

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

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Los Angeles Regional Water Quality Control Board
(<http://www.waterboards.ca.gov/losangeles>)

**WATER QUALITY ORDER R4-2024-0185
NPDES NUMBER CA0063185, CI NUMBER 7352**

**WASTE DISCHARGE REQUIREMENTS
FOR PHILLIPS 66 COMPANY
PHILLIPS 66 LOS ANGELES REFINERY, CARSON PLANT**

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

Table 1. Discharger Information

Discharger:	Phillips 66 Company
Name of Facility:	Phillips 66 Los Angeles Refinery, Carson Plant
Facility Address:	1520 East Sepulveda Boulevard Carson, CA 90745 Los Angeles County

Table 2. Discharge Location

Discharge Point	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	33.8153	-118.2319	Dominguez Channel Estuary

Table 3. Administrative Information

This Order was adopted on:	April 25, 2024
This Order shall become effective on:	June 1, 2024
This Order shall expire on:	May 31, 2029
The Discharger shall file a Report of Waste Discharge (ROWD) as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a NPDES permit no later than:	180 days prior to the Order expiration date
The United States Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board have classified this discharge as follows:	Major

I, Susana Arredondo, 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 **the date indicated above**.

for Susana Arredondo, Executive Officer

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1. FACILITY INFORMATION

Information describing Phillips 66 Company (Discharger), Phillips 66 Los Angeles Refinery, Carson Plant (Facility) is summarized in Table 1 and in sections 1 and 2 of the Fact Sheet (Attachment F). Section 1 of the Fact Sheet also includes information regarding the Facility's permit application.

2. FINDINGS

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

- 2.1. **Legal Authorities.** This Order serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the United States Environmental Protection Agency (U.S. EPA) and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit 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.
- 2.2. **Background and Rationale for Requirements.** The Los Angeles Water Board developed the requirements in this Order based on information submitted as part of the application and through the Discharger's monitoring and reporting program along with 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 are also incorporated into this Order.
- 2.3. **Notification of Interested Parties.** The Los Angeles 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.
- 2.4. **Consideration of Public Comment.** The Los Angeles 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 Order No. R4-2017-0120 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Los Angeles Water Board from taking enforcement action for violations of the previous Order.

3. DISCHARGE PROHIBITIONS

- 3.1. The discharge of wastes shall not exceed 11 million gallons per day (MGD) of treated stormwater runoff, boiler condensate, and boiler blowdown from Discharge Point 001.

- 3.2. The discharge of wastes at a location other than specifically described in this Order is prohibited. The discharge of wastes from accidental spills or other sources is prohibited.
- 3.3. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, Dominguez Channel Estuary, or other waters of the United States, are prohibited.
- 3.4. The treatment or the discharge of wastes from the Facility shall not cause pollution, contamination, or nuisance as defined by section 13050 of the Water Code.
- 3.5. The discharge of any substances in concentrations toxic to human, animal, plant, or aquatic life is prohibited.
- 3.6. The discharge of oil or any residuary product of petroleum to waters of the United States, except in accordance with waste discharge requirements or other provisions of division 7 of the Water Code, is prohibited.
- 3.7. The discharge of any radiological, chemical, or biological warfare agent into the waters of the United States is prohibited under Water Code section 13375.
- 3.8. The discharge of trash to waters of the United States or the deposition of trash where it may be discharged into waters of the United States is prohibited.

4. EFFLUENT LIMITATIONS AND DISCHARGE PROHIBITIONS

4.1. Effluent Limitations – Discharge Point 001

4.1.1. 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 Locations EFF-001, as described in the Monitoring and Reporting Program (MRP), Attachment E:

Table 4. Final Effluent Limitations

Parameter	Units	Average Monthly	Maximum Daily	Notes
Biochemical Oxygen Demand 5-day @ 20°C(BOD)	milligram per liter (mg/L)	26	48	--
BOD	pounds per day (lbs/day)	2,420	4,400	a
Oil and Grease	mg/L	8.0	15	--
Oil and Grease	lbs/day	737	1,376	a
pH	standard units	--	6.5 to 8.5	b
Temperature	degrees Fahrenheit (°F)	--	86	c
Total Suspended Solids (TSS)	mg/L	21	33	---
TSS	lbs/day	1,927	3,027	a

Parameter	Units	Average Monthly	Maximum Daily	Notes
Chemical Oxygen Demand (COD)	mg/L	180	360	--
COD	lbs/day	16,500	33,000	a
Chronic Toxicity	Pass or Fail, and % Effect (TST)	Pass	Pass or % Effect <50	d
Enterococci	CFU/100mL or MPN/100mL	---	110	e
Phenolic Compounds	mg/L	0.17	0.35	--
Phenolic Compounds	lbs/day	15	32	a
Settleable Solids	ml/L	0.1	0.3	---
Sulfide	mg/L	---	1.0	---
Sulfide	lbs/day	---	92	a
Total Residual Chlorine	mg/L	---	0.1	---
Total Residual Chlorine	lbs/day	---	9.2	a
Copper, TR	µg/L	3.1	6.1	---
Copper, TR	lbs/day	0.28	0.56	a
Chromium (VI)	µg/L	28	62	---
Chromium (VI)	lbs/day	2.5	5.7	a
Chromium	µg/L	210	600	---
Chromium	lbs/day	19	55	a
Lead, TR	µg/L	7.0	14	---
Lead, TR	lbs/day	0.64	1.3	a
Mercury, TR	µg/L	0.05	0.10	---
Mercury, TR	lbs/day	0.0046	0.0092	a
Nickel, TR	µg/L	6.8	14	---
Nickel, TR	lbs/day	0.62	1.3	a
Silver, TR	µg/L	1.1	2.2	---
Silver, TR	lbs/day	0.10	0.20	a
Zinc, TR	µg/L	70	141	---
Zinc, TR	lbs/day	6.4	13	a
Cyanide, Total (as CN)	µg/L	0.5	1.0	---
Cyanide, Total (as CN)	lbs/day	0.046	0.092	a
4,4-DDT	µg/L	0.00059	0.0012	f
4,4-DDT	lbs/day	5.4 x 10 ⁻⁵	1.1 x 10 ⁻⁴	a
Bis (2-Ethylhexyl) Phthalate	µg/L	5.9	12	---
Bis (2-Ethylhexyl) Phthalate	lbs/day	0.54	1.1	a
Benzo(a)anthracene	µg/L	0.049	0.098	f
Benzo(a)anthracene	lbs/day	0.0045	0.0090	a
Benzo(a)pyrene	µg/L	0.049	0.098	f
Benzo(a)pyrene	lbs/day	0.0045	0.0090	a
Chlordane	µg/L	0.00059	0.0012	f
Chlordane	lbs/day	5.4 x 10 ⁻⁵	1.1 x 10 ⁻⁴	a
Chrysene	µg/L	0.049	0.098	f
Chrysene	lbs/day	0.0045	0.0090	a

Parameter	Units	Average Monthly	Maximum Daily	Notes
Dieldrin	µg/L	0.00014	0.00028	f
Dieldrin	lbs/day	1.3 x 10 ⁻⁵	2.6 x 10 ⁻⁵	a
Hexachlorobenzene	µg/L	0.00077	0.0015	---
Hexachlorobenzene	lbs/day	7.0 x 10 ⁻⁵	1.4 x 10 ⁻⁴	a
Pyrene	µg/L	11,000	22,068	f
Pyrene	lbs/day	1,009	2,025	a
Total PCBs	µg/L	0.00017	0.00034	f and g
Total PCBs	lbs/day	1.6 x 10 ⁻⁵	3.1 x 10 ⁻⁵	a

Footnotes for Table 4

- a. The mass (lbs/day) limitations are based on a maximum flow of 11 MGD from Discharge Point 001 and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.
- b. The effluent limitations for pH are 6.5 as an Instantaneous Minimum and 8.5 as an Instantaneous Maximum.
- c. The effluent limitation for temperature is 86°F as an Instantaneous Maximum. Additionally, the maximum temperature of the effluent shall not exceed the natural receiving water temperature by more than 20°F.
- d. The maximum daily effluent limitation (MDEL) for chronic toxicity shall be reported as “Pass” or “Fail” and “% Effect”. The average monthly is a Median Monthly Effluent Limitation (MMEL), and the MMEL shall be reported as “Pass” or “Fail.” The MMEL for chronic toxicity only applies when there is a discharge on more than one day in a calendar month period. During such calendar months, if the chronic aquatic toxicity routine monitoring test results in a “Fail”, then the Discharger shall complete a maximum of two MMEL compliance tests. The MMEL compliance tests shall be initiated within the same calendar month that the first routine monitoring test was initiated that resulted in the “Fail” at the IWC. If the first chronic MMEL compliance test results in a “Fail” at the IWC, then the second MMEL compliance test is not necessary because the “Fail” results from the first two tests would constitute a violation of the chronic toxicity MMEL.
- e. The bacteria water quality objective for all waters where the salinity is greater than 1 part per thousand (ppt) 5 percent or more of the time during the calendar year is: a six-week rolling geometric mean of Enterococci not to exceed 30 colony forming units (CFU) per 100 milliliters (mL), calculated weekly, and a statistical threshold value (STV) of 110 CFU/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.
- f. Samples analyzed for chlordane, 4,4'-DDT, dieldrin, total PCBs, benzo(a)anthracene, benzo(a)pyrene, chrysene, and pyrene must be unfiltered samples.
- g. Total PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resembles those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

End of Footnotes for Table 4

4.1.2. Final Concentration-Based Sediment Waste Load Allocations – Discharge Point 001

The following concentration-based sediment waste load allocations (WLA) for cadmium and the bioaccumulative compounds chlordane and dieldrin are

associated with Dominguez Channel Estuary in the Dominguez Channel and Greater Los Angeles and Long Beach Harbors Waters Toxic Pollutants TMDL (Harbor Toxics TMDL). These WLAs are applicable to stormwater commingled with process wastewater. The Discharger shall maintain compliance with the following effluent sediment limitations at Discharge Point 001 as described in the attached MRP (Attachment E).

Table 5. Final Concentration-Based Sediment Waste Load Allocations – Discharge Location 001

Pollutant	Sediment Limitations (Final Concentration-based Sediment WLAs)	Units
Cadmium, TR	1.2	mg/kg dry sediment
Chlordane	0.5	mg/kg dry sediment
Dieldrin	0.02	mg/kg dry sediment

Compliance with the final concentration-based sediment allocation for cadmium (by any of the first four means) and chlordane and dieldrin (by any of the five means) may be demonstrated by:

1. Final sediment allocation of cadmium, chlordane and dieldrin is met in the effluent. The Discharger may collect sufficient effluent sample volume to provide an adequate amount of effluent sediments (suspended solids) for sediment analyses. The analytical results of the effluent sediment can be used for the direct comparison with the sediment allocations for cadmium, chlordane, and dieldrin.
2. Where the analysis of suspended sediments in stormwater samples is required to determine compliance with the established sediment limitations and collection of suspended sediment from stormwater samples with sufficient yields to perform the analysis required is not feasible use the suspended sediment concentration (SSC) method described in footnote a of Table E-3 may be used.
3. 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 Provisions of the Water Quality Control Plan for Enclosed Bays and Estuaries of California (Sediment Quality Provisions) is met.
4. Sediment numeric targets in Table 5 for cadmium, chlordane, and dieldrin is met in bed sediments over a 3-year averaging period.
5. Fish tissue target of 5.6 and 0.46 µg/kg wet weight (µg/kg ww) fish tissue for chlordane and dieldrin, respectively, is met in species resident to the TMDL waterbodies. Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Sediment Quality Provisions, as amended to address contaminants in resident finfish and wildlife.

