
T
I
V
E

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity

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

The chronic toxicity IWC for this discharge at Discharge Point 001 is 100 percent effluent.

2. Sample Volume and Holding Time

The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. For the receiving water, sufficient sample volume shall also be collected during accelerated monitoring for subsequent TIE studies, if necessary, at each sampling event. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.

3. Chronic Marine and Estuarine Species and Test Methods

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

- a. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.0).
 - b. A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, or the sand dollar, *Dendraster excentricus* (Fertilization Test Method 1008.0), or a static non-renewal toxicity test with the red abalone, *Haliotis rufescens* (Larval Shell Development Test Method).
 - c. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0).
4. Species Sensitivity Screening

Species sensitivity screening shall be conducted during this permit's first required sample collection. The Discharger shall collect a single effluent sample to initiate and concurrently conduct three toxicity tests using the fish, an invertebrate, and the alga species previously referenced. This sample shall also be analyzed for the parameters required on a monthly frequency for the discharge, during that given month. As allowed under the test method for the *Atherinops affinis*, a second and third sample may be collected for use as test solution renewal water as the seven-day toxicity test progresses. If the result of all three species is "Pass", then the species that exhibits the highest "Percent Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit cycle. If only one species fails, then that species shall be used for routine monitoring during the permit cycle. Likewise, if two or more species result in "Fail", then the species that exhibits the highest "Percent Effect" at the discharge IWC during the suite of species sensitivity screening shall be used for routine monitoring during the permit cycle, until such time as a rescreening is required.

Species sensitivity rescreening is required every 24 months if there has been discharge during dry weather conditions. If the discharge is intermittent and occurs only during wet

T
E
N
T
A
T
I
V
E

weather, rescreening is required every five years. If rescreening is necessary, the Discharger shall rescreen with the marine vertebrate species, a marine invertebrate species, and the alga species previously referenced, and continue to monitor with the most sensitive species. If the first suite of rescreening tests demonstrates that the same species is the most sensitive then the rescreening 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 may proceed with suites of screening tests for a minimum of three, but not to exceed five suites.

During the calendar month, toxicity tests used to determine the most sensitive test species shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL.

5. Quality Assurance and Additional Requirements

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

- a. The discharge is subject to determination of "Pass" or "Fail" from a chronic toxicity test using the Test of Significant Toxicity statistical t-test approach described in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1, and Appendix B, Table B-1. The null hypothesis (H_0) for the TST statistical approach is: Mean discharge IWC response $\leq 0.75 \times$ Mean control response. A test result that rejects this null hypothesis is reported as "Pass." A test result that does not reject this null hypothesis is reported as "Fail." The relative "Percent Effect" at the discharge IWC is defined and reported as: $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100\%$.
 - b. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method, then the Discharger must re-sample and re-test at the subsequent discharge event.
 - c. Dilution water and control water, including brine controls, shall be 1- μm -filtered uncontaminated natural seawater, hypersaline brine prepared using uncontaminated natural seawater, or laboratory water prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.
 - d. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.). Monthly reference toxicant testing is sufficient.
 - e. All reference toxicant test results should be reviewed and reported according to EPA guidance on the evaluation of concentration-response relationships found in *Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing* (40 C.F.R. part 136) (EPA 821-B-00-004, 2000).
 - f. The Discharger shall perform toxicity tests on final effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of the Monitoring and Reporting Program and the rationale is explained in the Fact Sheet (Attachment F).
6. Accelerated Monitoring Schedule for Maximum Daily Single Result: "Fail"
- The Maximum Daily single result shall be used to determine if accelerated testing needs to be conducted.

T
E
N
T
A
T
I
V
E

Once the Discharger becomes aware of this result, the Discharger shall implement an accelerated monitoring schedule within five calendar days of the receipt of the result. However, if the sample is contracted out to a commercial laboratory, the Discharger shall ensure that the first of five accelerated monitoring tests is initiated within seven calendar days of the Discharger becoming aware of the result. The accelerated monitoring schedule shall consist of a five concentration dilution series which includes the control with five dilutions, one of which must be the IWC, conducted at approximately two week intervals, over an eight week period; in preparation for the TRE process and associated reporting. If each of the accelerated toxicity tests results in "Pass," the Discharger shall return to routine monitoring for the next monitoring period. If one of the accelerated toxicity tests results in "Fail," the Discharger shall immediately implement the TRE Process conditions set forth below. During accelerated monitoring schedules, only TST results ("Pass" or "Fail") for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL.

B. Preparation of an Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan

The Discharger shall prepare and submit a copy of the Discharger's initial investigation TRE work plan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the work plan within 60 days, the work plan shall become effective. The Discharger shall use the *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989), or the most current version, as guidance. This work plan shall describe the steps that the Discharger intends to follow if toxicity is detected. At a minimum, the TRE Work Plan must describe the steps that the Discharger intends to follow if toxicity is detected. At a minimum the work plan shall include:

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).

C. Toxicity Reduction Evaluation (TRE) Process

1. **Preparation and Implementation of Detailed TRE Work Plan.** The Discharger shall immediately initiate a TRE and, within 15 days, submit to the Executive Officer a Detailed TRE Work Plan, which shall follow the generic Initial Investigation TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the Executive Officer:
 - a. Further actions by the Discharger to investigate, identify, and correct the causes of toxicity.
 - b. Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.
 - c. A schedule for these actions, progress reports, and the final report.
2. **TIE Implementation.** The Discharger may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, USEPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity*

T
E
N
T
A
T
I
V
E

Characterization Procedures (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.

3. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.
4. The Discharger shall continue to conduct routine effluent monitoring for compliance determination purposes while the TIE and/or TRE is taking place. Additional accelerated monitoring and TRE work plans are not required once a TRE has begun.
5. The Regional Water Board and USEPA recognize that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

D. Reporting

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

1. The toxicity test results for the TST statistical approach, reported as "Pass" or "Fail" and "Percent (%) Effect" at the chronic toxicity IWC for the discharge.
2. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).
3. TRE/TIE results. The Regional Water Board Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses.
4. Statistical program (e.g., TST calculator, CETIS, etc.) output results for each toxicity test.
5. Any additional QA/QC documentation or any additional chronic toxicity related information, upon request by Regional Water Board staff.

VI. LAND DISCHARGE MONITORING REQUIREMENTS—NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS—NOT APPLICABLE

T
E
N
T
A
T
I
V
E

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Surface Water Monitoring (Monitoring Location RSW-001)

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

Table E-4. Receiving Water Monitoring Requirements at Monitoring Location RSW-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	standard units	Grab	1/Year ¹	2
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Year ¹	2
Dissolved Oxygen	mg/L	Grab	1/Year ¹	2
<i>Enterococcus</i>	MPN/100ml or CFU/100ml	Grab	1/Year ¹	2,3
Fecal Coliform	MPN/100ml or CFU/100ml	Grab	1/Year ¹	2,3
Total Coliform	MPN/100ml or CFU/100ml	Grab	1/Year ¹	2,3
Salinity	ppt	Grab	1/Year ¹	2
Temperature	°F	Grab	1/Year ¹	2
TCDD Equivalents ⁴	µg/L	Grab	1/Year ¹	2
Remaining Priority Pollutants ⁵	µg/L	Grab	1/Year ¹	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. Receiving water samples should be collected at the same time as effluent samples, if possible, or at the first safe opportunity.

² Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; for priority pollutants the methods must meet the lowest MLs specified in Attachment 4 of the SIP and included as Attachment H in this Order. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.

³ Detection methods used for coliforms (total and fecal) and *Enterococcus* shall be those presented in Table 1A of 40 C.F.R. section 136, unless alternate methods have been approved by U.S. EPA pursuant to 40 C.F.R. part 136 or improved methods have been determined by the Executive Officer and/or U.S. EPA.

⁴ TCDD equivalents are 2,3,7,8-Tetrachlorodibenzodioxin (TCDD) plus 16 dioxin as furan congeners. TCDD equivalents shall be calculated using the following formula, where the MLs and the toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the MLs to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

Dioxin-TEQ (TCDD equivalents) = $\sum(Cx \times TEFx)$

where: Cx = concentration of dioxin or furan congener x

TEFx= TEF for congener x

Toxicity Equivalency Factors

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

T
E
N
T
A
T
I
V
E

	1,2,3,4,7,8 - hexa CDF	50	0.1
	1,2,3,6,7,8 - hexa CDF	50	0.1
	1,2,3,7,8,9 - hexa CDF	50	0.1
	2,3,4,6,7,8 - hexa CDF	50	0.1
	1,2,3,4,6,7,8 - hepta CDFs	50	0.01
	1,2,3,4,7,8,9 - hepta CDFs	50	0.01
	Octa CDF	100	0.0001
⁵ Priority pollutants as defined by the California Toxics Rule (CTR) defined in the Fact Sheet section III.C. and included as Attachment I of this Order.			

B. Surface Water Monitoring (Monitoring Location RSW-002)

The Discharger shall monitor the Dominguez Channel Estuary, at Monitoring Location RSW-002, approximately 50 feet downstream of Discharge Point No. 001 as follows:

Table E-5. Receiving Water Monitoring Requirements at Monitoring Location RSW-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	standard units	Grab	1/Year ¹	²
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Year ¹	²
Dissolved Oxygen	mg/L	Grab	1/Year ¹	²
Temperature	°F	Grab	1/Year ¹	²
Total Coliform	MPN/100 ml	Grab	1/Year ¹	²
Fecal Coliform	MPN/100 ml	Grab	1/Year ¹	²
<i>Enterococcus</i>	MPN/100 ml	Grab	1/Year ¹	²
Priority Pollutants ³	µg/L	Grab	1/Year ¹	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. Receiving water samples should be collected at the same time as effluent samples, if possible, or at the first safe opportunity. ² Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; for priority pollutants the methods must meet the lowest MLs specified in Attachment 4 of the SIP and included as Attachment H in this Order. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board. ³ Priority pollutants as defined by the California Toxics Rule (CTR) defined in the Fact Sheet section III.C. and included as Attachment I of this Order.				

T
E
N
T
A
T
I
V
E

IX. OTHER MONITORING REQUIREMENTS

A. Rainfall Monitoring

The Discharger shall measure and record the rainfall on each day of the month. This information shall be included in the monitoring report for that month.

B. Visual Monitoring

1. A visual observation station shall be established in the vicinity of the discharge point to the receiving water, Dominguez Channel Estuary.
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. 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 flow
 - g. Description of odor, if any, of the receiving water
 - h. Presence and activity of California Least Tern and California Brown Pelican.

C. Bed Sediment Monitoring Requirements for SED-001 (Harbor Toxics TMDL)

The Harbor Toxics TMDL encourages responsible parties to join a group of responsible parties to design and implement a collaborative monitoring plan. The Dominguez Channel Estuary responsible parties are each individually responsible for conducting water, sediment, and fish tissue monitoring. However, they are encouraged to collaborate or coordinate their efforts to avoid duplication and reduce associated costs. Dischargers interested in coordinated monitoring shall submit a collaborative monitoring plan that identifies monitoring to be implemented by the responsible parties. Under the coordinated monitoring option, the compliance point for the WLAs shall be storm drain outfalls or a point(s) in the receiving water that suitably represents the combined discharge of cooperating parties.

The details of the monitoring program including sampling locations and all methods shall be specified in the collaborative monitoring plan to be approved by the Executive Officer.

The Discharger shall monitor bed sediment at a sampling location specified in the collaborative monitoring plan. As an option, the Discharger may choose to conduct additional bed sediment monitoring at Monitoring Location SED-001 in order to demonstrate compliance with sediment limitations by meeting sediment numeric targets of cadmium, chlordane and dieldrin in bed sediments over a 3-year averaging period (see section IV.B. of the Order). Surface grab samples containing the upper 5 centimeters of sediment shall be collected and analyzed for the following:

T
E
N
T
A
T
I
V
E

Table E-6. Bed Sediment Monitoring Requirements for SED-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Cadmium, Total Recoverable	mg/kg dry sediment	Grab	1/Year	1
Chlordane	µg/kg dry sediment	Grab	1/Year	1
Dieldrin	µg/kg dry sediment	Grab	1/Year	1
¹ 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 Regional Water Board shall approve the use of other methods. Analytical tests shall be conducted by laboratories certified by the State Water Board in accordance with Water Code section 13176.				