4.1.2. Interim Effluent Limitations – Not Applicable

4.2. Land Discharge Specifications – Not Applicable

4.3. Recycling Specifications – Not Applicable

5. RECEIVING WATER LIMITATIONS

5.1. Surface Water Limitations

Receiving water limitations are based on the water quality objectives in the Basin Plan. The discharge shall not cause the following in the Dominguez Channel Estuary:

- 5.1.1. The pH 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.
- 5.1.2. No discharge shall cause the surface water temperature to be raised more than 4°F above the natural temperature of the receiving waters at any time or place. Nor shall elevated temperature waste discharges either individually or combined with other discharges create a zone, defined by water temperatures of more than 1°F above natural receiving water temperature, which exceeds 25 percent of the cross-sectional area of a main river channel at any point.
- 5.1.3. Bacteria Water Quality Objective
Water Contact Recreation (REC-1): The bacteria water quality objective for all waters where the salinity is greater than 1 part per thousand (ppt) more than 5 percent of the time during the calendar year is:
 - a. A six-week rolling geometric mean of enterococci not to exceed 30 colony forming units (CFU) per 100 milliliters (mL), calculated weekly, and
 - b. A statistical threshold value (STV) of 110 CFU/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.
- 5.1.4. The mean annual dissolved oxygen concentration shall be greater than 7 mg/L, and no single determination shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations.
- 5.1.5. Waters shall not contain floating materials, including solids, liquids, foams, and scum in concentrations that cause a nuisance or adversely affect beneficial uses.
- 5.1.6. Waters shall be free of changes in turbidity that cause a nuisance or adversely affect beneficial uses. Increases in natural turbidity shall not exceed the following limits:
 - a. Where natural turbidity is between 0 to 50 NTU, increases in turbidity shall not exceed 20%.
 - b. Where natural turbidity is greater than 50 NTU, increases in turbidity shall not exceed 10%.

- 5.1.7. 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 receiving water or on objects in the water that cause a nuisance or adversely affect beneficial uses.
- 5.1.8. Waters shall not contain suspended or settleable materials, chemical substances, or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use in the receiving water.
- 5.1.9. Waters shall be maintained free of 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.
- 5.1.10. The discharge shall not cause accumulation of bottom deposits or aquatic growths.
- 5.1.11. Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes a nuisance or adversely affects beneficial uses.
- 5.1.12. Waters shall be free of substances that result in increases of Biochemical Oxygen Demand (BOD) that adversely affect beneficial uses.
- 5.1.13. Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes, odors of fish and shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.
- 5.1.14. The discharge shall not cause damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity in the receiving water.
- 5.1.15. The discharge shall not cause the degradation of surface water communities and populations including vertebrate, invertebrate, and plant species in the receiving water.
- 5.1.16. The discharge shall not cause problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests in the receiving water.

5.2. Groundwater Limitations – Not Applicable

6. PROVISIONS

6.1. Standard Provisions

- 6.1.1. The Discharger shall comply with all Standard Provisions included in Attachment D.
- 6.1.2. 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 stormwater to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal stormwater

management programs developed to comply with NPDES permits issued by the Los Angeles 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 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 requirements shall be maintained at the discharge facility so as to be available at all times to operating personnel.
- f. If there is any storage of hazardous or toxic materials or hydrocarbons at this Facility and if the Facility is not staffed at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
- g. The Discharger shall file with the Los Angeles Water Board a report of waste discharge at least 120 days before making any proposed change in the character, location or volume of the discharge.
- h. The Discharger must notify the Los Angeles Water Board as soon as they know or have reason to believe that they have begun or expect to begin to use or manufacture an 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 the Los Angeles Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Los Angeles Water Board, 30 days prior to taking effect.
- j. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this Facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- k. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to planned discharge of any chemical, other than the products

previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:

- i. Name and general composition of the chemical;
 - ii. Frequency of use;
 - iii. Quantities to be used;
 - iv. Proposed discharge concentrations; and,
 - v. U.S. EPA registration number, if applicable.
- l. 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 Manager of the Watershed Regulatory Section at the Los Angeles Water Board by telephone at (213) 576-6616 or by fax at (213) 576-6660 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing to the Los Angeles Water Board within five days, unless the Los Angeles 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. The written notification shall also be submitted via email with reference to NPDES No. CA0063185, CI-7352 to losangeles@waterboards.ca.gov. Other noncompliance requires written notification as above at the time of the normal monitoring report.
- m. The Discharger shall make diligent, protective efforts to reduce Facility infrastructure vulnerability to current and future impacts resulting from climate change, including but not limited to extreme wet weather events, flooding, storm surges, wildfires, and projected sea level rise when the facility is located near the ocean or discharges to the ocean.
- n. Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation under authority preserved by section 311 of the CWA, related to oil and hazardous substances liability.
- 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.

6.2. Monitoring and Reporting Program (MRP) Requirements

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

6.3. Special Provisions

6.3.1. Reopener Provisions

- a. This Order may be modified, revoked and reissued, or terminated for cause, including, but not limited to:
 - i. Violation of any term or condition contained in this Order;

- ii. Obtaining this Order by misrepresentation, or by failure to disclose fully all relevant facts; or
- iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

- b. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the federal CWA, and amendments thereto, the Los Angeles Water Board may revise and modify this Order in accordance with such more stringent standards.
- c. 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 reasonable potential analysis (RPA).
- d. This Order may be reopened and modified, in accordance with the provisions set forth in title 40 of the Code of Federal Regulations (40 CFR) parts 122 and 124 to include requirements for the implementation of a watershed protection management approach or to include new minimum levels (MLs).
- e. This Order may be reopened for modification, or revocation and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order will cause, have reasonable potential to cause, or contribute to adverse impacts on beneficial uses or degradation of water quality of the receiving waters.
- f. This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR parts 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, 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.
- g. 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 testing, monitoring of 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.
- h. This Order may be reopened and modified to the extent necessary, to be consistent with new or revised state-wide plans, new laws, or new regulations.

6.3.2. Special Studies, Technical Papers, and Additional Monitoring Requirements

a. Updated Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan

The Discharger shall submit to the Los Angeles Water Board an updated Initial Investigation TRE workplan **within 90 days** of the effective date of this permit. This plan shall describe the steps the Discharger intends to follow in the event that toxicity is detected. See section 5.6 of the Monitoring and Reporting Program (Attachment E) for an overview of Toxicity Reduction Evaluation (TRE) requirements.

b. Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL (Harbor Toxics TMDL) Water Column and Sediment Monitoring for Responsible Parties in the Los Angeles River and Tributaries.

As defined in the Harbor Toxics TMDL, the Discharger is an “irregular discharger” and is responsible for compliance with the concentration-based Waste Load Allocations (WLAs) in the TMDL. As such the Discharger developed a site-specific monitoring and reporting plan (Monitoring Plan) and quality assurance project plan (QAPP) for the water column, sediment, and fish tissue in the Dominguez Channel Estuary. The Plan was submitted to the Los Angeles Water Board on January 6, 2020 for review, which is pending approval. The plan followed the “TMDL Element - Monitoring Plan” provisions in the Water Quality Control Plan, Los Angeles Region (Basin Plan) Chapter 7, Section 7-40.

The Discharger shall implement the site-specific Monitoring Plan with QAPP when a discharge from the Facility occurs. If any changes are made to the site-specific Monitoring Plan and QAPP, the Discharger shall notify the Los Angeles Water Board within 90 days of the modification of the Plans and resubmit the Plans to the Los Angeles Water Board for Executive Officer approval. If the Discharger decides to join a group already formed, the Discharger shall notify the Los Angeles 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. The Monitoring Plan shall continue to include water column, sediment, and fish tissue monitoring. The Discharger shall submit the annual monitoring report to the Los Angeles Water Board by the specified date in the Monitoring Plan. In addition to the annual monitoring report, the Discharger shall include an annual statement that indicates compliance and non-compliance with effluent limitations in Tables 4 and 5 that implement applicable waste load and/or load allocations. At a minimum, monitoring shall continue to be conducted at the location and for the constituents listed in the sections below for the water column, total suspended solids, and bed sediments. The exact locations of monitoring sites shall be specified in the Monitoring Plan to be approved by the Executive Officer.

At a minimum, monitoring shall include the following components:

- i. **Water Column Monitoring.** Water samples and total suspended solids samples shall be monitored three times a year, twice during wet weather events and once during a dry weather event. The first large storm event of the season shall be one of the wet weather monitoring events.

In addition, general water chemistry (temperature, dissolved oxygen, pH, and salinity) and receiving water flow shall be monitored at each sampling event.

- ii. **Sediment Monitoring.** Sediment samples shall be collected in the Dominguez Channel Estuary.

Sediment quality objective evaluation as detailed in the as specified in the State Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality Provisions (the SQP) shall continue to be performed every five years, preferably in coordination with the Biological Baseline and Bight regional monitoring programs. If moderate toxicity as defined in the SQO 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. Sampling and analysis for the full chemical suite, two toxicity tests and four benthic indices as specified in SQO shall be conducted and evaluated. 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 to be approved by the Executive Officer. Samples shall be collected in accordance with SWAMP protocols.

- 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. At a minimum, the three target species shall include white croaker, a sport fish, and a prey fish. 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 shall continue to be implemented based on methods or metrics described in the SQP, 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 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. The QAPP shall be updated if any changes are made to this information. 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. All samples shall be

collected in accordance with Surface Water Ambient Monitoring Program (SWAMP) protocols.

6.3.3. Best Management Practices and Pollution Prevention

The Discharger shall submit to the Los Angeles Water Board, within 90 days of the effective date of this Order, updated versions of the following:

- a. **Stormwater Pollution Prevention Plan (SWPPP)** An updated SWPPP that describes site-specific management practices for minimizing pollution of stormwater runoff and preventing contaminated stormwater runoff from being discharged directly to the Dominguez Channel Estuary. The SWPPP shall cover all areas of the Facility and shall include an updated drainage map for the Facility. The Discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge point; describe the activities in each area and the potential for pollution of stormwater runoff and the discharge of trash or hazardous waste/material; and address the feasibility of containment and/or treatment of stormwater. In addition, the SWPPP shall address and include best management practices procedures that the Discharger will implement to prohibit the discharge of trash from the Facility. The updated SWPPP shall be developed in accordance with the requirements for the evaluation included in Attachment G of this Order.
- b. **Best Management Practice Plan (BMPP)** An updated BMPP that will be implemented to reduce the discharge of pollutants to the receiving water. The BMPP may be included within the SWPPP as a description of best management practices (BMPs). The BMPP shall include site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material from being discharged to waters of the State. Further, the Discharger shall ensure that the stormwater discharges from the Facility would neither cause, nor contribute to the exceedance of water quality standards and objectives, nor create conditions of 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 discharge to surface waters.
- c. **Spill Contingency Plan (SCP)** An updated SCP for the Facility shall be submitted that includes a technical report on the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The SCP may be substituted with an updated version of the Discharger's existing Spill Prevention Control and Countermeasure (SPCC) Plan.