D. Harbor Toxics TMDL Water Column, Sediment and Fish Tissue Monitoring for Dominguez Channel, Torrance Lateral and Dominguez Channel Estuary

This provision implements the Compliance Monitoring Program as required in the Harbor Toxics TMDL. The Compliance Monitoring Program includes water column monitoring, sediment monitoring and fish tissue monitoring at monitoring stations in the Dominguez Channel Estuary. The Discharger may join a collaboration group or develop a site-specific plan to comply with this requirement. Details on these requirements are provided in Section VI.C.2.c of this Order.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the Discharger shall indicate under penalty of perjury in the corresponding monitoring report that no effluent was discharged to surface water during the reporting period.
3. If the Discharger monitors (other than for process/operational control, startup, research, or equipment testing) any influent, effluent, or receiving water constituent more frequently than required by this Order using approved analytical methods, the results of those analyses shall be included in the monitoring report. These results shall be reflected in the calculation of the average (or median) used in demonstrating compliance with this Order/Permit.
4. 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 (WDRs). This section shall clearly list all non-compliance with WDRs, as well as all excursions of effluent limitations.
5. The Discharger shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.
6. The Discharger shall report the results of chronic toxicity testing, TRE and TIE as required in Attachment E, Monitoring and Reporting, section V.

B. Self-Monitoring Reports (SMRs)

1. The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website:
http://www.waterboards.ca.gov/water_issues/programs/ciwqs/

**T
E
N
T
A
T
I
V
E**

The CIWQS website will provide additional information for SMR submittal in the event there will be a planned 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. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-7. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
1/Year	November 1, 2018	January 1 through December 31	February 15
1/Discharge Event	November 1, 2018	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 15 August 15 November 15 February 15

4. Reporting Protocols. The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 C.F.R. part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

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

**T
E
N
T
A
T
I
V
E**

to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. **Compliance Determination.** Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional Water Board and State Water Board, 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 ML.
6. **Multiple Sample Data.** When determining compliance with an average monthly limitation (AMEL) 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: 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.
 - 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.
7. **SMRs.** 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 waste discharge requirements; 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. Discharge Monitoring Reports (DMRs)

DMRs are USEPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the DMR website at:

http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring

T
E
N
T
A
T
I
V
E

D. Other Reports

1. Within 90 days of the effective date of this permit, the Discharger is required to submit the following to the Regional Water Board:
 - a. Initial Investigation TRE workplan
 - b. Updated SWPPP
 - c. Updated BMPP
 - d. SPCC Plan
2. The SWPPP, BMPP, and SCP(or SPCC) status shall be reviewed at a minimum once per year and updated as needed to ensure all actual or potential sources of trash and pollutants in wastewater and storm water discharge from the facility are addressed. All changes or revisions to the SWPPP, BMPP, and Spill Contingency Plan shall be submitted to the Regional Water Board within 30 days of any revisions.

**T
E
N
T
A
T
I
V
E**

ATTACHMENT F – FACT SHEET

CONTENTS

I.	Permit Information.....	F-3
II.	Facility Description	F-4
	A. Description of Wastewater and Biosolids Treatment and Controls	F-4
	B. Discharge Points and Receiving Waters	F-5
	C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data	F-6
	D. Compliance Summary.....	F-9
	E. Planned Changes	F-9
III.	Applicable Plans, Policies, and Regulations	F-9
	A. Legal Authorities	F-9
	B. California Environmental Quality Act (CEQA).....	F-9
	C. State and Federal Laws, Regulations, Policies, and Plans	F-9
	D. Impaired Water Bodies on the CWA section 303(d) List.....	F-12
	E. Other Plans, Policies and Regulations—Not Applicable.....	F-15
IV.	Rationale For Effluent Limitations and Discharge Specifications	F-16
	A. Discharge Prohibitions	F-16
	B. Technology-Based Effluent Limitations	F-17
	C. Water Quality-Based Effluent Limitations (WQBELs)	F-19
	D. Final Effluent Limitation Considerations	F-29
	E. Sediment Limitations.....	F-33
	F. Sediment Performance Goals	F-33
	G. Interim Effluent Limitations—Not Applicable.....	F-33
	H. Land Discharge Specifications—Not Applicable.....	F-33
	I. Recycling Specifications—Not Applicable	F-33
V.	Rationale for Receiving Water Limitations	F-33
	A. Surface Water.....	F-33
	B. Groundwater—Not Applicable.....	F-34
VI.	Rationale for Provisions	F-34
	A. Standard Provisions	F-34
	B. Special Provisions.....	F-34
VII.	Rationale for Monitoring and Reporting Requirements	F-35
	A. Influent Monitoring—Not Applicable	F-35
	B. Effluent Monitoring: Discharge Point 001	F-35
	C. Whole Effluent Toxicity Testing Requirements	F-36
	D. Receiving Water Monitoring	F-36
	E. Other Monitoring Requirements: Harbor Toxics TMDL Monitoring	F-36
VIII.	Public Participation.....	F-37
	A. Notification of Interested Parties	F-37
	B. Written Comments	F-37
	C. Public Hearing	F-37
	D. Reconsideration of Waste Discharge Requirements	F-37
	E. Information and Copying.....	F-38
	F. Register of Interested Persons.....	F-38
	G. Additional Information	F-38

**T
E
N
T
A
T
I
V
E**

TABLES

Table F-1. Facility Information.....	F-3
Table F-2. Historic Effluent Limitations.....	F-6
Table F-3. Final Pollutant Effluent Limitations in Sediment	F-9
Table F-4. Basin Plan Beneficial Uses	F-10
Table F-5. Summary of Technology-based Effluent Limitations for Discharge Point 001.....	F-18
Table F-6. Applicable Water Quality Criteria	F-20
Table F-7. Applicable Basin Plan Numeric Water Quality Objectives	F-25
Table F-8. Harbor Toxics TMDL Receiving Water Column Concentration-based WLAs.....	F-27
Table F-9. Sediment Limitations.....	F-28
Table F-10. Sediment Performance Goals	F-28
Table F-11. Summary of Final Effluent Limitations at Discharge Point 001	F-31

**T
E
N
T
A
T
I
V
E**

ATTACHMENT F – FACT SHEET

As described in section II.B of this Order, the Los Angeles Regional Water Board (Regional Water Board) incorporates this Fact Sheet as findings of the 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	4B192108004
Discharger	Equilon Enterprises LLC dba Shell Oil Products US
Name of Facility	Shell Oil Products US-Carson Distribution Facility
Facility Address	20945 South Wilmington Avenue
	Carson, CA 90810
	Los Angeles County
Facility Contact, Title and Phone	Sandeep Sharma, Facilities Manager, 310-816-2307
Authorized Person to Sign and Submit Reports	Sandeep Sharma, Facilities Manager, 310-816-2307
Mailing Address	Same
Billing Address	Same
Type of Facility	Refined Petroleum Pipeline/Bulk Station and Terminal
Major or Minor Facility	Major
Threat to Water Quality	Category 2
Complexity	Category B
Pretreatment Program	Not Applicable
Recycling Requirements	Not Applicable
Facility Permitted Flow	5.0 million gallons per day (MGD)
Facility Design Flow	Not Applicable
Watershed	Dominguez Channel
Receiving Water	Dominguez Channel Estuary
Receiving Water Type	Inland Surface Water, Estuary

- A. Equilon Enterprises LLC dba Shell Oil Products US is the owner of the Shell Oil Products US - Carson Distribution Facility (hereinafter Facility). Equilon Enterprises LLC dba Shell Oil Products US (hereinafter Discharger) is the operator of the Facility, located at 20945 South Wilmington Avenue, Carson, California.

T
E
N
T
A
T
I
V
E

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 industrial storm water to the Dominguez Channel Estuary, a water of the United States, and is currently regulated by Order No. R4-2013-0097 which was adopted on June 6, 2013, and expired on July 6, 2018. Order No. R4-2013-0097 is administratively continued until the effective date of a new permit. Attachment B provides a Facility location map and site plan. Attachment C provides a flow schematic for 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 January 16, 2018. A site visit was conducted on April 23, 2018, to observe operations and collect additional data to develop permit limitations and requirements for waste discharge.
- D. Federal regulations at 40 C.F.R. section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, Table 3 of this Order limits the duration of the discharge authorization. However, pursuant to 40 C.F.R. section 122.6 and California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all federal NPDES requirements for continuation of expired permits.

II. FACILITY DESCRIPTION

The Discharger owns and operates a fuel pipeline transfer station at the 450-acre facility, which is the site of a former Shell Refinery (Dominguez Section). The refinery operation was closed in November 1991, with the exception of the alkylation process module which was closed in 1995. The refinery superstructures have been dismantled and removed from the site.

The Facility currently operates as a 450-acre fuel transfer station. Products are primarily received from various sources via pipeline, stored in tanks, and distributed to various destinations via pipeline. There are racks for truck loading of ethanol and biodiesel.

The primary storage area is the Fuels Tank Farm consisting of 57 tanks for the storage of gasoline, diesel, jet fuel and ethanol. Each individual tank is surrounded by a berm. The berms have earthen bottoms and sides of earth, gunite or asphalt. The site also has a Chemical Facility with 105 smaller tanks. Currently about 35-40 of these tanks are being used for the storage of biodiesel, hydrocarbon solvents, and oxygenated products. The truck racks are located at the Chemical Facility.

A. Description of Wastewater and Biosolids Treatment and Controls

The entire site drains toward the north. Storm water is held onsite and allowed to evaporate/percolate. The storm water can be held within the bermed areas and/or pumped to other storage areas. These areas include the Storm Pond, Spencer Lake, and the North Ditch. Maintenance for these areas is provided by Enyon including weed control with environmentally-friendly spray product.

1. **Storm Pond.** The Storm Pond is the primary exchange point for storm water runoff. It is located in the northern area of the Facility and has a capacity of approximately 10 million gallons. It may direct storm water to or from the Fuels Tank Farm, Spencer Lake, and the North Ditch.
2. **Spencer Lake.** Spencer Lake is a 33-million gallon retention basin located adjacent to the Fuels Tank Farm. It is divided into two sections by a Facility road. Storm water from the Fuels Tank Farm bermed areas is pumped into Spencer Lake. Storm water may also be pumped between Spencer Lake and the Storm Pond.

T
E
N
T
A
T
I
V
E

3. **North Ditch.** The North Ditch is a concrete-lined channel along the northern border of the Facility. The North Ditch receives storm water from the Chemical Facility and non-process areas via earthen ditches. Water may be pumped from the North Ditch to or from the Storm Pond. The North Ditch terminates to the west at Box 3 (see MAP B-2: SITE PLAN).
4. **Box 3.** Box 3 is a storm water exchange vault that may receive water from the North Ditch, the Storm Pond, the Fuels Tank Farm, and Spencer Lake (via the Storm Pond). At Box 3 storm water passes through an American Petroleum Institute Oil/Water Separator and over a weir into an underground drain to the Dominguez Channel Estuary. The equipment around Box 3 includes a flow meter and sampling valve.

A large portion of the Facility is vacant land. A berm has been constructed in the center of the vacant land area to hold storm water from non-process areas of the site including buildings, roads and vacant land. The northwest corner of the vacant land area has a berm topped with sand bags to hold additional storm water within a natural basin. As previously stated, storm water from these areas may also be directed to the North Ditch via earthen drains.

Storm water is generally held on site for evaporation/percolation. The Discharger may also discharge storm water to the Sanitation Districts of Los Angeles County (LACSD) sewer between the hours of 2:00 am and 10:00 am. Restricted discharge to the sewer system may occur at other times to help keep the retention basins empty and available for storage.

During a large storm event, the volume of storm water may exceed the storage capacity at the Facility and the allowed LACSD discharge volume. In these cases storm water is directed to the Dominguez Channel Estuary through Box 3. This Order regulates discharges of storm water to the Dominguez Channel Estuary that occur when the onsite storage capacity and the permitted discharge flow to LACSD is exceeded. The last such discharge occurred in 2010.