Each plan shall cover all areas of the Facility and shall include an updated drainage map for the Facility. The Discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge point; describe the activities in each area and the potential for pollution of

stormwater runoff and the discharge of hazardous waste/material; and address the feasibility of containment and/or treatment of stormwater.

The Discharger shall implement the SWPPP, BMPP, and SCP (or SPCC Plan) within 10 days of the approval by the Los Angeles Water Board or no later than 90 days after submission to the Los Angeles Water Board, whichever comes first. The plans shall be reviewed annually and at the same time. Updated information shall be submitted to the Los Angeles Water Board within 30 days of revisions.

6.3.4. 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.

6.3.5. Climate Change Effects Vulnerability Assessment and Mitigation Plan

The Discharger shall develop a Climate Change Effects Vulnerability Assessment and Mitigation Plan (Climate Change Plan) to assess and manage climate change-related effects that may impact the facility's operation, water supplies, water quality, and beneficial uses. The Discharger shall consider the impacts of climate change as they affect the operation of the treatment facility due to flooding, sea level rise, wildfires, or other climate-related changes. The Climate Change Plan shall also discuss any projected changes to pollutant concentrations in the stormwater and/or receiving water. The Climate Change Plan is due 12 months after the effective date of this Order.

6.3.6. Other Special Provisions – Not Applicable

6.3.7. Compliance Schedules – Not Applicable

7. COMPLIANCE DETERMINATION

Compliance with the effluent limitations is based on all available data collected during the time period, contained in section 4 of this Order will be determined as specified below:

7.1. 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 1.9. of the MRP), then the Discharger is out of compliance.

7.2. 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, constituents reported as ND or DNQ are treated as having concentrations equal to zero, provided that the applicable ML is used.

7.3. 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

7.3.1. If the number of measurements (n) is odd, then the median will be calculated as
= $X_{(n+1)/2}$; or,

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

7.4. Multiple Sample Data

When determining compliance with an AMEL or MDL 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 accordance with the following procedure:

- 7.4.1. 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.
- 7.4.2. 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.

7.5. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsection 7.3 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 for the purpose of calculating mandatory minimum penalties, though the Discharger may 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) in cases where discretionary administrative civil liabilities are appropriate. 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 any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for a given parameter, the Discharger will have demonstrated compliance with the AMEL for each day of that month for that parameter.

If the analytical result of any single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any parameter, the Discharger may collect up to four additional samples within the same calendar month. All five analytical results shall be reported in the monitoring report for that month. The concentration of pollutant (an arithmetic mean or a median) in these samples estimated from the "Multiple Sample Data Reduction" section above, will be used for compliance determination.

In the event of noncompliance with an AMEL, the sampling frequency for that parameter shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.

7.6. Maximum Daily Effluent Limitation (MDEL)

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

7.7. 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 potential 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).

7.8. 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 potential 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).

7.9. 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 non-compliance 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.

7.10. Chronic Toxicity

The discharge is subject to determination of “Pass” or “Fail”, and “Percent Effect” from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test 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, Table A-1, and Appendix B, Table B-1 and the procedures described in the *State Policy for Water Quality Control: Toxicity Provisions*.

Attainment of the water quality objective is demonstrated by conducting chronic aquatic toxicity testing as described in Section III.B.2 of the Toxicity Provisions and rejecting the null hypothesis in accordance with the TST statistical approach described in Section III.B.3. of the Toxicity Provisions.

Under Section II.C.1. of the Toxicity Provisions, the chronic aquatic toxicity water quality objective is expressed as a null hypothesis. The null hypothesis (H_0) for the TST statistical approach is: Mean discharge In-stream Waste Concentration (IWC) response $\leq 0.75 \times$ Mean control response. A test result that rejects the 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:

$$\text{Percent Effect at the IWC} = ((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100.$$

This is a t-test (formally Student's t-Test), a statistical analysis comparing two sets of replicate observations - in the case of Whole Effluent Toxicity (WET), only two test concentrations (i.e., a control and IWC). The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving water concentration differs from the control (the test result is "Pass" or "Fail")). The Welch's t-test employed by the TST statistical approach is an adaptation of Student's t-test and is used with two samples having unequal variances.

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

The 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 and analyzed using the TST statistical approach, results in "Fail." The MMEL for chronic toxicity shall only apply when there is a discharge on more than one day in a calendar month period. During such calendar months, up to three independent toxicity tests may be conducted when one toxicity test results in "Fail."

The chronic toxicity MDEL and MMEL are set at the IWC for the discharge (100% effluent) and expressed in units of the TST statistical approach ("Pass" or "Fail", "Percent Effect"). All NPDES effluent compliance monitoring for the chronic toxicity MDEL and MMEL shall be reported using only the 100% effluent concentration and negative control, expressed in units of the TST. The TST hypothesis (H_0) (see above) is statistically analyzed using the IWC and a negative control. Effluent toxicity tests shall be run using a multi-concentration test design when required by *Short-term Methods for Estimating the Chronic Toxicity of West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995)*. The Los Angeles Water Board's review of reported toxicity test results will include review of concentration-response patterns as appropriate (see Fact Sheet discussion at 4.3.5.). As described in the bioassay laboratory audit correspondence from the State Water Board dated August 7, 2014, and from the U.S. EPA dated December 24, 2013, the Percent Minimum Significant Difference (PMSD) criteria only apply to compliance reporting for the No Observable Effect Concentration (NOEC) and the sublethal statistical endpoints of the NOEC, and therefore are not used to interpret TST results. Standard Operating Procedures used by the toxicity testing laboratory to identify and report valid, invalid, anomalous, or inconclusive effluent (and receiving water) toxicity test measurement results from the TST statistical approach, including those that incorporate a consideration of

concentration-response patterns, must be submitted to the Los Angeles Water Board (40 CFR section 122.41(h)). The Los Angeles Water Board will make a final determination as to whether a toxicity test result is valid, and may consult with the Discharger, the U.S. EPA, the State Water Board's Quality Assurance Officer, or the State Water Board's Environmental Laboratory Accreditation Program (ELAP) as needed. The Board may consider the results of any TIE/TRE studies in an enforcement action.

7.11. Mass and Concentration Limitations

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

7.12. Bacterial Standards and Analysis

The geometric mean used for determining compliance with bacterial standards is calculated with 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 coliform, at a minimum, and 1 to 1000 per 100 ml for *Enterococcus*). The detection methods used for each analysis shall be reported with the results of the analyses.

Detection methods used for coliforms (total) and *Enterococci* shall be those presented in Table 1A of 40 CFR part 136 (revised August 28, 2017), unless alternate methods have been approved by U.S. EPA pursuant to 40 CFR part 136, or improved methods have been determined by the Executive Officer and/or U.S. EPA.

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 (μ) = the sum of the measured ambient water concentrations divided by 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.

Average Weekly Effluent Limitation (AWEL)

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

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 stormwater. 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.

Dilution Credit

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

Effluent Concentration Allowance (ECA)

ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as wasteload allocation (WLA) as used in U.S. EPA 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.

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 $n/2+1$).

Median Monthly Effluent Limitation (MMEL)

The MMEL is an effluent limit based on the median results of three independent toxicity tests, conducted within the same calendar month, and analyzed using the TST. The MMEL is exceeded when the median result (i.e. two out of three) is a "fail."

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 CFR 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.

PAHs (polynuclear aromatic hydrocarbons)

The sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

PCBs (polychlorinated biphenyls) as Aroclors

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.

PCBs (polychlorinated biphenyls) as Congeners

The sum of the following 41 individually quantified PCB congeners or mixtures of isomers of a single congeners in a co-elution: PCB- 18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206.

Persistent Pollutants

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

Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Los Angeles 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 Los Angeles 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 Los Angeles 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 stormwater for a minimum of one hour, or the intermittent discharge of stormwater 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 Los Angeles Water Board Basin Plan.

Standard Deviation (σ)

Standard Deviation is a measure of variability that is calculated as follows: Standard Deviation (σ) = $\sqrt{\sum(x-\mu)^2/(n-1)^{0.5}}$, where: x is the observed value; μ is the arithmetic mean of the observed values; and n is the number of samples.

Statistical Threshold Value (STV)

The STV for the bacteria water quality objectives is a set value that approximates the 90th percentile of the water quality distribution of a bacterial population.

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.)

Trash

All improperly discarded solid material from any production, manufacturing, or processing operation including, but not limited to, products, product packaging, or containers constructed of plastic, steel, aluminum, glass, paper, or other synthetic or natural material.

ACRONYMS AND ABBREVIATIONS

AMEL	Average Monthly Effluent Limit
ASTM	American Society for Testing and Materials
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20°C
BPT	Best Practicable Treatment Control Technology
C	Water Quality Objective
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR.	Code of Federal Regulations
CFU	Colony Forming Units
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	California Water Code
Discharger	Phillips 66 Company
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
E	Existing Order
ELAP	State Water Resources Control Board, Drinking Water Division, Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Facility	Phillips 66 Los Angeles Refinery, Carson Plant
gpd	gallons per day
IC	Inhibition Coefficient
LA	Load Allocations
LOEC	Lowest Observed Effect Concentration
Los Angeles Water Board	California Regional Water Quality Control Board, Los Angeles Region
µg/L	micrograms per Liter
mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MMEL	Median Monthly Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MPN	Most Probable Number
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
Ocean Plan	Water Quality Control Plan for Ocean Waters of California
PCBs	Polychlorinated Biphenyls
PMEL	Proposed Maximum Daily Effluent Limitation
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
RL	Reporting Limit
RPA	Reasonable Potential Analysis
SCP	Spill Contingency Plan
SIP	State Implementation Policy (Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California)
SMR	Self Monitoring Reports
SPCC	Spill Prevention Control and Countermeasures Plan
SQP	Sediment Quality Provisions
SSC	Suspended Sediment Concentration
State Water Board	California State Water Resources Control Board
SWAMP	Stormwater Ambient Monitoring Program
SWPPP	Stormwater Pollution Prevention Plan
TAC	Test Acceptability Criteria
TEF	Toxicity equivalency factors
Thermal Plan	Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TR	Total Recoverable
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document
TST	Test of Significant Toxicity
TSS	Total Suspended Solid
TUc	Chronic Toxicity Unit
U.S.EPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WET	Whole Effluent Toxicity
WER	Water Effect Ratio
WLA	Wasteload Allocations
WQBELs	Water Quality-Based Effluent Limitations

WQS
%

Water Quality Standards
Percent

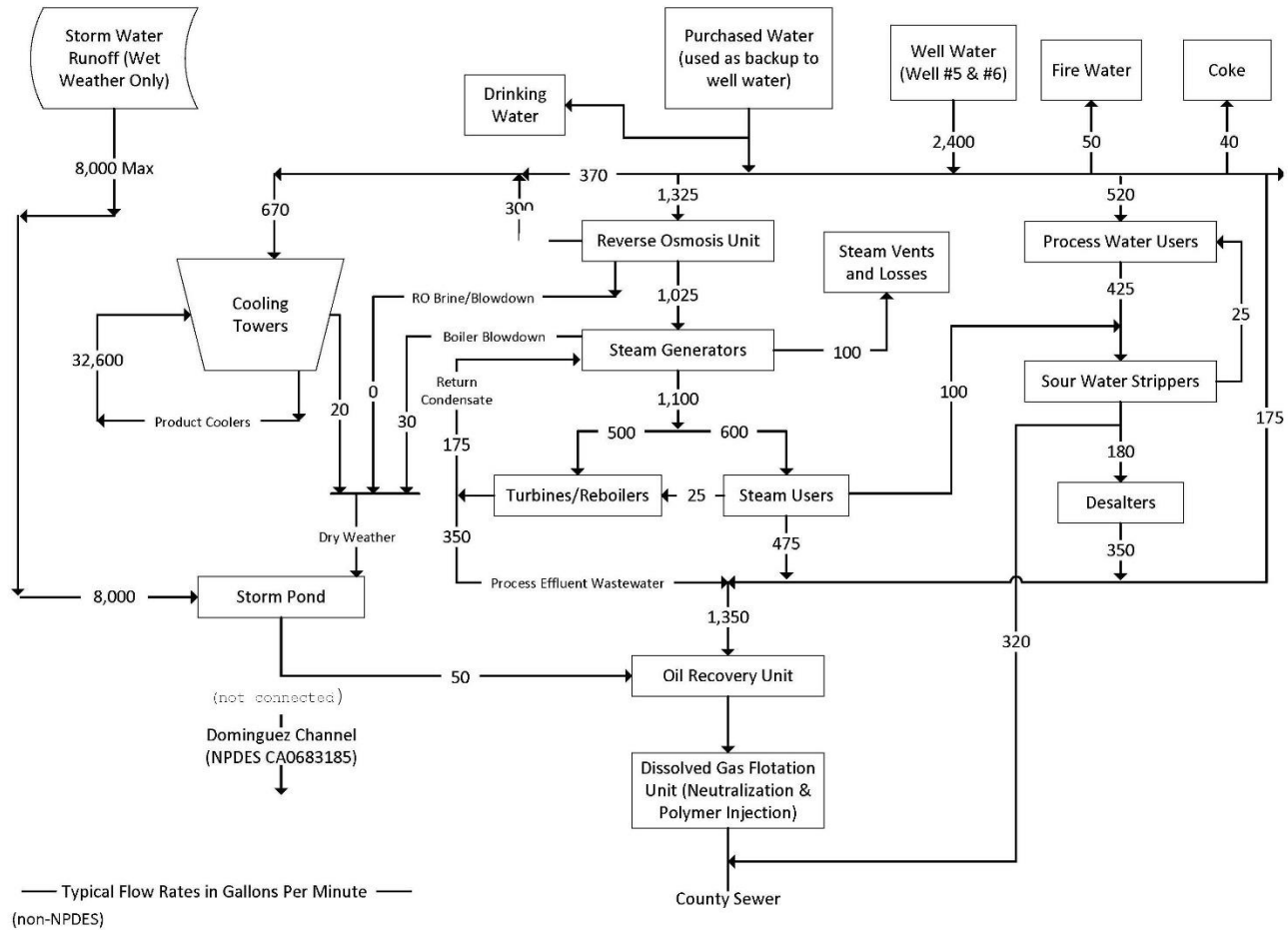
ATTACHMENT B – SITE VICINITY MAP



Figure 1: Site Vicinity Map and Discharge Point to the Dominguez Channel Estuary

ATTACHMENT C - FLOW SCHEMATIC

ATTACHMENT - FLOW SCHEMATIC
 STORM WATER FLOW MAP



ATTACHMENT D – STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply

- 1.1.1. The Discharger must comply with all the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (Title 40 of the Code of Federal Regulations (40 CFR) § 122.41(a); California Water Code (CWC), §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)
- 1.1.2. 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 CFR § 122.41(a)(1).)

1.2. Need to Halt or Reduce Activity Not a Defense

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

1.3. 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 CFR § 122.41(d).)

1.4. Proper Operation and Maintenance

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

1.5. Property Rights

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

1.6. Inspection and Entry

The Discharger shall allow the Los Angeles Water Board, State Water Board, U.S. EPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (33 U.S.C. § 1318(a)(B); 40 CFR § 122.41(i); CWC, §§ 13267, 13383):

- 1.6.1. 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)(B)(i); 40 CFR § 122.41(i)(1); CWC, §§ 13267, 13383);
- 1.6.2. 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)(B)(ii); 40 CFR § 122.41(i)(2); CWC, §§ 13267, 13383);
- 1.6.3. 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)(B)(ii); 40 CFR § 122.41(i)(3); CWC, §§ 13267, 13383); and
- 1.6.4. 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)(B); 40 CFR § 122.41(i)(4); CWC, §§ 13267, 13383.)

1.7. Bypass

1.7.1. Definitions

- a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR § 122.41(m)(1)(i).)
- b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR § 122.41(m)(1)(ii).)

1.7.2. 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 1.7.3, 1.7.4, and 1.7.5 below. (40 CFR § 122.41(m)(2).)

1.7.3. Prohibition of bypass. Bypass is prohibited, and the Los Angeles Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):

- a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 122.41(m)(4)(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 CFR § 122.41(m)(4)(i)(B)); and
 - c. The Discharger submitted notice to the Los Angeles Water Board as required under Standard Provisions – Permit Compliance 1.7.5 below. (40 CFR § 122.41(m)(4)(i)(C).)
- 1.7.4. The Los Angeles Water Board may approve an anticipated bypass, after considering its adverse effects, if the Los Angeles Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance 1.7.3 above. (40 CFR § 122.41(m)(4)(ii).)

1.7.5. 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, 2023, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 below. Notices shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(m)(3)(i).)
- b. Unanticipated bypass. The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting 5.5 below (24-hour notice). As of December 21, 2023, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 below. Notices shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(m)(3)(ii).)

1.8. 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 CFR § 122.41(n)(1).)

- 1.8.1. 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 1.8.2 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 CFR § 122.41(n)(2).)
- 1.8.2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly

signed, contemporaneous operating logs or other relevant evidence that (40 CFR § 122.41(n)(3)):

- a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i));
- b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));
- c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting 5.5.2.2 below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and
- d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance 1.3 above. (40 CFR § 122.41(n)(3)(iv).)

1.8.3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR § 122.41(n)(4).)

2. STANDARD PROVISIONS – PERMIT ACTION

2.1. General

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

2.2. Duty to Reapply

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

2.3. Transfers

This Order is not transferable to any person except after notice to the Los Angeles Water Board. The Los Angeles 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 CFR §§ 122.41(l)(3), 122.61.)

3. STANDARD PROVISIONS – MONITORING

3.1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR § 122.41(j)(1).)

3.2. Monitoring must be conducted according to test procedures approved under 40 CFR part 136 for the analyses of pollutants unless another method is required under 40 CFR chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 CFR part 136 for the analysis of pollutants or

pollutant parameters or as required under 40 CFR chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:

- 3.2.1. 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
- 3.2.2. The method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR 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 CFR part 136 or otherwise required under 40 CFR chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 CFR §§ 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)

4. STANDARD PROVISIONS – RECORDS

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

4.2. Records of monitoring information shall include:

- 4.2.1. The date, exact place, and time of sampling or measurements (40 CFR § 122.41(j)(3)(i));
- 4.2.2. The individual(s) who performed the sampling or measurements (40 CFR § 122.41(j)(3)(ii));
- 4.2.3. The date(s) analyses were performed (40 CFR § 122.41(j)(3)(iii));
- 4.2.4. The individual(s) who performed the analyses (40 CFR § 122.41(j)(3)(iv));
- 4.2.5. The analytical techniques or methods used (40 CFR § 122.41(j)(3)(v)); and
- 4.2.6. The results of such analyses. (40 CFR § 122.41(j)(3)(vi).)

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

- 4.3.1. The name and address of any permit applicant or Discharger (40 CFR § 122.7(b)(1)); and

4.3.2. Permit applications and attachments, permits and effluent data. (40 CFR § 122.7(b)(2).)

5. STANDARD PROVISIONS – REPORTING

5.1. Duty to Provide Information

The Discharger shall furnish to the Los Angeles Water Board, State Water Board, or U.S. EPA within a reasonable time, any information which the Los Angeles Water Board, State Water Board, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Los Angeles Water Board, State Water Board, or U.S. EPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); CWC, §§ 13267, 13383.)

5.2. Signatory and Certification Requirements

- 5.2.1. All applications, reports, or information submitted to the Los Angeles Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting 5.2.2, 5.2.3, 5.2.4, 5.2.5, and 5.2.6 below. (40 CFR § 122.41(k).)
- 5.2.2. 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., Los Angeles Administrators of U.S. EPA). (40 CFR § 122.22(a)(3).)
- 5.2.3. All reports required by this Order and other information requested by the Los Angeles Water Board, State Water Board, or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting 5.2.2 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 5.2.2 above (40 CFR § 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 CFR § 122.22(b)(2)); and
 - c. The written authorization is submitted to the Los Angeles Water Board and State Water Board. (40 CFR § 122.22(b)(3).)
- 5.2.4. If an authorization under Standard Provisions – Reporting 5.2.3 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 5.2.3 above must be submitted to the Los Angeles Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR § 122.22(c).)

- 5.2.5. Any person signing a document under Standard Provisions – Reporting 5.2.2 or 5.2.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 CFR § 122.22(d).)

- 5.2.6. Any person providing the electronic signature for documents described in Standard Provisions – 5.2.1, 5.2.2, or 5.2.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting 5.2, and shall ensure that all relevant requirements of 40 CFR part 3 (Cross-Media Electronic Reporting) and 40 CFR part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 CFR § 122.22(e).)

5.3. Monitoring Reports

- 5.3.1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.41(l)(4).)
- 5.3.2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Los Angeles 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 5.10 and comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(l)(4)(i).)
- 5.3.3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR part 136, or another method required for an industry-specific waste stream under 40 CFR 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 Los Angeles Water Board or State Water Board. (40 CFR § 122.41(l)(4)(ii).)
- 5.3.4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR § 122.41(l)(4)(iii).)

5.4. Compliance Schedules

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

5.5. Twenty-Four Hour Reporting

5.5.1. 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.

As of December 21, 2025, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10. The reports shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. The Los Angeles 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 CFR § 122.41(l)(6)(i).)