All industrial process wastewater at the site is discharged to the sanitary sewer. The Discharger has installed infrastructure on-site to ensure the separation of process wastewater and storm water. The Facility's existing water permits include LACSD Industrial Wastewater Discharge Permit No. 15558 for storm water discharges to the publicly owned treatment works (POTW); and LACSD Industrial Wastewater Discharge Permit No. 014939 for the discharge of non-storm water wastestreams such as treated groundwater and contact storm water to the POTW. The Discharger is currently subject to Cleanup and Abatement Order No. 88-069. In addition, the Discharger is enrolled under General NPDES Permit No. CAG674001 (Order No. R4-2004-0109) for hydrotest water. Hydrotest discharges to the Dominguez Channel occur approximately once per year and are scheduled so that the discharge does not commingle with storm water discharges. This Order does not include discharges regulated by Cleanup and Abatement Order No. 88-69, General NPDES Permit No. CAG674001, or non-storm water regulated by Industrial Wastewater Discharge Permit No. 014939.

B. Discharge Points and Receiving Waters

The Discharger proposes to discharge up to 5 MGD of storm water from the Facility into the Dominguez Channel Estuary, a water of the United States via Discharge Point No. 001 (Latitude 33° 50' 44.17" N, Longitude -118° 16' 03.13" W).

T
E
N
T
A
T
I
V
E

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

1. Final Effluent Limitations-Discharge Point No. 001

- a. Effluent limitations contained in Order No. R4-2013-0097 for discharges from Discharge Point 001 are summarized in Tables F-2 below. No discharge occurred during the term of the prior Order. The last discharge occurred in 2010.

Table F-2. Historic Effluent Limitations

Parameter	Units	Effluent Limitations ¹			
		Average Monthly	Maximum Daily	Instantaneous	
				Minimum	Maximum
Conventional Pollutants					
pH	s.u.	--	--	6.5	8.5
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	--	30	--	--
	lbs/day ²	--	1,251	--	--
Oil and Grease	mg/L	--	15	--	--
	lbs/day ²	--	626	--	--
Total Suspended Solids (TSS)	mg/L	--	30	--	--
	lbs/day ²	--	1,251	--	--
Non-Conventional Pollutants					
Ammonia (as N)	mg/L	--	0.233 ³	--	--
Phenolic Compounds	mg/L	--	1.0	--	--
	lbs/day ²	--	41.7	--	--
Settleable Solids	ml/L	--	0.3	--	--
Sulfides	mg/L	--	0.1	--	--
	lbs/day ²	--	4.2	--	--
Temperature	°F	--	--	--	86
Turbidity	NTU	--	75	--	--
Total Petroleum Hydrocarbons (TPH) ⁴	µg/L	--	100	--	--
	lbs/day ²	--	4.2	--	--
Xylenes	µg/L	--	21	--	--
	lbs/day ²	--	0.88	--	--
Priority Pollutants					
Copper, Total Recoverable	µg/L	--	6.1	--	--
	lbs/day ²	--	0.26	--	--
Lead, Total Recoverable	µg/L	--	14	--	--
	lbs/day ²	--	0.58	--	--
Mercury, Total Recoverable	µg/L	--	0.10	--	--
	lbs/day ²	--	0.0042	--	--
Nickel, Total Recoverable	µg/L	--	14	--	--
	lbs/day ²	--	0.58	--	--
Zinc, Total Recoverable	µg/L	--	140	--	--
	lbs/day ²	--	5.9	--	--

T
E
N
T
A
T
I
V
E

Parameter	Units	Effluent Limitations ¹			
		Average Monthly	Maximum Daily	Instantaneous	
				Minimum	Maximum
Benzene	µg/L	--	21	--	--
	lbs/day ²	--	0.88	--	--
Ethylbenzene	µg/L	--	21	--	--
	lbs/day ²	--	0.88	--	--
Toluene	µg/L	--	21	--	--
	lbs/day ²	--	0.88	--	--
TCDD Equivalents ⁵	µg/L	--	2.8E-08	--	--
	lbs/day ²	--	1.2E-09	--	--
Benzo(a)Anthracene ⁶	µg/L	--	0.098	--	--
	lbs/day ²	--	0.0041	--	--
Benzo(a)Pyrene ⁶	µg/L	--	0.098	--	--
	lbs/day ²	--	0.0041	--	--
Chrysene ⁶	µg/L	--	0.098	--	--
	lbs/day ²	--	0.0041	--	--
Pyrene ⁶	µg/L	--	22,068	--	--
	lbs/day ²	--	920	--	--
Chlordane	µg/L	--	0.0012	--	--
	lbs/day ²	--	4.9E-05	--	--
4,4'-DDT	µg/L	--	0.0012	--	--
	lbs/day ²	--	4.9E-05	--	--
Dieldrin	µg/L	--	0.00028	--	--
	lbs/day ²	--	1.2E-05	--	--
Total PCBs ⁷	µg/L	--	0.00034	--	--
	lbs/day ²	--	1.4E-05	--	--

- ¹ Scientific "E" notation is used to express certain values. In scientific "E" notation, the number following the "E" indicates that position of the decimal point in the value. Negative numbers after the "E" indicate that the value is less than 1, and positive numbers after the "E" indicate that the value is greater than 1. In this notation a value of 6.1E-02 represents 6.1 x 10⁻² or 0.061, 6.1E+02 represents 6.1 x 10² or 610, and 6.1E+00 represents 6.1 x 10⁰ or 6.1.
- ² The mass limitations are based on a maximum flow of 5 MGD and is calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.
- ³ The daily maximum concentration of un-ionized ammonia shall not exceed 0.233 mg/L. The un-ionized ammonia concentration must be converted to total ammonia using the implementation procedure in the Basin Plan Amendment – Salt Water Ammonia Objectives for Inland Surface Waters (Regional Board Resolution No. 2004-022).
- ⁴ TPH equals the sum of TPH(C₄-C₁₂), TPH(C₁₃-C₂₂), and TPH(C₂₃+).
- ⁵ TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

T
E
N
T
A
T
I
V
E

Toxicity Equivalency Factors

Congeners	Toxicity Equivalence Factor (TEF)
2,3,7,8 - tetra CDD	1.0
1,2,3,7,8 - penta CDD	1.0
1,2,3,4,7,8 - hexa CDD	0.1
1,2,3,6,7,8 - hexa CDD	0.1
1,2,3,7,8,9 - hexa CDD	0.1
1,2,3,4,6,7,8 - hepta CDD	0.01
Octa CDD	0.0001
2,3,7,8 - tetra CDF	0.1
1,2,3,7,8 - penta CDF	0.05
2,3,4,7,8 - penta CDF	0.5
1,2,3,4,7,8 - hexa CDF	0.1
1,2,3,6,7,8 - hexa CDF	0.1
1,2,3,7,8,9 - hexa CDF	0.1
2,3,4,6,7,8 - hexa CDF	0.1
1,2,3,4,6,7,8 - hepta CDFs	0.01
1,2,3,4,7,8,9 - hepta CDFs	0.01
Octa CDF	0.0001

⁶ Per page 13 of Attachment A to Resolution No. R11-008 CTR human health criteria were not established for total PAHs. Therefore, the CTR criterion for individual PAHs of 0.049 µg/L is applied to benzo(a)anthracene, benzo(a)pyrene, and chrysene. The CTR criterion for pyrene of 11,000 µg/L is assigned as an individual WLA to pyrene.

⁷ CTR human health criterion for PCBs applies to total PCBs, e.g., the sum of all congener or isomer or homolog or arochlor analyses.

- b. **Bacteria Limitations Requirements.** Bacteria limits are established for both geometric means and single samples. The Basin Plan includes an implementation provisions for geometric means: *“The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period).”*

i. Rolling 30-day Geometric Mean Limits

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

ii. Single Sample Limits

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

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

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

**T
E
N
T
A
T
I
V
E**

2. Final Sediment Waste Load Allocations-Discharge Point No. 001

The following sediment, final, concentration-based allocations as per the Harbor Toxics TMDL (R11-008), are applicable to Discharge Point No. 001 during the effective dates of this Order.

Table F-3. Final Pollutant Effluent Limitations in Sediment

Pollutant	Sediment, Final Concentration-based Allocations	Units
Cadmium, Total Recoverable	1.2	mg/kg in dry sediment
Chlordane	1.5	µg/kg in dry sediment

D. Compliance Summary

The Facility did not discharge during the permit term. As a result there were no violations of numeric effluent limitations.

E. Planned Changes

The Discharger does not have any planned changes to the Facility.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the 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 USEPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from CEQA. See also *County of Los Angeles v. State Water Resources Control Board* (2006) 143 Cal.App.4th 985, 1007.

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

- Water Quality Control Plan.** The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (hereinafter Basin Plan) on June 13, 1994, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan.

In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) 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 Dominguez Channel Estuary are as follows:

Table F-4. Basin Plan Beneficial Uses

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

2. **Thermal Plan.** The State Water Board adopted the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan) on January 7, 1971 and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. This plan contains a maximum temperature limitation of 86°F for thermal discharges to the Estuaries. Requirements of this Order implement the Thermal Plan. Additionally, a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region* (White Paper)¹, evaluated the optimum temperatures for a number of aquatic species prevalent in the region including: 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 it is consistent with the maximum temperature limitation in the Thermal Plan. Therefore, based on the Thermal Plan and the White Paper, a maximum effluent temperature limitation of 86°F is included in this Order.

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

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

The discharge from the Facility is comprised entirely of storm water runoff and therefore is not considered to be industrial process water. Nonetheless, this Order contains provisions necessary to protect all beneficial uses of the receiving water, the Dominguez Channel Estuary.

4. **Sediment Quality.** The State Water Board adopted the Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1, Sediment Quality on September 16, 2008, and it

¹ Available from staff in the office of the California Regional Water Quality Control Board, Los Angeles Region.

became effective on August 25, 2009. This plan supersedes other narrative sediment quality objectives, and establishes new sediment quality objectives and related implementation provisions for specifically defined sediments in most bays and estuaries. Requirements of this Order implement sediment quality objectives of this Plan.

5. **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.
6. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
7. **Antidegradation Policy.** Federal regulation 40 C.F.R. section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16 ("Statement of Policy with Respect to Maintaining High Quality of Waters in California"). 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 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.
8. **Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) 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.
9. **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, threatened, or endangered species. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
10. **Trash Provisions.** The State Water Board adopted the "*Amendment to the Ocean Plan and Part I Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California*" (Trash Provisions) through resolution 2015-

T
E
N
T
A
T
I
V
E

0019, which was approved by the Office of Administrative Law (OAL) on December 2, 2015 and became effective upon USEPA approval on January 12, 2016. The Trash Provisions established a narrative water quality objective and a prohibition on the discharge of trash, implemented through permits issued pursuant to CWA section 402(p), waste discharge requirements, or waivers of waste discharge requirements.

The Trash Provisions apply to all surface waters of the State, with the exception of those waters within the jurisdiction of the Regional Water Board where trash or debris Total Maximum Daily Loads (TMDLs) are in effect prior to the effective date of the Trash Provisions. There are currently no Trash TMDLs for the Dominguez Channel Estuary therefore the discharges described in this Order are subject to the Trash Provisions. As such, this Order incorporates the requirements of the Trash Provisions through the prohibition of trash discharges to the NPDES discharge points. This Order also requires the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP), which shall include specific BMPs used as storm water control measures that the Discharger will undertake to prevent the discharge of trash from the Facility to the Dominguez Channel Watershed. The Discharger is required to detail and submit to the Regional Water Board annually (through their annual SWPPP submittal) specific BMPs (storm water control measures) employed to control and prohibit the discharge of trash and other pollutants from the Facility through the NPDES discharge point, consistent with the monitoring and reporting requirement of the Trash Provisions.