5.5.2. 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 CFR § 122.41(l)(6)(ii)(A).)
- b. Any upset that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(B).)

5.5.3. The Los Angeles 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 CFR § 122.41(l)(6)(ii)(B).)

5.6. Planned Changes

The Discharger shall give notice to the Los Angeles Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 CFR § 122.41(l)(1)):

5.6.1. 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 CFR § 122.41(l)(1)(i)); or

5.6.2. 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 CFR § 122.41(l)(1)(ii).) or

5.7. Anticipated Noncompliance

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

5.8. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting 5.3, 5.4, and 5.5 above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting 5.5 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 5.5 and the applicable required data in appendix A to 40 CFR part 127. The Los Angeles 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 CFR § 122.41(l)(7).)

5.9. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Los Angeles Water Board, State Water Board, or U.S. EPA, the Discharger shall promptly submit such facts or information. (40 CFR § 122.41(l)(8).)

5.10. 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 CFR part 127 to the initial recipient defined in 40 CFR section 127.2(b). U.S. EPA 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 CFR section 127.2(c)]. U.S. EPA will update and maintain this listing. (40 CFR § 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

6.1. The Los Angeles 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.

- 6.2. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the CWA, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two years, or both. Any person who *knowingly* violates such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who *knowingly* violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions (40 CFR § 122.41(a)(2); CWC section 13385 and 13387).
- 6.3. Any person may be assessed an administrative penalty by the Administrator of U.S. EPA, the Los Angeles Water Board, or State Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000. (40 CFR § 122.41(a)(3)).
- 6.4. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph,

punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both. (40 CFR § 122.41(j)(5)).

- 6.5. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both. (40 CFR § 122.41(k)(2)).

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

7.1. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Los Angeles Water Board as soon as they know or have reason to believe (40 CFR § 122.42(a)):

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

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) NO. 5424

Section 308(a) 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 CFR) require that all NPDES permits specify monitoring and reporting requirements. California Water Code (CWC) section 13383 also authorizes the Los Angeles Water Board to establish monitoring, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and California laws and/or regulations.

1. GENERAL MONITORING PROVISIONS

- 1.1. Effluent sampling stations shall be established for the point of discharge (Discharge Point 001) and shall be located where representative samples of effluent can be obtained.
- 1.2. Effluent samples shall be taken downstream of any treatment works and prior to mixing with the receiving waters.
- 1.3. The Los Angeles 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.
- 1.4. Pollutants shall be analyzed using the analytical methods described in 40 CFR parts 136.3, 136.4, and 136.5 (revised August 28, 2017); or where no methods are specified for a given pollutant, by methods approved by this Los Angeles Water Board or the State Water Resources Control Board (State Water Board).
- 1.5. **Laboratory Certification.** Laboratories analyzing monitoring samples shall be certified by the State Water Resources Control Board, Division of Drinking Water Environmental Laboratory Accreditation Program (ELAP) in accordance with the provision of Water Code section 13176 or approved by the Executive Officer and must include quality assurance/quality control data with their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained.
- 1.6. Pollutants shall be analyzed within allowable holding time limits as specified in 40 CFR section 136.3. All Quality Assurance/Quality Control (QA/QC) items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Los Angeles 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.
- 1.7. For any analyses performed for which no procedure is specified in the United States Environmental Protection Agency (U.S. EPA) guidelines, or in the MRP, the constituent or parameter analyzed, and the method or procedure used must be specified in the monitoring report.
- 1.8. 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:

- a. An actual numerical value for sample results greater than or equal to the ML; or
- b. “Detected, but Not Quantified (DNQ)” if results are greater than or equal to the laboratory’s MDL but less than the ML; or,
- c. “Not-Detected (ND)” for sample results less than the laboratory’s MDL with the MDL indicated for the analytical method used.

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

Current MLs 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*, (State Implementation Policy or SIP), February 24, 2005, Appendix 4.

- 1.9. 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 CFR 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, reporting levels (RLs), and method detection limits (MDLs).
- 1.10. 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 CFR 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 CFR 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, RLs, and MDLs.

The Los Angeles Water Board, in consultation with the State Water Board Quality Assurance Program, shall establish a ML that is not contained in Appendix 4 of the SIP to be included in the Discharger’s permit in any of the following situations:

- a. When the pollutant under consideration is not included in Appendix 4 of the SIP;
- b. When the Discharger and Los Angeles 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);
- c. When the Discharger agrees to use an ML that is lower than that listed in Appendix 4 of the SIP;

- d. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix 4 of the SIP, and proposes an appropriate ML for their matrix; or,
 - e. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the U.S. EPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, the Los Angeles 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.
- 1.11. 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 CFR part 136. All field instruments must be calibrated according to the 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 procedures shall be maintained onsite, and shall be available for inspection by Los Angeles Water Board staff. Information including instrument calibration, time of sample collection, time of analysis, name of analyst, QA/QC data, and measurement values shall be clearly documented during each field analysis and submitted to the Los Angeles Water Board as part of the corresponding regular monitoring report.
- 1.12. All analyses shall be accompanied by the chain of custody, including but not limited to date and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.
- 1.13. The Discharger shall have, and implement, an acceptable written quality 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.
- 1.14. 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.

- 1.15. The Discharger shall ensure the results of the Discharge Monitoring Report -Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are 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

- 1.16. In the event stormwater or spills in the areas permitted by this Order are transported to a different disposal site during the reporting period, the following shall be reported in the monitoring report:

- a. Type of stormwater and spilled wastes and quantity of each;
- b. Name and address for each hauler of wastes (or method of transport if other than by hauling); and
- c. Location of the final point(s) of disposal for each type of waste.

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

- 1.17. Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.
- 1.18. Each monitoring report shall affirm in writing that *“all analyses were conducted at a laboratory certified for such analyses by the State Water Board, Division of Drinking Water, Environmental Laboratory Accreditation Program or approved by the Executive Officer and in accordance with current U.S. EPA guideline procedures or as specified in this MRP.”*

2. 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	EFF-001	The effluent sampling station shall be located at Discharge Point 001: Latitude: 33.8152° Longitude: -118.2319°
---	RSW-002	A location where a representative sample of the receiving water can be obtained at least 250 feet from the center of the discharge point line in the direction of tidal flow in the Dominguez Channel

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
		Estuary. If sampled at slack tide, this station shall be in the direction where the channel waters have been influenced by the discharge at the time of sampling.
---	RSW-003	A location where a representative sample of the receiving water can be at least 250 feet from the center of the discharge point line in the opposite direction of tidal flow in the Dominguez Channel Estuary. If sampled at slack tide, this station shall be located opposite of where the channel waters have been influenced by the discharge at the time of sampling.
---	SED-001	The bed sediment sampling station shall be located in the vicinity of the discharge point to the receiving water, the Dominguez Channel Estuary.

3. INFLUENT MONITORING REQUIREMENTS – Not Applicable

4. EFFLUENT MONITORING REQUIREMENTS

4.1. Monitoring Location EFF-001

4.1.1. The Discharger shall monitor discharges at the Effluent Monitoring Location EFF-001 as shown in Table E-2. If more than one analytical test method is listed for a given parameter, the Discharger must select a sufficiently sensitive method as defined in 40 CFR 122.21(e)(3) and 122.44(i)(1)(iv):

Table E-2. Effluent Monitoring at EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Total Flow	MGD	Meter	1/Discharge Event	a
Biochemical Oxygen Demand @20°C (BOD)	mg/L	Grab	1/Discharge Event	b and c
<i>Enterococci</i>	CFU or MPN/100 mL	Grab	1/Discharge Event	b and c
Oil and Grease	mg/L	Grab	1/Discharge Event	b and c
pH	standard unit	Grab	1/Discharge Event	b and c
Temperature	°F	Grab	1/Discharge Event	b and c
Total Suspended Solids (TSS)	mg/L	Grab	1/Discharge Event	b and c
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Discharge Event	b and c
Chemical Oxygen Demand (COD)	mg/L	Grab	1/Discharge Event	b and c
Chronic Toxicity	Pass or Fail and % Effect	Grab	1/Discharge Event	b, c, and d

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Methyl Tert-butyl Ether (MTBE)	µg/L	Grab	1/Discharge Event	c and e
Phenolic Compounds	mg/L	Grab	1/Discharge Event	c and f
Settleable Solids	ml/L	Grab	1/Discharge Event	b and c
Sulfides	mg/L	Grab	1/Discharge Event	b and c
Tert-butyl Alcohol (TBA)	mg/L	Grab	1/Discharge Event	b and c
Total Residual Chlorine	mg/L	Grab	1/Discharge Event	b and c
Total Organic Carbon	mg/L	Grab	1/Discharge Event	b and c
Total Petroleum Hydrocarbons (TPH) as Gasoline (C ₄ -C ₁₂)	µg/L	Grab	1/Discharge Event	b and g
TPH as Diesel (C ₁₃ -C ₂₂)	µg/L	Grab	1/Discharge Event	b and g
TPH as Waste Oil (C ₂₃ +)	µg/L	Grab	1/Discharge Event	b and g
Turbidity	NTU	Grab	1/Discharge Event	b and c
Arsenic, Total Recoverable (TR)	µg/L	Grab	1/Discharge Event	b and c
Cadmium, TR	µg/L	Grab	1/Discharge Event	b and c
Chromium, TR	mg/L	Grab	1/Discharge Event	b and c
Chromium VI	mg/L	Grab	1/Discharge Event	b and c
Copper, TR	µg/L	Grab	1/Discharge Event	b and c
Lead, TR	µg/L	Grab	1/Discharge Event	b and c
Mercury, TR	µg/L	Grab	1/Discharge Event	b and i
Nickel, TR	µg/L	Grab	1/Discharge Event	b and c
Silver, TR	µg/L	Grab	1/Discharge Event	b and c
Zinc, TR	µg/L	Grab	1/Discharge Event	b and c
Cyanide, TR	µg/L	Grab	1/Discharge Event	b and c
4,4-DDT	µg/L	Grab	1/Discharge Event	b, c, and j
Benzo(a)anthracene	µg/L	Grab	1/Discharge Event	b, c, and j
Benzo(a)pyrene	µg/L	Grab	1/Discharge Event	b, c, and j
Bis (2-Ethylhexyl) Phthalate	µg/L	Grab	1/Discharge Event	b and c
Chlordane	µg/L	Grab	1/Discharge Event	b, c, and j
Chrysene	µg/L	Grab	1/Discharge Event	b, c, and j
Dieldrin	µg/L	Grab	1/Discharge Event	b, c, and j
Hexachlorobenzene	µg/L	Grab	1/Discharge Event	b and c
Pyrene	µg/L	Grab	1/Discharge Event	b, c, and j
Polychlorinated Biphenyls (PCBs), Total	µg/L	Grab	1/Discharge Event	b, c, j, and k
TCDD Equivalents	µg/L	Grab	1/Year	b, c, e, and l
Remaining Priority Pollutants	µg/L	Grab	1/Year	b, c, e, and m