11. **Mercury Provisions.** The State Water Board adopted “*Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California- Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions*” (Mercury Provisions) through Resolution 2017-0027, which was approved by OAL on June 28, 2017 and became effective upon USEPA approval on July 14, 2017. The Mercury Provisions established one narrative and four numeric water quality objectives for mercury and three new beneficial use definitions, implemented through NPDES permits issued pursuant to CWA section 402, waste discharge requirements, or waivers of waste discharge requirements. The Provisions included implementation provisions for individual non-storm water NPDES permits for municipal and industrial dischargers; storm water discharges including the MS4 and the Industrial General Permit (NPDES No. CAS000001); mine site remediation; nonpoint source discharges; dredging activities; and wetland projects.

The Provisions did not prescribe specific implementation provisions for individual industrial permittees that discharge storm water only. Therefore, the Mercury Provisions do not apply to this discharge. The Discharger is required to monitor annually for mercury.

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

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

The USEPA approved the California 2014-2016 CWA section 303(d) List of Impaired Waters (2014-16 303(d) List) on April 6, 2018. 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 2014-16 303(d) List and have been scheduled for TMDL.

The Facility discharges into the unlined portion of the Dominguez Channel Estuary below Vermont. The 2014-16 303(d) List includes the classification of the “Dominguez Channel

T
E
N
T
A
T
I
V
E

Estuary (unlined portion below Vermont Ave.)". The pollutants/stressors of concern for this portion include benthic community effects, benzo(a)anthracene, benzo(a)pyrene (3,4-benzopyrene-7-d), chlordane (tissue), chrysene (C1-C4), copper, DDT (tissue and sediment), dieldrin (tissue), indicator bacteria, lead, polychlorinated biphenyls (PCBs), phenanthrene, pyrene, and toxicity.

Two TMDLs have been developed that address some of the stressors listed for the Dominguez Channel Estuary. Following is a summary of these TMDLs:

1. **Bacteria TMDL.** The Regional Water Board approved the Los Angeles Harbor Bacteria TMDL through Resolution 2004-011 on July 1, 2004. The State Water Board, Office of Administrative Law (OAL), and USEPA approved the TMDL on October 21, 2004, January 5, 2005, and March 1, 2005, respectively. The Bacteria TMDL became effective on March 10, 2005. The Bacteria TMDL addresses Inner Cabrillo Beach and the Main Ship Channel of the Los Angeles Inner Harbor, but does not address the Dominguez Channel Estuary. The requirements of the Bacteria TMDL are not applicable to the discharge from this Facility. This Order retains effluent bacteria limitations based on Water Quality Objectives (WQOs) included in the Basin Plan that are applicable to Dominguez Channel Estuary. These WQOs are identical to the WQOs used to develop the Bacteria TMDL that is applicable to the Main Ship Channel immediately downstream of Dominguez Channel Estuary.
2. **Harbor Toxics TMDL.** The Regional Water Board adopted Resolution No. R11-008 on May 5, 2011, that amended the Basin Plan to incorporate the *TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbors Waters* (Harbor Toxics TMDL). The Harbor Toxics TMDL was approved by the State Water Board on February 7, 2012, the OAL on March 21, 2012, and the USEPA on March 23, 2012. The TMDL became effective on March 23, 2012. The Harbor Toxics TMDL contains requirements applicable to this discharge. Therefore, this Order contains effluent limitations, sediment limitations and performance goals, and monitoring requirements based on the TMDL.

For the Dominguez Channel Estuary, the Harbor Toxics TMDL includes:

- a. Sediment interim concentration-based waste load allocations (WLAs) (in mg/kg sediment) for copper, lead, zinc, 4,4'-DDT, PAHs and PCBs (Attachment A to Resolution No. R11-008, p. 11).
- b. Water column final concentration-based WLAs (µg/L) for copper, lead, zinc, PAHs, chlordane, 4,4'-DDT, dieldrin and total PCBs (Attachment A to Resolution No. R11-008, pp. 13-14).
- c. Sediment final concentration-based allocations (in mg/kg sediment) for cadmium (Attachment A to Resolution R11-008, p. 17).
- d. Bed sediment final concentration-based allocations (in mg/kg sediment) for chlordane and dieldrin (Attachment A to Resolution R11-008, p. 21).
- e. Provisions for monitoring discharges and/or receiving waters during the TMDL's 20 year implementation schedule to determine attainment with waste load and load allocations as appropriate.

T
E
N
T
A
T
I
V
E

Implementation of the Harbor Toxics TMDL

The provisions included here are consistent with the assumptions and requirements of the WLAs established in the Harbor Toxics TMDL that are applicable to the discharge from this Facility.

- a. **Water Column WLAs.** This Order includes water quality-based effluent limitations (WQBELs) (in µg/L, total metal) based on Harbor Toxics TMDL saltwater column final concentration-based WLAs for copper (3.73), lead (8.52), zinc (85.6), PAHs [benzo(a)anthracene (0.049), benzo(a)pyrene (0.049), chrysene (0.049), pyrene (11,000)], chlordane (0.00059), 4,4'-DDT (0.00059), dieldrin (0.00014) and total PCBs (0.00017). The TMDL's WLAs were converted from saltwater California Toxics Rule (CTR) criteria using CTR saltwater default translators. The WQBELs were statistically calculated from the WLAs according to provisions in section 1.4 of the State Implementation Policy (SIP). CTR human health criteria were not established for total PAHs, therefore the CTR criterion of 0.049 µg/L for individual PAHs is assigned as an individual WQBEL to benzo(a)anthracene, benzo(a)pyrene and chrysene. The CTR criteria for pyrene of 11,000 µg/L is assigned as an individual WQBEL to pyrene. The WQBELs established in this Order based on Harbor Toxics TMDL WLAs are the same as those included in Order No. R4-2013-0097.
- b. **Sediment Limitations, Performance Goals and Monitoring.** This Order also includes sediment limitations and performance goals based on the TMDL's interim and final sediment allocations, respectively. The sediment limitations (in mg/kg sediment dry weight) are copper (220.0), lead (510.0), zinc (789.0), DDT (1.727), PAHs (31.60) and total PCBs (1.490). The sediment performance goals (in µg/kg dry sediment) based on the final sediment allocations include cadmium (1.2), chlordane (0.5) and dieldrin (0.02). This Order also includes the associated sediment monitoring requirements for the effluent. The TMDL's interim and final sediment allocations were developed to ensure that the beneficial uses of the Dominguez Channel Estuary are preserved.

The water column CTR TMDL-based WLAs for copper, lead, zinc, PAHs, chlordane, 4,4'-DDT, dieldrin, and total PCBs were developed to ensure that the beneficial uses of the Dominguez Channel Estuary are preserved. However, no water column CTR TMDL-based WLA was assigned for cadmium in the Dominguez Channel Estuary. Therefore, a performance goal is established for cadmium. The cadmium performance goal was developed using CTR criteria and section 1.4 of the SIP. This performance goal will therefore serve as a monitoring trigger to ensure proper implementation of the TMDL's final cadmium sediment limitation for this Discharge.

With regard to sediment limitations, during each reporting period, if effluent monitoring results exceed both a TSS effluent limitation and an effluent limitation for copper, lead, zinc, 4,4'-DDT, total PCBs, benzo(a)anthracene, benzo(a)pyrene, chrysene or pyrene as specified in Table 4 of this Order; then the Discharger has not demonstrated compliance with the sediment limitations in Table 5 of this Order and the Discharger is required to implement the sediment monitoring program for that priority pollutant. The Discharger shall begin the sediment monitoring program during the first discharge event following the effluent exceedance. An effluent sediment monitoring result at or below the sediment limitation in Table 5 of this Order demonstrates compliance with the sediment limitation and additional sediment monitoring for that pollutant is not required. An effluent sediment monitoring result that is above the sediment limitation in Table 5 requires additional sediment monitoring during discharge, but not more frequently than once per year, until the

T
E
N
T
A
T
I
V
E

three-year average concentration for sediment monitoring results is at or below the sediment limitation.

With regard to sediment performance goals, during each reporting period, if effluent monitoring results exceed both a TSS effluent limitation and an effluent limitation or performance goal for cadmium, chlordane or dieldrin as specified in Table 4 of this Order; then the Discharger has not demonstrated attainment with the sediment performance goals as specified in Table 6 of this Order; and the Discharger is required to implement the sediment monitoring program for that priority pollutant. The Discharger shall begin the sediment monitoring program during the first discharge event following the effluent exceedance. An effluent sediment monitoring result at or below the sediment performance goal in Table 6 of this Order demonstrates attainment with the sediment performance goal and additional sediment monitoring for those pollutants is not required. An effluent sediment monitoring result that is above the sediment performance goal in Table 6 constitutes an exceedance of the performance goal. Annual sediment monitoring is required for the pollutant(s) until the data demonstrates compliance with the performance goals in Table 6.

- c. **Water Column, Sediment, and Fish Tissue Monitoring for Dominguez Channel, Torrance, and Dominguez Channel Estuary.** As defined in the Harbor Toxics TMDL, the Discharger is a “responsible party” because it is an “Individual Industrial Permittee.” As such, either individually or with a collaborating group, the Discharger shall develop a monitoring and reporting plan (Monitoring Plan) and quality assurance project plan (QAPP) for the water column, sediment, and fish tissue in Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary Compliance Monitoring Program. These plans shall follow the “TMDL Element - Monitoring Plan” provisions in Attachment A to Resolution No. R11-008. The TMDL requires that the Monitoring Plan and QAPP shall be submitted 20 months after the effective date (March 23, 2012) of the TMDL for public review and subsequent Executive Officer approval. Since the effective date of this Order exceeds the deadline for the Monitoring Plan and QAPP, the Discharger shall join a group already formed or develop a site-specific monitoring plan. If the Discharger decides to join a group already formed, the Discharger shall notify the Regional Water Board within 90 days of the effective date of the Order. Documentation of Discharger’s participation and responsibilities shall be provided with the notification. If the Discharger decides to develop a site-specific Monitoring Plan with a QAPP, the Discharger shall notify the Regional Water Board within 90 days of the effective date of the Order and submit them to the Regional Water Board within 12 months of the effective date of the Order for public comment, and subsequently, the Regional Water Board approval. The Discharger shall begin monitoring 6 months after the Monitoring Plan and QAPP are approved by the Executive Officer, unless otherwise directed by the Executive Officer. The compliance monitoring program shall include water column, sediment, and fish tissue monitoring. The Discharger shall submit the annual monitoring report to the Regional Water Board by the specified date in the proposed Monitoring Plan. The annual monitoring report shall indicate compliance and non-compliance with waste load allocations.

E. Other Plans, Policies and Regulations—Not Applicable

T
E
N
T
A
T
I
V
E

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: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

The Facility is a fuel oil tank farm (bulk petroleum storage facility). The list of pollutants of concern was developed based on constituents that were historically found in the effluent or are common pollutants from petroleum storage facilities. Pollutants commonly associated with storm water discharges include, settleable solids, biochemical oxygen demand (5-day at 20 degrees C) (BOD), total suspended solids (TSS), sulfides, temperature, turbidity and toxicity. The storm water may come in contact with the raw materials and the products, which consist of several organic and inorganic compounds. Therefore, the pollutants of concern for discharges from bulk petroleum storage facilities include: oil and grease, pH, ammonia, phenols, total petroleum hydrocarbons (TPH), benzene, ethylbenzene, toluene, xylene and methyl tertiary butyl ether (MTBE). The 2014-16 303(d) List includes the following pollutants of concern for the Dominguez Channel Estuary (unlined portion below Vermont Ave.): benthic community effects, benzo(a)anthracene, benzo(a)pyrene (3,4-benzopyrene-7-d), chlordane (tissue), chrysene (C1-C4), copper, DDT (tissue and sediment), dieldrin (tissue), indicator bacteria, lead (tissue), polychlorinated biphenyls (PCBs), phenanthrene, pyrene, and toxicity. Therefore, these are also considered pollutants of concern.

Pursuant to 40 C.F.R. section 122.45(d), permit limitations for continuous discharges shall be expressed, unless impracticable, as both average monthly effluent limitations (AMELs) and maximum daily effluent limitations (MDELs). However, discharges through Discharge Point 001 consist of storm water only. They are intermittent and of short duration. Therefore, only MDELs are included to ensure protection of the beneficial uses associated with the receiving water.