Footnotes for Table E-2

- a. Flow shall be recorded daily during each period of discharge. Periods of no flow shall also be reported.
- b. During periods of extended discharge, no more than one sample per week (or 7-day period) needs to be taken. 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, and in the corresponding monitoring report, the Discharger will indicate under statement of perjury that no effluent was discharged to surface water.
- c. Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; for priority pollutants, the methods must meet the lowest MLs specified in Appendix 4 of the SIP. Where no methods are specified for a given pollutant, the methods must be approved by the Los Angeles 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.
- d. Refer to section 5 below, Whole Effluent Toxicity Testing Requirements. "Pass" or "Fail" for Median Monthly Effluent Limitation (MMEL). "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitation (MDEL). The MMEL for chronic toxicity shall only apply when there is a discharge more than one day in a calendar month period. During such calendar months, up to three independent toxicity tests are required when one toxicity test results in "Fail".
- e. Monitoring is only required during years in which discharge occurs. Annual samples shall be collected during the first discharge of the year. If there is no discharge to surface waters, the Discharger will indicate in the corresponding monitoring report, under statement of perjury, that no effluent was discharged to surface water during the reporting period.
- f. Phenolic compounds include the sum of the following individual chlorinated and non-chlorinated phenolic compounds: 2-chlorophenol; 2-nitrophenol; phenol; 2,4-dimethylphenol; 2,4-dichlorophenol; 2,4,6-trichlorophenol; 4-chloro-3-methylphenol; 2,4-dinitrophenol; 2-methyl-4,6-dinitrophenol; pentachlorophenol; and 4-nitrophenol.
- g. For TPH as Gasoline (C₄-C₁₂) use U.S. EPA Method 503.1 or 8015B. For TPH as Diesel (C₁₃-C₂₂) and TPH as Kerosene (C₂₃₊) use U.S. EPA Method 503.1 or 8015B, or 8270.
- h. Total phenols measured by U.S. EPA Method 420.1 or 420.2 (using the 4AAP method).
- i. U.S. EPA Method 1631E, per 40 CFR part 136, with a quantification level lower than 0.5 ng/L, shall be used to analyze total mercury. If an alternative method with an equivalent or more sensitive method detection limit is approved in 40 CFR part 136, the Discharger may use that method in lieu of U.S. EPA Method 1631E.
- j. Samples analyzed must be unfiltered samples.
- k. Total PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resembles those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260. PCBs as aroclors shall be analyzed using U.S. EPA method 608.3. Upon U.S. EPA approval of Resolution No. R22-005, PCBs monitoring shall be required for 44 congeners using recommended EPA methods 8270 and 1668 or equivalent method and shall be reported with a target reporting limit of 10 to 20 pg/L.
- l. TCDD equivalents shall be calculated using the following formula, where the minimum levels (MLs) 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 MLs to zero. U.S. EPA

method 1613 may be used to analyze dioxin and furan congeners. The TCDD Equivalents are calculated as follows: Dioxin-TEQ (TCDD equivalents) = Sum of Concentration of dioxin or furan congener_x (C_x) X Toxicity Equivalency Factors (TEFs) for congener_x. The TEFs are listed in the Table below.

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
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

m. Priority Pollutants as defined in 40 CFR Part 131.

End of Footnotes for Table E-2

4.1.2. Effluent sediment monitoring is only required when a discharge from the Facility occurs. The Discharger must sample the discharge at the discharge points following final treatment, prior to the discharge entering the receiving water.

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Cadmium, TR	mg/kg	Grab	1/Year	a and b
Chlordane	mg/kg	Grab	1/Year	a and b
Dieldrin	mg/kg	Grab	1/Year	a and b

Footnotes for Table E-3

a. For each parameter, a measured concentration in the total (CT) and dissolved (CD) fractions of the stormwater sample. Methods used to measure the total and dissolved fractions shall be analytical method promulgated in 40 CFR 136 or as otherwise directed by the State Board. Concentration of the constituents in the suspended sediment will be determined based on the difference between the concentrations of the constituent measured in the total fraction and the concentrations of the constituent measured in the dissolved fraction.

$$C_A = C_T - C_D$$

C_T = Concentration of analyte in total fraction, $\mu\text{g/L}$

C_D = Concentration of analyte in dissolved fraction, $\mu\text{g/L}$

C_A = Concentration of analyte in suspended sediment fraction, $\mu\text{g/L}$

A separate analysis of suspended sediment concentration (SSC) using ASTM D3977-97 (19) Test Method B-Filtration) shall be performed to determine the net weight of sediment and net sample volume parameters necessary for unit conversion.

The following equation should be used to convert C_A , $\mu\text{g/L}$, to C_S , mg/kg :

$$C_S = (C_A/\text{SSC}) \times 1,000$$

C_A = Concentration of analyte in suspended sediment fraction, $\mu\text{g/L}$

C_S = Concentration of analyte in suspended sediment fraction, mg/kg

SSC = Suspended sediment concentration, measured by ASTM D3977-97 (19), mg/L

When using the above formulas, the following values shall be included with the report: C_S , C_T , C_D , and SSC.

- b. Pollutants shall be analyzed in accordance with U.S. EPA or American Society for Testing and Materials (ASTM) methodologies where such methods exist. Where no U.S. EPA or ASTM methods exist, the State Board or Los Angeles Water Board shall approve the use of other methods. Analytical tests shall be conducted by laboratories certified by the State Water Board's Division of Drinking Water Environmental Laboratory Accreditation Program (ELAP) in accordance with California Water Code section 13176.

End of Footnotes for Table E-3

5. CHRONIC WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

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

The chronic toxicity IWC for this discharge is 100 percent effluent.

5.2. 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 stormwater, sufficient sample volume shall also be collected 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.

5.3. 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 the test species provided in the *State Policy for Water Quality Control: Toxicity Provisions* and shall follow the 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 shall be used

to increase sample salinity. In no case shall these species be substituted with another test species unless written authorization from the Executive Officer is received.

- A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.01).
- A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, and 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).
- A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0).

5.4. Species Sensitivity Screening

Species sensitivity screening shall be conducted during this permit's first required sample collection or when the Facility discharges. The Discharger shall collect a single effluent sample 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 for the discharge. 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.

Rescreening is required at least once per five (5) years. The Discharger shall rescreen with the three species listed above 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 suit of tests. If a different species is the most sensitive, or if there is ambiguity, then the Discharger shall proceed with suites of screening tests using enough collected effluent for a minimum of three, but not to exceed five suites.

5.5. Quality Assurance and Additional Requirements

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

- 5.5.1. The discharge is subject to a determination of "Pass" or "Fail" and "Percent Effect" from a 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 and Appendix B, Table B-1, and the procedures described in the State Policy for Water Quality Control: Toxicity Provisions. Attainment of the water quality objective is demonstrated by conducting chronic aquatic toxicity testing as described in Section III.B.2 of the Toxicity Provisions and rejecting the null hypothesis in accordance with the TST statistical approach described in Section III.B.3. of the Toxicity Provisions. The null hypothesis (H_0) for the TST statistical approach is: Mean discharge In-stream Waste Concentration (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: $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$. This is a t-test (formally Student's t-Test), a statistical analysis comparing two sets of replicate observations - in the case of WET, only two test concentrations (i.e., a control and IWC). The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving water concentration differs from the control (the test result is "Pass" or "Fail")). The Welch's t-test employed by the TST statistical approach is an adaptation of Student's t-test and is used with two samples having unequal variances.

- 5.5.2. 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.
- 5.5.3. 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.
- 5.5.4. All reference toxicant test results should be reviewed and reported according to U.S. EPA guidance on the evaluation of concentration-response relationships found in *Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing* (40 CFR part 136) (EPA 821-B-00-004, 2000).
- 5.5.5. 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).

5.6. Preparation of an Initial Investigation Toxicity Reduction Evaluation Workplan

The Discharger shall prepare and submit a copy of the Discharger's initial investigation TRE work plan to the Executive Officer of the Los Angeles 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 U.S. EPA manual U.S. EPA/833B-99/002 (municipal) or its most current version or U.S. EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070, April 1989)* as guidance. This work plan shall describe the steps that the Discharger intends to follow if toxicity is detected. At a minimum, the work plan shall include:

- 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.

- 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.
- If a Toxicity Identification Evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

5.7. Toxicity Identification Evaluation and Toxicity Reduction Evaluation Process

- 5.7.1. **Preparation and Implementation of a Detailed TRE Work Plan.** The Discharger shall immediately initiate a TRE using, according to the type of treatment facility, U.S. EPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833B-99/002, 1999) or U.S. EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, April 1989) and, within 30 days, submit to the Executive Officer a Detailed TRE Work Plan, which shall follow the 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:
- Further actions by the Discharger to investigate, identify, and correct the causes of toxicity.
 - Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.
 - A schedule for these actions, progress reports, and the final report.
- 5.7.2. **TIE Implementation.** A toxicity test sample is immediately subject to TIE procedures to identify the toxic chemical(s), if a chronic toxicity test shows "Fail and % Effect value ≥ 50 ". 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, U.S. EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Chronic TIE Manual: Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I* (EPA/600/6-91/005F, 1992); *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.
- 5.7.3. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and stormwater 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.

- 5.7.4. The Discharger shall continue to conduct routine effluent monitoring for compliance determination purposes while the TIE and/or TRE process is taking place.
- 5.7.5. The Los Angeles Water Board recognizes 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.
- 5.7.6. The Water Board may consider the results of any TRE/TIE studies in an enforcement action.

5.8. 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, "Report Preparation," including:

- a. The valid toxicity test results for the TST statistical approach, reported as "Pass" or "Fail" and "Percent Effect" at the chronic toxicity IWC for the discharge. All toxicity test results (whether identified as valid or otherwise) conducted during the calendar month shall be reported on the SMR due date.
- b. A summary of water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).
- c. The statistical analysis used in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010) Appendix A, Figure A-1, Table A-1, and Appendix B, Table B-1.
- d. TRE/TIE results. The Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses. Prior to the completion of the final TIE/TRE report, the Discharger shall provide status updates in the monthly monitoring reports, indicating which TIE/TRE steps are underway and which steps have been completed.
- e. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.
- f. Tabular data and graphical plots clearly showing the laboratory's performance for the reference toxicant, for each solution, for the previous 20 tests and the laboratory's performance for the control mean, control standard deviation, and control coefficient of variation, for each solution, for the previous 12-month period.
- g. Any additional QA/QC documentation or any additional chronic toxicity-related information, upon request from the Los Angeles Water Board Chief Deputy Executive Officer or the Executive Officer.

6. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

7. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

8. RECEIVING WATER MONITORING REQUIREMENTS

8.1. Receiving Water Monitoring Location RSW-001 and RSW-002

Receiving water sampling shall be conducted at the same time as the effluent monitoring when there is discharge to surface water. The Discharger shall monitor the Dominguez Channel Estuary at Monitoring Locations RSW-001 and RSW-002 as follows:

Table E-4. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Year	a and b
Nitrate Nitrogen, Total (as N)	mg/L	Grab	1/Year	a and b
Dissolved Oxygen	mg/L	Grab	1/Year	a and b
<i>Enterococci</i>	CFU or MPN/100 mL	Grab	1/Year	a and b
pH	standard units	Grab	1/Year	a, b, and c
Salinity	ppt	Grab	1/Year	a, b, and c
Temperature	°F	Grab	1/Year	a, b, and c
Remaining Priority Pollutants	µg/L	Grab	1/Year	a, b, and d
TCDD Equivalents	µg/L	Grab	1/Year	a, b, and e

Footnotes to Table E-4

- a. Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; for priority pollutants, the methods must meet the lowest MLs specified in Appendix 4 of the SIP. Where no methods are specified for a given pollutant, the methods must be approved by the Los Angeles 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.
- b. Annual samples shall be collected during the first discharge of the year and shall be monitored concurrently with effluent Priority Pollutant monitoring specified in section 4.2 of this MRP (Attachment E). 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. Monitoring is not required during years in which no discharge occurs.
- c. Receiving water pH, salinity, hardness, and temperature must be collected simultaneously during the collection of samples for priority pollutants analysis.
- d. Priority Pollutants are those constituents referred to in 40 CFR part 131 or the California Toxics Rule.
- e. TCDD equivalents shall be calculated using the following formula, where the minimum levels (MLs) 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 MLs to zero. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners. The TCDD Equivalents are calculated as follows: Dioxin-TEQ (TCDD equivalents) = Sum of Concentration of dioxin or furan congener_x (C_x) X Toxicity Equivalency Factors (TEFs) for congener_x. The TEFs are listed in the Table below.

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
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

End of Footnotes to Table E-4

8.2. Bed Sediment - Monitoring Location SED-001

Receiving water sampling shall be conducted at the same time as the effluent monitoring when there is a discharge to surface water. The Discharger shall monitor the Dominguez Channel Estuary at Monitoring Location SED-001 as follows:

Table E-5. Receiving Water Monitoring Requirements – SED-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Cadmium, TR	mg/kg dry sediment	Grab	1/Year	a, b, and c
Chlordane	mg/kg dry sediment	Grab	1/Year	a, b, and c
Dieldrin	mg/kg dry sediment	Grab	1/Year	a, b, and c

Footnotes to Table E-5

- a. If there is no discharge to surface waters, no sampling is required and the Discharger will indicate in the corresponding monitoring report, under statement of perjury, that no effluent was discharged to surface water during the reporting period.
- b. Pollutants shall be analyzed in accordance with U.S. EPA or ASTM methodologies where such methods exist.

- c. Grab samples containing the upper two centimeters of sediment shall be taken from an Ekman grab sampler (or another method approved by the Executive Officer).

End of Footnotes to Table E-5

8.4 Groundwater Monitoring – Not Applicable

8.5. Harbor Toxics TMDL Monitoring Requirements

The Monitoring Program includes water column monitoring, sediment monitoring and fish tissue monitoring at monitoring stations in the Dominguez Channel Estuary as required in the Harbor Toxics TMDL. The Discharger shall continue to implement the site-specific plan in order to comply with this requirement. Details on these requirements are provided in section 6.3.2 of this Order.

9. OTHER MONITORING REQUIREMENTS

9.1. Rainfall Monitoring

The Discharger shall measure and record the rainfall on each day of the month or submit the data obtained from the nearest city/county operated rain gauge monitoring station. The location of the rain gauge utilized and the distance from the Facility and any other information shall be included in the monitoring report for that month.

9.2. Stormwater Visual Observation

The Discharger shall make visual observations of all stormwater discharge locations during at least one storm event per month that produces a significant discharge of stormwater. Observations shall note the presence of floating and suspended materials, oil and grease, discoloration, turbidity, and odor at the stormwater discharge locations. A “significant stormwater discharge” is a continuous discharge of stormwater for a minimum of one hour, or the intermittent discharge of stormwater for a minimum of 3 hours in a 12-hour period.

10. REPORTING REQUIREMENTS

10.1. General Monitoring and Reporting Requirements

- 10.1.1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
- 10.1.2. 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.
- 10.1.3. Each monitoring report shall contain a separate section titled “Summary of Non-Compliance” which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.

10.1.4. The Discharger shall inform the Los Angeles Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.

10.2. Self-Monitoring Reports (SMRs)

10.2.1. The Discharger shall electronically submit SMRs using the State Water Board’s California Integrated Water Quality System (CIWQS) Program Web site:

<http://www.waterboards.ca.gov/ciwqs/index.html>

The CIWQS Web site will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.

10.2.2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections 3 through 9. The Discharger shall submit quarterly SMRs including the results of all required monitoring using U.S. EPA-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.

10.2.3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-6. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
1/Discharge Event	Permit Effective Date	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
1/Year	Permit Effective Date	January 1 through December 31	Submit with corresponding quarterly SMR for February 15

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

10.2.5. **Compliance Determination.** Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment A. For purposes of reporting and administrative enforcement by the Los Angeles 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 reporting level (RL).

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

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

10.2.7. **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.

10.3. Discharge Monitoring Reports (DMRs)

DMRs are U.S. EPA 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:

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

10.4. Other Reports

10.4.1. Within 90 days of the effective date of this permit, the Discharger is required to submit the following to the Los Angeles Water Board:

- a. Initial Investigation TRE workplan.
- b. Updated SWPPP
- c. Updated BMPP
- d. Updated Spill Control Plan (SCP) or SPCC Plan

The SWPPP, BMPP, and SCP shall be reviewed at a minimum once per year and updated as needed to ensure all actual or potential sources of trash and pollutants discharged from the Facility are addressed. All changes or revisions to the SWPPP, BMPP, and SCP shall be submitted to the Los Angeles Water Board within 30 days of revisions.

10.4.2. Within 90 days of the effective date of this Order, the Discharger must submit to the Los Angeles Water Board notification of whether the Discharger will be participating with an organized group of Responsible Parties to complete the regional monitoring required by the Harbor Toxics TMDL for the Los Angeles River Watershed and included in section 6.3.2.b. of the Waste Discharge Requirements of this Order or if the Discharger will be developing a site specific plan. The Discharger shall provide proof of joining a collaborating group, or an updated site-specific plan. If developing a site-specific plan, that plan is due to

the Los Angeles Water Board within 90 days from the effective date of this Order. The Discharger has six months after the approval to implement the plan.

- 10.4.3. According to the Harbor Toxics TMDL, the Discharger shall submit an annual monitoring/implementation report to the Los Angeles Water Board. The report shall describe the measures implemented and the progress achieved toward meeting the assigned WLAs. The annual report shall be received by the Los Angeles Water Board by the specified date in the proposed Monitoring Plan.
- 10.4.4. Within 12 months from the effective date of this Order, the Discharger is required to submit a Climate Change Effects Vulnerability Assessment and Mitigation Plan (Climate Change Plan) to assess and manage climate change related-effects associated with the facility operation, water supplies, collection system, water quality and beneficial uses.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section 2.2 of this Order, the Los Angeles Water Board incorporates this Fact Sheet as findings of the Los Angeles 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.

1. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4B192131026
Discharger	Phillips 66 Company
Name of Facility	Phillips 66 Los Angeles Refinery, Carson Plant
Facility Address	1520 E. Sepulveda Blvd. Carson, CA 90745
Facility Contact, Title and Phone	Michael Bechtol, HSE Manager, (310) 952-6132
Authorized Person to Sign and Submit Reports	Henry Barzotti, General Manager, (310) 958-6001
Mailing Address	1520 E. Sepulveda Blvd. Carson, CA 90745
Billing Address	1520 E. Sepulveda Blvd. Carson, CA 90745
Type of Facility	Petroleum Refinery
Major or Minor Facility	Major
Threat to Water Quality	2
Complexity	A
Pretreatment Program	Not applicable (N/A)
Recycling Requirements	N/A
Facility Permitted Flow	11 million gallons per day (MGD)
Facility Design Flow	11 MGD
Watershed	Dominguez Channel Estuary Watershed, Los Angeles/Long Beach Harbor Watershed Management Area
Receiving Water	Dominguez Channel Estuary
Receiving Water Type	Inland Surface Water

1.1. Phillips 66 Company (hereinafter Discharger) is the owner and operator of Phillips 66 Los Angeles Refinery, Carson Plant, (hereinafter Facility), a petroleum refinery. 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.

- 1.2. The Facility discharges treated wastewater, boiler condensate and boiler blowdown, comingled with stormwater runoff to the Dominguez Channel Estuary, a water of the United States. The Discharger was previously regulated by Order No. R4-2017-0120, which was adopted on June 1, 2017. The Order expired on July 31, 2022.
- 1.3. Federal regulations at 40 CFR section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. However, pursuant to 40 CFR section 122.6(d)(1) 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. The Discharger filed a report of waste discharge (ROWD) and submitted an application for reissuance of its WDRs and NPDES permit on January 6, 2022. The application was deemed complete on February 17, 2022. A site visit was conducted on December 13, 2023 to observe operations and collect additional data to develop permit limitations and conditions. The terms and conditions of the current Order have been continued and remain in effect until new WDRs and NPDES permits are adopted pursuant to this Order. Attachment B provides a map of the area around the Facility and the discharge point. Attachment C provides the flow schematic of the Facility.

2. FACILITY DESCRIPTION

The Facility is a petroleum refining facility and is categorized as a cracking refinery. The Facility receives an average throughput of 130,000 barrels per day of crude oil. Crude oil is separated and processed in various refinery processes. Intermediate products are piped to another refinery located in Wilmington, California for processing to produce gasoline, diesel fuel, and jet fuel. Sulfur, carbon dioxide, and petroleum cokes are produced as co-products. The refinery processes at the Facility include crude distillation, vacuum flashing, coking, hydrotreating, sulfur recovery, and hydrogen generation.

2.1. Description of Wastewater and Treatment or Controls

Process wastewater and stormwater from process areas are segregated from non-process waters and stormwater from non-process areas (i.e., tank farms, parking lots, roadways, and other non-process areas) via site grading, piping, and berms. The drainage system at the Facility includes numerous catch basins. There are three types of catch basins that are used at the Facility: storm catch basins; process catch basins, and common catch basins. Each type of catch basin is interconnected by a series of stormwater conveyance lines. These lines are segregated according to the type of water they convey, i.e., stormwater, process wastewater, and common (storm or process water). Below is the description of the function of each type of catch basin:

- Process catch basins – the process catch basins are designed to capture process waters, stormwater, and contaminants that may be present in waters from the process areas. The process catch basins receive flow from areas of concrete pads within the various process units. The water from these pads

flows to the process water closed drain system. It is treated in the process wastewater system using Corrugated Plate Interceptors (CPI's), American Petroleum Institute (API) separators, and Air-Flotation Units (AFU 1 and AFU 2). The effluent water is discharged to the Los Angeles County Sanitation Districts (LACSD) sanitary sewer under Industrial Permit No. 21079.