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

A. Discharge Prohibitions

Discharge Prohibitions in this Board Order are based on the federal Clean Water Act, Basin Plan, Water Code, State Water Board's plans and policies, USEPA guidance and regulations, and previous permit provisions. This Order includes a new prohibition for trash in order to implement the statewide Trash Provisions. The discharge prohibitions included in this Order are consistent with the requirements set for other dischargers within the Los Angeles Region that are regulated by NPDES permits.

T
E
N
T
A
T
I
V
E

B. Technology-Based Effluent Limitations

1. Scope and Authority

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

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

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

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

2. Applicable Technology-Based Effluent Limitations

Currently, no technology-based ELGs exist for bulk petroleum storage, loading, and transfer facilities. Order No. R4-2013-0097 included effluent limitations for BOD, oil and grease, TSS, benzene, ethylbenzene, settleable solids, sulfides, toluene, TPH, phenolic compounds, turbidity and xylenes based on BPJ. In setting these limitations, the Regional Water Board considered the factors listed in 40 C.F.R. section 125.3(d).

Pursuant to state and federal antibacksliding regulations, this Order retains effluent limitations for these pollutants as technology-based effluent limitations. These limitations

T
E
N
T
A
T
I
V
E

are consistent with technology-based limitations included in other Orders within the State for similar types of discharges.

Order No. R4-2013-0097 required the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). This Order requires the Discharger to update and continue to implement the SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water contamination and for preventing contaminated storm water from being discharged directly to the receiving water. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water. This Order requires the Discharger to update and continue to implement a SWPPP consistent with requirements in Attachment G.

This Order requires the Discharger to develop and implement a Best Management Practices Plan that addresses specific areas that are considered sources of pollutants. The BMPs shall include measures to minimize the amount of pollutants entering the discharge.

This Order requires the Discharger to update the Spill Prevention Control and Countermeasures (SPCC) Plan. The SPCC Plan is required in order to report on preventative and contingency (cleanup) procedures for controlling accidental discharges and for minimizing the adverse effects of such events.

The combination of the SWPPP, BMPs, and SPCC Plan and existing Order limitations reflecting BPJ will serve as the equivalent of technology-based effluent limitations, in the absence of established ELGs, in order to carry out the purposes and intent of the CWA.

The following table summarizes the technology-based effluent limitations for Discharge Point 001:

Table F-5. Summary of Technology-based Effluent Limitations for Discharge Point 001

Parameter	Units	Maximum Daily
Biochemical Oxygen Demand (BOD)	mg/L	30
	lbs/day ¹	1,251
Oil and Grease	mg/L	15
	lbs/day ¹	626
TSS	mg/L	30
	lbs/day ¹	1,251
Benzene	µg/L	21
	lbs/day ¹	0.88
Ethylbenzene	µg/L	21
	lbs/day ¹	0.88
Settleable Solids	mL/L	0.3
Sulfides	mg/L	0.1
	lbs/day ¹	4.2
Toluene	µg/L	21
	lbs/day ¹	0.88
Total Petroleum Hydrocarbons (TPH) ²	µg/L	100
	lbs/day ¹	4.2
Phenolic Compounds, Total	mg/L	1.0
	lbs/day ¹	41.7

**T
E
N
T
A
T
I
V
E**

Parameter	Units	Maximum Daily
Turbidity	NTU	75
Xylenes	µg/L	21
	lbs/day ¹	0.88
¹ The mass limitations are based on a maximum flow of 5 MGD and is calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.		
² TPH equals the sum of TPH(C ₄ -C ₁₂), TPH(C ₁₃ -C ₂₂), and TPH(C ₂₃₊).		

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

CWA Section 301(b) 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.

Section 122.44(d)(1)(i) of 40 C.F.R. 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 section 122.44(d)(1)(vi).

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

The specific procedures for determining reasonable potential and, if necessary, for calculating WQBELs are contained in the USEPA's *Technical Support Document For Water Quality-based Toxics Control* (EPA/505/2-90-001,1991) (TSD) for storm water discharges and in the SIP for non-storm water discharges. However, the TSD on Page 64 Section 3.3.8 states that "The statistical approach shown in Box 3-2 or an analogous approach developed by a regulatory authority can be used to determine the reasonable potential." The Regional Water Board has determined that the procedures for determining reasonable potential and calculating WQBELs contained in the SIP for non-storm water discharges may also be used to evaluate reasonable potential and calculate WQBELs for storm water discharges. Hence, in this Order, the SIP methodology is used to evaluate reasonable potential for storm water discharges through Discharge Point 001.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

As noted in section III of this Fact Sheet, the Regional Water Board adopted a Basin Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The beneficial uses applicable to the receiving water are

T
E
N
T
A
T
I
V
E

summarized in section III.C.1 of this Fact Sheet. The Basin Plan includes both narrative and numeric water quality objectives applicable to the receiving water.

Priority pollutant water quality criteria in the CTR are applicable to the Dominguez Channel Estuary. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, and in accordance with Section 131.38(c)(3), saltwater criteria apply at salinities of 10 part per thousand (ppt) and greater at locations where this occurs 95 percent or more of the time. The most recent receiving water monitoring data submitted by the Discharger (from March 4, 2009) indicated a salinity of 17 ppt. Therefore, the CTR criteria for saltwater aquatic life or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of the Dominguez Channel Estuary, a water of the United States.

The following table summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the effluent or receiving water:

Table F-6. 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	µg/L
2	Arsenic	36	N/A ¹		69	36	N/A ¹	--
3	Beryllium	NC ²			--	--		Narrative
4	Cadmium ³	9.4			42.3	9.4		--
5b	Chromium (VI) ³	50.4			1108	50.4		Narrative
6	Copper ³	3.7 ⁴			5.8	3.7		--
7	Lead ³	8.5 ⁴			221	8.5		--
8	Mercury	0.051			--	--		0.051
9	Nickel ³	8.3			75	8.3		4,600
10	Selenium ³	71			290	71		Narrative
11	Silver ³	2.2			2.2	--		--
12	Thallium	6.3						6.3
13	Zinc ³	86 ⁴			95	86		--
16	2,3,7,8-TCDD	1.4E-8			--	--		1.4E-8
60	Benzo(a) Anthracene ⁵	0.049 ⁴			--	--		0.049
61	Benzo(a) Pyrene ⁵	0.049 ⁴			--	--		0.049
73	Chrysene ⁵	0.049 ⁴			--	--		0.049
100	Pyrene ⁵	11,000 ⁴			--	--		11,000

**T
E
N
T
A
T
I
V
E**

- ¹ "N/A" indicates the receiving water body is not characterized as freshwater, nor are the water quality criteria for the protection of human health for the consumption of water and organisms applicable.
- ² "NC" indicates the constituent has no numeric water quality criteria.
- ³ Criteria for metals are converted from saltwater dissolved CTR criteria using CTR saltwater default translators.
- ⁴ These values are the same as those listed in Attachment A to Resolution R11-008.
- ⁵ Per page 13 of Attachment A to Resolution No. R11-008 CTR human health criteria were not established for total PAHs. Therefore, the CTR criterion for individual PAHs of 0.049 µg/L is applied to benzo(a)anthracene, benzo(a)pyrene, and chrysene. The CTR criterion for pyrene of 11,000 µg/L is assigned as an individual WLA to pyrene.

3. Determining the Need for WQBELs

Reasonable Potential Analysis Methodology. In accordance with section 1.3 of the SIP, the Regional Water Board conducts a Reasonable Potential Analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. If there is a TMDL WLA approved by USEPA, then WQBELs are developed using the WLA. Otherwise, the Regional Water Board analyzes effluent and receiving water data and identifies the maximum observed effluent concentration (MEC) and maximum background concentration (B) in the receiving water for each constituent. To determine reasonable potential, the MEC and the B are then compared with the applicable water quality objectives (C) outlined in the CTR, NTR, as well as the Basin Plan. For all pollutants that have a reasonable potential to cause or contribute to an excursion above a state water quality standard, numeric WQBELs are required.

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

- a. Trigger 1 – if $MEC \geq C$, a limit is needed.
- b. Trigger 2 – If the background concentration $B > C$ and the pollutant is detected in the effluent, a limit is needed.
- c. Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, or other applicable factors indicate that a WQBEL is required.

Sufficient effluent and receiving water data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

No discharge event has occurred at the Facility since 2010; therefore, no data was available to conduct an RPA. Therefore, the WQBELs in Order No. R4-2013-0097 are retained in this Order to adhere to anti-backsliding provisions in CWA sections 402(o)(1) and 303(d)(4).

Order No. R4-2013-0097 included an effluent limitation for TCDD Equivalents. This limitation was included based on one sampling result from December 23, 2010. A review of the data indicates that the result was a non-detect for 2,3,7,8-TCDD. The detection limit, however, was above the effluent limitation and therefore the result was flagged for reasonable potential. Since the pollutant has not been detected in the effluent, this Order does not retain the effluent limitation for TCDD Equivalents. This Order includes monitoring for this pollutant using sufficiently sensitive methods to determine reasonable potential.

T
E
N
T
A
T
I
V
E

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 WLA established as part of a TMDL.
 - ii. Use of a steady-state model to derive MDELs and AMELs.
 - iii. Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Water Board.
- b. Since no discharges have occurred since 2010, no RPA was performed based on recent data and no new WQBELs were calculated and the WQBELs from Order No. R4-2013-0097 are retained.
- c. The performance goal for cadmium was calculated from CTR aquatic life criteria and following the procedure based on the steady-state model, available in Section 1.4 of the SIP.
- d. 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 being allowed. However, in accordance with the reopener provision in section VI.C.1.e in the Order, this Order may be reopened upon the submission by the Discharger of adequate information to establish appropriate dilution credits or a mixing zone, as determined by the Regional Water Board.
- e. The process for developing these limits is in accordance with Section 1.4 of the SIP. Two sets 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.

Using nickel as an example, the WQBELs retained from Order No. R4-2013-0097 and the performance goal for cadmium were calculated using the process described below:

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 criterion, determine the effluent concentration allowance (ECA) using the following steady state equation:

$$ECA = C + D(C-B) \text{ when } C > B, \text{ and}$$

$$ECA = C \quad \text{when } C \leq B,$$

Where C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. For discharges from the Facility, criteria for saltwater are independent of hardness and pH.

D = The dilution credit, and

B = The ambient background concentration

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

$$ECA = C$$

T
E
N
T
A
T
I
V
E

For total recoverable nickel the applicable ECAs are:

$$ECA_{acute} = 75 \mu\text{g/L}$$

$$ECA_{chronic} = 8.3 \mu\text{g/L}$$

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

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

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

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. Since there are less than 10 samples, the CV is equal to 0.6 for all constituents.

For total recoverable nickel, the following data were 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}	ECA Multiplier _{chronic}
1	0.6	0.32	0.53

$$LTA_{acute} = 75 \mu\text{g/L} \times 0.32 = 24 \mu\text{g/L}$$

$$LTA_{chronic} = 8.3 \mu\text{g/L} \times 0.53 = 4.4 \mu\text{g/L}$$

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

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

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

$$LTA_{nickel} = LTA_{chronic} = 4.4 \mu\text{g/L}$$

Step 4: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as AMEL and 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 CV of the data set, the number of samples (for AMEL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

$$AMEL_{aquatic\ life} = LTA \times \text{Multiplier}_{AMEL}$$

$$MDEL_{aquatic\ life} = LTA \times \text{Multiplier}_{MDEL}$$

T
E
N
T
A
T
I
V
E

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 total recoverable nickel, the following data were used to develop the AMEL and MDEL for effluent limitations using equations provided in Section 1.4, Step 5 of the SIP (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	0.6	3.1	1.55

Total recoverable nickel

$$\text{AMEL} = 4.4 \mu\text{g/L} \times 1.55 = 6.8 \mu\text{g/L}$$

$$\text{MDEL} = 4.4 \mu\text{g/L} \times 3.1 = 14 \mu\text{g/L}$$

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

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

For nickel,

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

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

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

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

No. of Samples Per Month	CV	Multiplier _{MDEL 99}	Multiplier _{AMEL 95}	Ratio
4	0.6	3.1	1.55	2.0

For nickel:

$$\text{MDEL}_{\text{human health}} = 4,600 \mu\text{g/L} \times 2.0 = 9,200 \mu\text{g/L}$$

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

AMEL _{aquatic life}	MDEL _{aquatic life}	AMEL _{human health}	MDEL _{human health}
6.8	14	4,600	9,200

For nickel, the lowest (most restrictive) effluent limits are based on aquatic toxicity and are incorporated into this Order. Only the MDELs are applied, since discharges are infrequent, of short duration, and occur only when the onsite storage capacity is full and the discharge to the LACSD sewer is not permitted. These limitations are expected to be protective of the beneficial uses of the receiving water.

T
E
N
T
A
T
I
V
E

5. WQBELs Based on Basin Plan Objectives

The Basin Plan Objectives applicable to the Discharger are identified in Table F-5 below. These objectives were evaluated with respect to historic effluent monitoring data and Facility operations.

Table F-7. Applicable Basin Plan Numeric Water Quality Objectives

Constituent	Units	Water Quality Objective
pH	standard units	The pH of bays or estuaries shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.2 units from natural conditions as a result of waste discharge.
Ammonia	mg/L	1-hour avg. unionized ammonia concentration (mg/L) 0.233 mg/L 4-day avg. unionized ammonia concentration (mg/L) 0.035 mg/L
Bacteria	MPN/100 ml	Marine Waters Designated for Water Contact Recreation (REC-1) <u>Geometric Mean Limits</u> Total coliform density shall not exceed 1,000/100 ml. Fecal coliform density shall not exceed 200/100 ml. Enterococcus density shall not exceed 35/100 ml. <u>Single Sample Limits</u> Total coliform density shall not exceed 10,000/100 ml. Fecal coliform density shall not exceed 400/100 ml. Enterococcus density shall not exceed 104/100 ml. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.
BOD ₅	Narrative	Waters shall be free of substances that result in increases in the BOD which adversely affect beneficial uses
Dissolved Oxygen	mg/L	The mean annual dissolved oxygen concentration of all waters shall be greater than 7.0 mg/L, and no single determination shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations.
Oil and Grease	Narrative	Waters shall not contain oils, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.
Solid, Suspended or Settleable Materials	Narrative	Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses.
Turbidity	NTU	Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%. Where natural turbidity is greater than 50 NTU increases shall not exceed 10%.

T
E
N
T
A
T
I
V
E

- pH.** This Order includes instantaneous minimum and maximum effluent limitations for pH based on Basin Plan objectives.
- Ammonia.** Order No. R4-2013-0097 established a maximum daily effluent limitation for ammonia of 0.233 mg/L. Due to a lack of discharge events, effluent and receiving water data were insufficient to evaluate ammonia in the discharge. Therefore, this Order retains the effluent limitation for ammonia established in the prior Order.
- Bacteria.** The Dominguez Channel Estuary is identified on the 2014-16 303(d) List as impaired for indicator bacteria. To address bacteria as a pollutant of concern, this Order includes effluent limitations based on the Basin Plan.

- d. **Biochemical Oxygen Demand (BOD₅).** The 5-day BOD test indirectly measures the amount of readily degradable organic material in water by measuring the residual dissolved oxygen after a period of incubation (usually 5 days at 20° C). This Order addresses BOD through technology-based effluent limitations.
- e. **Dissolved Oxygen.** This Order applies the water quality objective for dissolved oxygen as a receiving water limit.
- f. **Oil and Grease.** This Order addresses oil and grease through technology-based effluent limitations.
- g. **Solid, Suspended or Settleable Materials.** This Order addresses this Basin Plan Water Quality Objective through technology-based effluent limitations for total suspended solids (TSS). This Order also includes receiving water limitations for settleable solids and requires monitoring for settleable solids in the effluent and the receiving water.
- h. **Turbidity.** This Order applies the water quality objective for turbidity as a receiving water limitation in addition to the technology-based effluent limitation.

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 toxics 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 and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses by aquatic organisms. Detrimental responses include, but are 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.

Order No. R4-2013-0097 included acute toxicity limitations and monitoring requirements at Discharge Point 001 in accordance with the Basin Plan, in which the acute toxicity objective for discharges dictates that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. There was no acute toxicity monitoring conducted at Discharge Point 001 during the term of Order No. R4-2013-0097 due to the lack of discharge events.

Chronic toxicity is a more stringent requirement than acute toxicity. A chemical at a low concentration can have chronic effects but no acute effects. This Order replaces the acute toxicity limitation in Order No. R4-2013-0097 with a chronic toxicity limitation. The chronic toxicity limitation addresses both acute and chronic toxicity endpoints in organisms exposed to the discharge.

This Order establishes an MDEL of “Pass” or “% Effect <50” as a chronic toxicity effluent limitation. In June 2010, USEPA published a guidance document titled *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010), in which they recommend the following: “Permitting authorities should consider adding the TST approach to their implementation procedures for analyzing valid WET data for their current NPDES WET Program.” The TST approach is another

T
E
N
T
A
T
I
V
E

statistical option for analyzing valid WET test data. Use of the TST approach does not result in any changes to EPA's WET test methods. Section 9.4.1.2 of USEPA's *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/0136,1995), recognizes that, "the statistical methods recommended in this manual are not the only possible methods of statistical analysis." The TST approach can be applied to acute (survival) and chronic (sublethal) endpoints and is appropriate to use for both freshwater and marine EPA WET test methods.

The TST's null hypothesis for chronic toxicity is:

$$H_0: \text{Mean response (IWC in \% effluent)} \leq 0.75 \text{ mean response (Control).}$$

Results obtained from the chronic toxicity test are analyzed using the TST approach and an acceptable level of chronic toxicity is demonstrated by rejecting the null hypothesis and reporting "Pass" or "P". Chronic toxicity results are expressed as "Pass" or "Fail" and "% Effect". Since no dilution is allowed, the chronic toxicity IWC for Discharge Point 001 is 100 percent effluent.

This Order contains numeric chronic toxicity effluent limitations. Nevertheless, this Order contains a reopener to allow the Regional Water Board and USEPA to modify the permit in the future, if necessary, to make it consistent with any new policy, plan, law, or regulation.

7. Harbor Toxics TMDL

Water Column WLAs

Table F-8 summarizes the Harbor Toxics TMDL Receiving Water Column Concentration-based WLAs for discharges to the Dominguez Channel Estuary.

**Table F-8. Harbor Toxics TMDL Receiving Water Column Concentration-based WLAs
Applicable to Discharge Point 001**

Parameter	Units	WLA
Copper, Total Recoverable ¹	µg/L	3.73
Lead, Total Recoverable ¹	µg/L	8.52
Zinc, Total Recoverable ¹	µg/L	85.6
PAHs ²	µg/L	0.049
Chlordane	µg/L	0.00059
4,4'-DDT	µg/L	0.00059
Dieldrin	µg/L	0.00014
Total PCBs	µg/L	0.00017
^{1.} Total Concentration-based WLAs for metals are converted from saltwater dissolved CTR criteria using CTR saltwater default translators. ^{2.} CTR human health criteria were not established for total PAHs. Therefore, the CTR criterion for individual PAHs of 0.049 µg/L is applied individually to benzo(a)anthracene, benzo(a)pyrene, and chrysene. The CTR criterion for pyrene of 11,000 µg/L is assigned as an individual WLA to pyrene.		

This permit implements the applicable receiving water column concentration-based WLAs as required in the TMDL. The WLAs are converted into effluent limitations by applying the CTR-SIP procedures.

Sediment Interim WLAs (Sediment Limitations)

The Harbor Toxics TMDL establishes interim concentration-based sediment waste load allocations (WLAs) in the Dominguez Channel Estuary that are to be achieved on March 23, 2012 (upon the effective date of the TMDL). The interim sediment WLAs that are applicable to the Discharger are established as sediment limitations in this Order as indicated in the table below:

Table F-9. Sediment Limitations

Pollutant	WLA	Units
Copper	220.0	mg/kg in dry sediment
Lead	510.0	µg/kg in dry sediment
Zinc	789.0	µg/kg in dry sediment
DDT	1.727	µg/kg in dry sediment
PAHs	31.60	µg/kg in dry sediment
PCBs	1.490	µg/kg in dry sediment

Compliance with the sediment limitations may be demonstrated via any one of three different means:

- Demonstrate that the sediment quality condition of Unimpacted or Likely Unimpacted via the interpretation and integration of multiple lines of evidence as defined in the SQO Part 1, is met; or
- Meet the limitations in bed sediment over a three-year averaging period; or
- Meet the limitations in the discharge over a three-year averaging period.

Sediment Final WLAs (Sediment Performance Goals)

The Harbor Toxics TMDL establishes final concentration-based sediment waste load allocations (WLAs) in the Dominguez Channel Estuary that must be attained by March 23, 2032 (20 years after the effective date of the TMDL). Until that deadline, these final sediment WLAs are applicable to the Discharger as performance goals in this Order as indicated in the table below:

Table F-10. Sediment Performance Goals

Pollutant	Performance Goal ¹	Units
Cadmium, Total Recoverable	1.2	mg/kg in dry sediment
Chlordane	0.5	µg/kg in dry sediment
Dieldrin	0.02	µg/kg in dry sediment
^{1.} In this Order, Sediment Performance Goals are not enforceable limitations. Rather, exceedance of a Sediment Performance Goal triggers annual sediment monitoring for the pollutant(s) until the data demonstrates attainment with the goal.		

Attainment of the sediment performance goal for cadmium may be demonstrated via any one of three means:

T
E
N
T
A
T
I
V
E

- a. The cadmium sediment performance goal is met. The Discharger may collect sufficient effluent sample to provide an adequate amount of effluent sediments (suspended solids) for sediment analysis.
- b. The qualitative sediment condition of Unimpacted or Likely Unimpacted via the interpretation and integration of multiple lines of evidence as defined in the Sediment Quality Plan is met.
- c. The sediment performance goal is met in bed sediments over a 3-year averaging period. The Discharger may choose to conduct bed sediment monitoring as specified in the MRP (Attachment E) to demonstrate compliance with this condition.

Attainment of the sediment performance goals for chlordane and dieldrin may be demonstrated via any one of four means:

- a. Fish tissue targets are met in species resident to the TMDL waterbodies. (A site-specific study to determine resident species shall be submitted to the Executive Officer for approval.)
- b. The chlordane and dieldrin sediment performance goals are met.
- c. Sediment numeric targets to protect fish tissue are met in bed sediments over a three-year averaging period.
- d. Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan, as amended to address contaminants in resident finfish and wildlife.

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. With the exception of TCDD Equivalents, all effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R4-2013-0097. That Order established effluent limitations for acute toxicity. This Order replaces the acute toxicity limitations with a chronic toxicity limitation. Chronic toxicity evaluates lethality as does the previously used acute test and it evaluates reductions in reproduction and growth; therefore, it is more stringent than the acute limitation.

Order No. R4-2013-0097 included an effluent limitation for TCDD Equivalents. Section 402(o)(B)(ii) states that effluent limitations may be less stringent in instances when the Administrator determines that technical mistakes were made in issuing the permit. As previously discussed, the TCDD limitation was included based on one sampling result that was flagged for reasonable potential because it was a non-detect for 2,3,7,8-TCDD at a detection limit that was above the effluent limitation. Since the pollutant has not actually been detected in the effluent, this Order does not retain the effluent limitation for TCDD Equivalents. This Order includes monitoring for this pollutant using sufficiently sensitive methods to determine reasonable potential.

2. Antidegradation Policies

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

**T
E
N
T
A
T
I
V
E**

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 Regional Water Board's Basin Plan and the SIP implement, and incorporate by reference, both the state and federal antidegradation policies. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge.

This Order does not provide for an increase in the permitted design flow and the final limitations in this Order hold the Discharger to performance levels that will not cause or contribute to water quality impairment or degradation of water quality. Therefore, the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution 68-16.

3. Mass-based Effluent Limitations

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

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

$$\text{Mass (lbs/day)} = \text{flow rate (MGD)} \times 8.34 \times \text{effluent limitation (mg/L)}$$

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

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

Flow rate = discharge flow rate (MGD).

According to the Report of Waste Discharge submitted by the Discharger, the maximum flow is 5 MGD at Discharge Point 001. As such, the mass-based effluent limitations are calculated using this flow.

4. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD, TSS, oil and grease, benzene, ethylbenzene, settleable solids, sulfides, toluene, TPH, phenolic compounds, turbidity and xylene at Discharge Point 001. Restrictions on these parameters are discussed in section IV.B.2 of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

Water quality-based effluent limitations have been derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 C.F.R. section 131.38. The procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR implemented by the SIP, which was approved by USEPA on May 18, 2000. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to

T
E
N
T
A
T
I
V
E

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 40 C.F.R. section 131.21(c)(1). The remaining water quality objectives and beneficial uses implemented by this Order were approved by USEPA and are applicable water quality standards pursuant to section 131.21(c)(2). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

5. Summary of Final Effluent Limitations

Table F-11. Summary of Final Effluent Limitations at Discharge Point 001

Parameter	Units	Effluent Limitations			Performance Goals ¹	Basis ²
		Maximum Daily	Instantaneous			
			Minimum	Maximum		
Conventional Pollutants						
pH	s.u.	--	6.5	8.5	--	BP, PO
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	30	--	--	--	BPJ, PO
	lbs/day ³	1,251	--	--	--	
Oil and Grease	mg/L	15	--	--	--	BPJ, PO
	lbs/day ³	626	--	--	--	
Total Suspended Solids (TSS) ^{4,5}	mg/L	30	--	--	--	BPJ, PO
	lbs/day ³	1,251	--	--	--	
Non-conventional Pollutants						
Ammonia (as N)	mg/L	0.233 ⁶	--	--	--	BP, PO
Phenolic Compounds	mg/L	1.0	--	--	--	BPJ, PO
	lbs/day ³	41.7	--	--	--	
Settleable Solids	ml/L	0.3	--	--	--	BPJ, PO
Sulfides	mg/L	0.1	--	--	--	BPJ, PO
	lbs/day ³	4.2	--	--	--	
Temperature	°F	--	--	86	--	BP, TP, WP, PO
Turbidity	NTU	75	--	--	--	BPJ, PO
Total Petroleum Hydrocarbons (TPH) ⁷	µg/L	100	--	--	--	BPJ, PO
	lbs/day ³	4.2	--	--	--	
Xylenes	µg/L	21	--	--	--	BPJ, PO
	lbs/day ³	0.88	--	--	--	
Bacteria	8				--	BP, PO
Chronic Toxicity	Pass or Fail, % Effect	Pass or % Effect <50	--	--	--	BP, BPJ, TST
Priority Pollutants						
Cadmium, Total Recoverable ⁴	µg/L	--	--	--	15	CTR, TMDL, SIP
Copper, Total Recoverable ⁵	µg/L	6.1	--	--	--	CTR, TMDL, PO
	lbs/day ³	0.26	--	--	--	

**T
E
N
T
A
T
I
V
E**

Parameter	Units	Effluent Limitations			Performance Goals ¹	Basis ²
		Maximum Daily	Instantaneous			
			Minimum	Maximum		
Lead, Total Recoverable ⁵	µg/L	14	--	--	--	CTR, TMDL, PO
	lbs/day ³	0.58	--	--	--	
Mercury, Total Recoverable	µg/L	0.10	--	--	--	CTR, PO
	lbs/day ³	0.0042	--	--	--	
Nickel, Total Recoverable	µg/L	14	--	--	--	CTR, PO
	lbs/day ³	0.58	--	--	--	
Zinc, Total Recoverable ⁵	µg/L	140	--	--	--	CTR, TMDL, PO
	lbs/day ³	5.9	--	--	--	
Benzene	µg/L	21	--	--	--	BPJ, PO
	lbs/day ³	0.88	--	--	--	
Ethylbenzene	µg/L	21	--	--	--	BPJ, PO
	lbs/day ³	0.88	--	--	--	
Toluene	µg/L	21	--	--	--	BPJ, PO
	lbs/day ³	0.88	--	--	--	
Benzo(a)Anthracene ^{5,9}	µg/L	0.098	--	--	--	CTR, TMDL, PO
	lbs/day ³	0.0041	--	--	--	
Benzo(a)Pyrene ^{5,9}	µg/L	0.098	--	--	--	CTR, TMDL, PO
	lbs/day ³	0.0041	--	--	--	
Chrysene ^{5,9}	µg/L	0.098	--	--	--	CTR, TMDL, PO
	lbs/day ³	0.0041	--	--	--	
Pyrene ^{5,9}	µg/L	22068	--	--	--	CTR, TMDL, PO
	lbs/day ³	920	--	--	--	
Chlordane ⁴	µg/L	0.0012	--	--	--	TMDL, PO
	lbs/day ³	4.9E-05	--	--	--	
4,4'-DDT ⁵	µg/L	0.0012	--	--	--	TMDL, PO
	lbs/day ³	4.9E-05	--	--	--	
Dieldrin ⁴	µg/L	0.00028	--	--	--	TMDL, PO
	lbs/day ³	1.2E-05	--	--	--	
Total PCBs ^{5,10}	µg/L	0.00034	--	--	--	TMDL, PO
	lbs/day ³	1.4E-05	--	--	--	

- Performance goals are intended to ensure that effluent concentrations and mass discharges do not exceed levels currently achieved by the permitted facility. These performance goals are not considered as limitations or standards for the regulation of the Facility. They act as triggers to determine when sediment monitoring is required for this category of pollutants.
- BP = Basin Plan; TP = Thermal Plan; PO = Order No. R4-2013-0097; BPJ = Best Professional Judgment; CTR = California Toxic Rule; SIP = State Implementation Policy; TMDL = Harbor Toxics TMDL (Attachment A to Resolution No. R11-008), and WP = White Paper.
- The mass limitations are based on a maximum flow of 5 MGD and is calculated as follows:
Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.
- During each reporting period, if effluent monitoring results exceed both a TSS effluent limitation and an effluent limitation or performance goal for cadmium, chlordane or dieldrin as specified in Table 4 of this Order; then the Discharger has not demonstrated attainment with the sediment performance goals as specified in Table 6 of this Order; and the Discharger is required to implement the sediment monitoring program for that priority pollutant. The Discharger shall begin the sediment monitoring program during the first discharge event following the effluent exceedance. An effluent sediment monitoring result at or below the sediment performance goal in Table 6 of this Order demonstrates attainment with the sediment performance goal and additional sediment monitoring for those pollutants is not required. An effluent sediment monitoring result that is above the sediment performance goal in Table 6 constitutes an exceedance of the performance

T
E
N
T
A
T
I
V
E

- goal. Annual sediment monitoring is required for the pollutant(s) until the data demonstrates compliance with the performance goals in Table 6.
5. During each reporting period, if effluent monitoring results exceed both a TSS effluent limitation and an effluent limitation for copper, lead, zinc, 4,4'-DDT, total PCBs, benzo(a)anthracene, benzo(a)pyrene, chrysene or pyrene as specified in Table 4 of this Order; then the Discharger has not demonstrated compliance with the sediment limitations in Table 5 of this Order and the Discharger is required to implement the sediment monitoring program for that priority pollutant. The Discharger shall begin the sediment monitoring program during the first discharge event following the effluent exceedance. An effluent sediment monitoring result at or below the sediment limitation in Table 5 of this Order demonstrates compliance with the sediment limitation and additional sediment monitoring for that pollutant is not required. An effluent sediment monitoring result that is above the sediment limitation in Table 5 requires additional sediment monitoring during discharge, but not more frequently than once per year, until the three-year average concentration for sediment monitoring results is at or below the sediment limitation.
 6. The daily maximum concentration of un-ionized ammonia shall not exceed 0.233 mg/L. The un-ionized ammonia concentration must be converted to total ammonia using the implementation procedure in the Basin Plan Amendment – Salt Water Ammonia Objectives for Inland Surface Waters (Regional Board Resolution No. 2004-022).
 7. TPH equals the sum of TPH(C₄-C₁₂), TPH(C₁₃-C₂₂), and TPH(C₂₃₊).
 8. Effluent limitations for total and fecal coliform bacteria are described below:
 - a. Geometric Mean Limits
 - i. Total coliform density shall not exceed 1,000/100 ml.
 - ii. Fecal coliform density shall not exceed 200/100 ml.
 - iii. Enterococcus shall not exceed 35/100 ml.
 - b. Single Sample Limits
 - i. Total coliform density shall not exceed 10,000/100 ml.
 - ii. Fecal coliform density shall not exceed 400/100 ml.
 - iii. Enterococcus density shall not exceed 104/100 ml.
 - iv. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-coliform exceeds 0.1.
 9. Per page 13 of Attachment A to Resolution No. R11-008 CTR human health criteria were not established for total PAHs. Therefore, the CTR criterion for individual PAHs of 0.049 µg/L is applied to benzo(a)anthracene, benzo(a)pyrene, and chrysene. The CTR criterion for pyrene of 11,000 µg/L is assigned as an individual WLA to pyrene. Effluent limitations for these pollutants were calculated based on the above criteria using SIP procedures.
 10. CTR human health criterion for PCBs applies to total PCBs, e.g., the sum of all congener or isomer or homolog or arochlor analyses.

E. Sediment Limitations

The Harbor Toxics TMDL establishes interim concentration-based sediment waste load allocations (WLAs) in the Dominguez Channel Estuary that are to be achieved on March 23, 2012 (upon the effective date of the TMDL). The interim sediment WLAs that are applicable to the Discharger are established as sediment limitations in this Order as indicated in Table F-9.

F. Sediment Performance Goals

The Harbor Toxics TMDL establishes final concentration-based sediment waste load allocations (WLAs) in the Dominguez Channel Estuary that must be attained by March 23, 2032 (20 years after the effective date of the TMDL). Until that deadline, these final sediment WLAs are applicable to the Discharger as performance goals in this Order as indicated in Table F-10.

G. Interim Effluent Limitations—Not Applicable

H. Land Discharge Specifications—Not Applicable

I. Recycling Specifications—Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan. As such, they are a required part of the proposed Order.

A. Surface Water

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

Water Board Resolution No. 68-16. Receiving water limitations in this Order are included to ensure protection of beneficial uses of the receiving water.

B. Groundwater—Not Applicable

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

Sections 122.41(a)(1) and (b) through (n) of 40 C.F.R. 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) of 40 C.F.R. allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 C.F.R. section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 C.F.R. sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

These provisions are based on 40 C.F.R. part 123 and Order No. R4-2013-0097. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new federal regulations, modification in toxicity requirements, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

- a. **Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan.** This provision is based on section 4 of the SIP, Toxicity Control Provisions, which establishes minimum toxicity control requirements for implementing the narrative toxicity objective for aquatic life protection established in the basin plans of the State of California.
- b. **Harbor Toxics TMDL Water Column, Sediment and Fish Tissue Monitoring for Dominguez Channel, Torrance Lateral and Dominguez Channel Estuary.** This provision implements the Compliance Monitoring Program as required in the Harbor Toxics TMDL. The Compliance Monitoring Program includes water column monitoring, sediment monitoring and fish tissue monitoring at monitoring stations in the Dominguez Channel Estuary. The Discharger may join a collaboration group or develop a site-specific plan to comply with this requirement.

3. Best Management Practices and Pollution Prevention

- a. **Storm Water Pollution Prevention Plan (SWPPP).** 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 the SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing trash and

T
E
N
T
A
T
I
V
E

contaminated storm water runoff from being discharged directly into the Dominguez Channel Estuary. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water. SWPPP requirements are included as Attachment G, based on 40 C.F.R. section 122.44(k).

- b. **Best Management Practices Plan (BMPP).** This Order requires the Discharger to develop and implement the BMPP. The BMPP may be included as a component of the SWPPP. The purpose of the BMPP is to establish site-specific procedures that ensure proper operation and maintenance of equipment, to ensure that unauthorized non-storm water discharges (i.e., spills) do not occur at the Facility. The BMPP shall incorporate the requirements contained in Attachment G. Attachment G requires a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.
 - c. **Spill Prevention Control and Countermeasures Plan.** As specified in 40 C.F.R. part 112, the owner or operator of an aboveground storage tank which stores more than 1,320 gallons of oil is required to submit an SPCC plan, with some exceptions. This Order requires the Permittee to submit an SPCC plan. The Discharger shall review and update, if necessary, the SPCC after each incident and make it available for the facility personnel at all times.
4. **Construction, Operation, and Maintenance Specifications—Not Applicable**
 5. **Special Provisions for Publicly-Owned Treatment Works (POTWs)—Not Applicable**
 6. **Other Special Provisions—Not Applicable**
 7. **Compliance Schedules—Not Applicable**

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that 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: Discharge Point 001**

Monitoring for pollutants expected to be present in the discharge will be required as established in the MRP (Attachment E) and as required in the SIP. To demonstrate compliance with established effluent limitations, the Order retains the monitoring requirements from Order No. R4-2013-0097 with the exception of acute toxicity (see section VII.C of this Fact Sheet for a discussion of toxicity requirements).

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

T
E
N
T
A
T
I
V
E

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth. This Order includes limitations for chronic toxicity and therefore, monitoring requirements are included in the MRP to determine compliance with the effluent limitations established in Limitations and Discharge Requirements, Effluent Limitations, section IV.A.

D. Receiving Water Monitoring

1. Surface Water

According to the SIP, the Discharger is required to monitor the upstream receiving water for the CTR priority pollutants to determine reasonable potential. Accordingly, the Regional Water Board is requiring that the Discharger conduct upstream receiving water monitoring of the CTR priority pollutants, TCDD equivalents, and ammonia at Monitoring Location RSW-001 during years in which a discharge occurs. Additionally, the Discharger must analyze pH and salinity of the upstream receiving water at the same time as the samples are collected for priority pollutants analyses. This Order discontinues monitoring for hardness at Monitoring Location RSW-001, as saltwater criteria are independent of hardness.

This Order includes monitoring requirements for the downstream location, Monitoring Location RSW-002. Monitoring for dissolved oxygen is required to demonstrate compliance with Basin Plan Objectives. In addition, at Monitoring Location RSW-002 the Discharger must monitor for ammonia, pH, and temperature to adjust the ammonia water quality objective, expressed as un-ionized ammonia, to total ammonia and to determine potential impacts of effluent ammonia to the receiving water concentrations.

2. Groundwater—Not Applicable

E. Other Monitoring Requirements: Harbor Toxics TMDL Monitoring

To achieve maximum efficiency and economy of resources, the Regional Water Board encourages dischargers to establish and participate in regional monitoring efforts. Regional monitoring enable the sharing of technical resources, trained personnel, and associated costs and create an integrated water and sediment monitoring program within each water body. Focusing resources on water body issues and developing a broader understanding of pollutants effects in these water bodies enables the development of more rapid and efficient response strategies and facilitates better management of water and sediment quality.

The Discharger is required to conduct sediment monitoring to demonstrate compliance with the sediment concentration-based allocations. Compliance with the sediment concentration-based allocations may be demonstrated via any one of the following three means:

1. Demonstrate that the sediment quality condition of Unimpacted or Likely Unimpacted via the interpretation and integration of multiple lines of evidence as defined in the Sediment Quality Plan, is met; or
2. Meet the interim allocations in bed sediment over a 3-year averaging period; or
3. Meet the interim allocations in the discharge over a 3-year averaging period.

**T
E
N
T
A
T
I
V
E**

VIII. PUBLIC PARTICIPATION

The Regional Water Board has considered the issuance of WDRs that will serve as an NPDES permit for the Facility. As a step in the WDR adoption process, Regional Water Board staff has developed tentative WDRs and has encouraged public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through email and public notice.

The public had access to the agenda and any changes in dates and locations through the Regional Water Board's website at <http://www.waterboards.ca.gov/losangeles>.

B. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process electronically at losangeles@waterboards.ca.gov with a copy to thomas.siebels@waterboards.ca.gov.

To be fully responded to by staff and considered by the Regional Water Board, the written comments were due at the Regional Water Board office by 5:00 p.m. on August 22, 2018.

C. Public Hearing

The 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: September 13, 2018
Time: 9:00 AM
Location: Government Center
800 S. Victoria Avenue
Ventura, CA 93009
Hall of Administration, Main Plaza

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

D. Reconsideration of Waste Discharge Requirements

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

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

Or by email at waterqualitypetitions@waterboards.ca.gov

T
E
N
T
A
T
I
V
E

For instructions on how to file a petition for review, see:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

E. Information and Copying

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

The tentative WDRs, comments received and response to comments are also available on the Regional Water Board's website at:

http://www.waterboards.ca.gov/losangeles/board_decisions/tentative_orders/index.shtml

F. Register of Interested Persons

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

G. Additional Information

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

**T
E
N
T
A
T
I
V
E**

ATTACHMENT G – STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

I. IMPLEMENTATION SCHEDULE

A storm water pollution prevention plan (SWPPP) shall be developed and submitted to the Regional Water Board within 90 days following the adoption of this Order. The SWPPP shall be implemented for each facility covered by this Permit within 10 days of approval from the Regional Water Board, or no later than 90 days from the date of the submittal of the SWPPP to the Regional Water Board (whichever comes first).

II. OBJECTIVES

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

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

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

III. PLANNING AND ORGANIZATION

M. 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.

N. 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 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

**T
E
N
T
A
T
I
V
E**

whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

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

**T
E
N
T
A
T
I
V
E**

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.

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, skim ponds, 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 VI.A.4 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 materials¹ 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 IV.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:
 - 4. **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.

¹ "Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to section 313 of Title III of Superfund Amendments and Reauthorization Act (SARA); fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges.

5. **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.
 6. **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.
 7. **Significant Spills and Leaks.** Describe materials that have spilled or leaked in significant quantities in storm water discharges or authorized non-storm water discharges since April 17, 1994. Include toxic chemicals (listed in 40 Code of Federal Regulations (C.F.R.), 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 C.F.R., 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.
 8. **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 authorized non-storm water discharges and associated drainage area.

Non-storm water discharges that are not authorized by this Permit, other waste discharge requirements, or other NPDES permits are prohibited. The SWPPP must include BMPs to prevent or reduce contact of authorized non-storm water discharges with significant materials (as defined in Footnote 1 of section V above) or equipment.
 9. **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.
 10. **Trash.** Describe the facility locations where trash may be generated as a result of facility operations and on-site activities.
- 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 VIII below.

T
E
N
T
A
T
I
V
E

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 section VI 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 VIII 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 VI. and VII. 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.

**T
E
N
T
A
T
I
V
E**

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:

**T
E
N
T
A
T
I
V
E**

O. 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 VIII.B. below). Below is a list of non-structural BMPs that should be considered:

1. **Good Housekeeping.** Good housekeeping generally consists 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, skim ponds, 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.

T
E
N
T
A
T
I
V
E

P. Structural BMPs.

Where non-structural BMPs as identified in section VIII.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, skim ponds, 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 10 days of approval by the Executive Officer or no later than 90 days after submission to the Regional Water Board, whichever comes first. 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 X.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 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.

T
E
N
T
A
T
I
V
E

X. SWPPP GENERAL REQUIREMENTS

- C.** The SWPPP shall be retained on site and made available upon request of a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.
- D.** The Regional Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this section. As requested by the Regional Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.
- E.** 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.
- F.** 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.
- G.** When any part of the SWPPP is infeasible to implement due to proposed significant structural changes, the facility operator shall submit a report to the Regional Water Board prior to the applicable deadline that (i) describes the portion of the SWPPP that is infeasible to implement by the deadline, (ii) provides justification for a time extension, (iii) provides a schedule for completing and implementing that portion of the SWPPP, and (iv) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or modifications. Facility operators shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.

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

**T
E
N
T
A
T
I
V
E**

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

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.

**T
E
N
T
A
T
I
V
E**

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

T
E
N
T
A
T
I
V
E

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50
Pyrene		10	0.05	

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

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

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

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

T
E
N
T
A
T
I
V
E

Table 2d – PESTICIDES – PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
alpha-BHC	0.01
Aldrin	0.005
b-Endosulfan	0.01
Beta-BHC	0.005
Chlordane	0.1
Delta-BHC	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Gamma-BHC (Lindane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

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

Techniques:

GC - Gas Chromatography
GCMS - Gas Chromatography/Mass Spectrometry
HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)
LC - High Pressure Liquid Chromatography
FAA - Flame Atomic Absorption
GFAA - Graphite Furnace Atomic Absorption
HYDRIDE - Gaseous Hydride Atomic Absorption
CVAA - Cold Vapor Atomic Absorption
ICP - Inductively Coupled Plasma
ICPMS - Inductively Coupled Plasma/Mass Spectrometry
SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)
DCP - Direct Current Plasma
COLOR – Colorimetric

T
E
N
T
A
T
I
V
E

ATTACHMENT I – LIST OF PRIORITY POLLUTANTS

CTR Number	Parameter	CAS Number	Analytical Methods
1	Antimony	7440360	1
2	Arsenic	7440382	1
3	Beryllium	7440417	1
4	Cadmium	7440439	1
5a	Chromium (III)	16065831	1
5a	Chromium (VI)	18540299	1
6	Copper	7440508	1
7	Lead	7439921	1
8	Mercury	7439976	1
9	Nickel	7440020	1
11	Selenium	7782492	1
11	Silver	7440224	1
12	Thallium	7440280	1
13	Zinc	7440666	1
14	Cyanide	57125	1
15	Asbestos	1332214	1
16	2,3,7,8-TCDD	1746016	1
17	Acrolein	117028	1
18	Acrylonitrile	117131	1
19	Benzene	71432	1
20	Bromoform	75252	1
21	Carbon Tetrachloride	56235	1
22	Chlorobenzene	118907	1
23	Chlorodibromomethane	124481	1
24	Chloroethane	75003	1
25	2-Chloroethylvinyl Ether	111758	1
26	Chloroform	67663	1
27	Dichlorobromomethane	75274	1
28	1,1-Dichloroethane	75343	1
29	1,2-Dichloroethane	117062	1
30	1,1-Dichloroethylene	75354	1
31	1,2-Dichloropropane	78875	1
32	1,3-Dichloropropylene	542756	1
33	Ethylbenzene	110414	1
34	Methyl Bromide	74839	1
35	Methyl Chloride	74873	1
36	Methylene Chloride	75092	1
37	1,1,2,2-Tetrachloroethane	79345	1
38	Tetrachloroethylene	127184	1
39	Toluene	118883	1
40	1,2-Trans-Dichloroethylene	156605	1
41	1,1,1-Trichloroethane	71556	1
42	1,1,2-Trichloroethane	79005	1
43	Trichloroethylene	79016	1
44	Vinyl Chloride	75014	1
45	2-Chlorophenol	95578	1
46	2,4-Dichlorophenol	120832	1
47	2,4-Dimethylphenol	115679	1
48	2-Methyl-4,6-Dinitrophenol	534521	1

**T
E
N
T
A
T
I
V
E**

CTR Number	Parameter	CAS Number	Analytical Methods
49	2,4-Dinitrophenol	51285	1
50	2-Nitrophenol	88755	1
51	4-Nitrophenol	110027	1
52	3-Methyl-4-Chlorophenol	59507	1
53	Pentachlorophenol	87865	1
54	Phenol	118952	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	118601	1
68	Bis(2-Ethylhexyl)Phthalate	117817	1
69	4-Bromophenyl Phenyl Ether	111553	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	116467	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
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

T
E
N
T
A
T
I
V
E

CTR Number	Parameter	CAS Number	Analytical Methods
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	1131178	1
115	Endrin	72208	1
116	Endrin Aldehyde	7421934	1
117	Heptachlor	76448	1
118	Heptachlor Epoxide	1124573	1
119	PCB-1116	12674112	1
120	PCB-1221	11114282	1
121	PCB-1232	11141165	1
122	PCB-1242	53469219	1
123	PCB-1248	12672296	1
124	PCB-1254	11197691	1
125	PCB-1260	11196825	1
126	Toxaphene	8001352	1

¹ Pollutants shall be analyzed using the methods described in 40 C.F.R. Part 136.

**T
E
N
T
A
T
I
V
E**