- Storm catch basins – Stormwater catch basins receive runoff from areas outside of the process units. Stormwater catch basins are located around the perimeter of the process areas and within non-process areas of the Facility. Runoff flows through these catch basins to the stormwater collection system, which is separate from the process water drain system. From this storm drain system, the water flows to the 200,000-barrel capacity and 8.4 million gallon retention basin (Storm Water Pond). The stormwater from parking lots, roadways, non-process areas, and boiler condensate and blowdown are also directed to the Storm Water Pond.
- Common catch basins – Common catch basins serve as process water catch basins during dry weather and serve as stormwater catch basins during wet weather. The common catch basins are located within the tank farm areas of the Facility. After flushing the first tenth of an inch of rainfall to the process wastewater system, stormwater is diverted to the Storm Water Pond through the use of manually activated diversion boxes/valves. Process water that enters the common catch basins during dry weather and the first tenth of an inch during storm events are routed to the process wastewater system to prevent non-stormwater discharges, contaminants, and spills from being discharged to the Storm Water Pond.

Stormwater runoff from the process areas is combined with process wastewater, treated and discharged to the LACSD sanitary sewer. Stormwater from non-process areas, tanks farms, parking lots, and roadways is collected in the Storm Water Pond for observation and treatment before discharge to the process wastewater system, intermediate stormwater holding areas, LACSD sanitary sewer system or to the Dominguez Channel Estuary when the capacity of the Storm Water Pond is exceeded.

Under most conditions, stormwater, boiler blowdown, and boiler condensate from the Storm Water Pond is gradually pumped to the Oil Recovery Unit (ORU) for treatment prior to discharge to the sanitary sewer or Dominguez Channel Estuary. During storm events when the capacity of the Storm Water Pond is exceeded, the Facility has two additional ponds that are used to store excess water. Excess water is pumped to a containment pond next to the Storm Pond and an additional pond located by the flare gas recovery system. The excess water is treated and reused on site or sent to the LACSD sewer system. If all of these containment ponds reach capacity, the Facility is permitted to discharge treated wastewater consisting of stormwater runoff, boiler condensate, and boiler blowdown to the Dominguez Channel Estuary. Discharge of treated wastewater to the Dominguez Channel Estuary is not initiated until it meets the discharge limitations specified in the NPDES Permit. If initiated, discharge of treated wastewater to the Dominguez Channel Estuary continues until the level in the Storm Water Pond drops below 3 feet as long as water quality meeting discharge limitations is

maintained. The remaining water in the Storm Water Pond is then re-routed into the process wastewater system for discharge to the sanitary sewer.

The Facility has not discharged to the Dominguez Channel Estuary since March 2001. In addition, the pipe leading from the ORU to Discharge Point No. 001 has a flat sheet of steel (referred to as “blind”) that completely occludes the pipe and prevents the passage of any fluids through the pipe except when it is manually removed.

2.2. Discharge Points and Receiving Waters

Treated wastewater, boiler condensate and boiler blowdown, commingled with stormwater may be discharged to surface waters at the following discharge point:

Discharge Point 001: Discharge of boiler condensate and boiler blowdown commingle with stormwater to the Dominguez Channel Estuary, approximate coordinates: Latitude 33.8153°, Longitude -118.2319°.

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

No discharges of treated boiler condensate and boiler blowdown commingled with stormwater have occurred from the Facility since March 2001. Therefore, there were no samples collected during Order No. R4-2017-0120.

2.4. Compliance Summary

No discharges of treated boiler condensate and boiler blowdown commingled with stormwater occurred during the term of Order R4-2017-0040.

2.5. Planned Changes

The Discharger does not anticipate any changes during the permit term of this Order.

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

3.1. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. EPA 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 locations described in Table 2 subject to the WDRs in this Order.

3.2. California Environmental Quality Act (CEQA)

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

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

3.3.1. Water Quality Control Plan. The Water Quality Control Plan for the Los Angeles Region (Basin Plan) designates beneficial uses, establishes water quality

objectives (WQOs), 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. Beneficial uses applicable to the Dominguez Channel Estuary are as follows:

Table F-2. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Dominguez Channel Estuary	<p><u>Existing:</u> Water Contact Recreation (REC-1), Non-Contact Water Recreation (REC-2), Commercial and Sport Fishing (COMM), Estuarine Habitat (EST), Marine Habitat (MAR), Wildlife Habitat (WILD), Rare, Threatened, or Endangered Species (RARE), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN).</p> <p><u>Potential:</u> Navigation (NAV).</p>

3.3.2. **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 Board as Resolution No. 95-84 on November 16, 1995, states that:

"It is the policy of the State Water 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 Water Board only when the Regional Water 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 Facility discharges into Dominguez Chanel Estuary. Discharges from the Phillips 66 Los Angeles Refinery, Carson Plant would occur during precipitation events and would be comprised mostly of treated stormwater with a small amount of boiler condensate and boiler blowdown. The Discharger has eliminated their discharge to the receiving water to the greatest extent possible at this point and has not discharged since 2001. In the event of an emergency necessitating a discharge, this Order contains provisions necessary to protect all beneficial uses of the receiving water.

3.3.3. **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 (Resolution No. 75-89). This plan contains temperature objectives for coastal and interstate waters and enclosed bays and estuaries of California.

For estuaries, provision 5.A.(1) of Thermal Plan includes the following specific water quality objectives for this type of discharge:

- a. The maximum temperature shall not exceed the natural receiving water temperature by more than 20°F.
- b. Elevated temperature waste discharges either individually or combined with other discharges shall not create a zone, defined by water temperatures of more than 1°F above natural receiving water temperature, which exceeds 25 percent of the cross-sectional area of a main river channel at any point.
- c. No discharge shall cause a surface water temperature to rise greater than 4°F above the natural temperature of the receiving waters at any time or place.
- d. Additional limitations shall be imposed when necessary to assure protection of beneficial uses.

Consistent with the Thermal Plan, Los Angeles Water Board staff prepared a study entitled, *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region* (White Paper) that evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel, which are the typical aquatic life species present in tidal estuaries and enclosed bays in the Los Angeles Region. A maximum effluent temperature limitation of 86°F was determined to be appropriate for protection of aquatic life. This Order includes the effluent limitation of 86°F consistent with the Thermal Plan to protect the aquatic life beneficial uses, including but not limited to EST, MAR, and WILD.

3.3.4. **Sediment Quality.** The State Water Board adopted the *Water Quality Control Plan for Enclosed Bays and Estuaries – Sediment Quality Provisions* on September 16, 2008, and it became effective on August 29, 2009 (Sediment Quality Provisions). Sediment Quality Provisions established sediment quality objectives (SOQs) for benthic community protection and human health and related implementation provisions for specifically defined sediments and discharges in most bays and estuaries. The State Water Board amended the Sediment Quality Provisions through Resolution No. 2018-0028; these amendments became effective upon approval by U.S. EPA on March 11, 2019. The 2018 amendments to the Sediment Quality Provisions updated the implementation provisions for assessing the human health SQOs. The human health implementation provisions do not apply to receiving waters with a previously adopted TMDL that addresses bioaccumulation of organochlorine pesticides or polychlorinated biphenyls from sediment into sportfish tissue. The Los Angeles Water Board's Harbor Toxics TMDL adopted in 2012 addresses bioaccumulation of toxic substances. Therefore, the Sediment Quality Provisions do not apply.

3.3.5. **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” through Resolution No. 2017-0027, which was approved by OAL on June 28, 2017, and became effective upon U.S. EPA approval on July 14, 2017. The Mercury Provisions are implemented through NPDES permits issued pursuant to CWA section 402, waste discharge requirements, or waivers of waste discharge requirements. The Mercury Provisions include specific implementation provisions for municipal wastewater and industrial discharges; stormwater discharges from mine site remediation discharges; dredging activities; wetland projects and nonpoint source discharges.

The Mercury Provisions also prescribe specific implementation provisions for individual industrial permittees based on waterbody type. Because this permit regulates the discharge of treated stormwater commingled with wastewater, the Los Angeles Water Board evaluated whether a water quality based effluent limitation (WQBEL) was necessary for mercury in accordance with section IV.D.2.c.1 of the Mercury Provisions. The Mercury Provisions convert the fish tissue-based water quality objectives into water column values to be used for reasonable potential analysis and development of effluent limitations. Table 1 of the Mercury Provisions establishes mercury water quality objective of 12 ng/L (0.012 µg/L) for flowing water bodies with MAR and/or WILD beneficial use designations such as Dominguez Channel Estuary. The Facility has not discharged since 2001 and there is no current data available. Thus, the reasonable potential to cause or contribute to an exceedance of the water quality standard cannot be determined for mercury at this time. This Order carries over the existing mercury effluent limitations to avoid backsliding until an updated reasonable potential analysis can be conducted. In addition, this Order establishes monitoring requirements for mercury in the effluent and receiving water in Attachment E with the new detection limit of 0.5 ng/L (0.0005 µg/L), which the Mercury Provisions specify as a quantification limit for monitoring mercury in water samples.

- 3.3.6. **Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries in California – Part 3: Bacteria Provisions (hereinafter Bacteria Provisions).** On August 7, 2018, the State Water Board adopted Resolution No. 2018-0038, bacteria provisions and a water quality variance policy as (1) *Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays and Estuaries of California*; and (2) an amendment to the *Water Quality Control Plan for Ocean Waters of California*. The goals of the Bacteria Provisions are to (1) establish a beneficial use definition of limited water contact recreation (LREC-1); (2) establish new statewide numeric water quality objectives for bacteria to protect primary contact recreation (REC-1) beneficial use; (3) include implementation elements; and (4) create a water quality standards variance framework under provisions established by the U.S. EPA. OAL approved the regulatory action on February 4, 2019. On March 22, 2019, U.S. EPA approved the Bacteria Provisions, and they became effective. The Dominguez Channel Estuary has existing REC-1 beneficial use. This Order establishes effluent and

receiving water bacteria limits to protect those beneficial uses consistent with the Bacteria Provisions.

- 3.3.7. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** U.S. EPA 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, U.S. EPA 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. This Order implements the NTR and CTR.
- 3.3.8. **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 U.S. EPA through the NTR and to the priority pollutant objectives established by the Los Angeles Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the U.S. EPA 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. The requirements of this Order implement the SIP.
- 3.3.9. **Antidegradation Policy.** Federal regulation 40 CFR 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). Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Los Angeles Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge is consistent with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution 68-16 as discussed in finding 4.4.2 of this Fact Sheet.
- 3.3.10. **Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR 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. This Order complies with the anti-backsliding provisions as discussed in finding 4.4.1 of this Fact Sheet.
- 3.3.11. **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 USCA §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

3.3.12. **Toxicity Provisions.** On December 1, 2020, the State Water Board adopted statewide numeric water quality objectives for both acute and chronic toxicity, using the TST, and a program of implementation to control toxicity, which are collectively known as the Toxicity Provisions. The Toxicity Provisions establish a uniform regulatory approach to provide consistent protection of aquatic life beneficial uses in inland surface waters, enclosed bays, estuaries, and coastal lagoons. The Toxicity Provisions were approved by OAL on April 25, 2022. The Toxicity Provisions were approved by the U.S. EPA and became effective on May 1, 2023. The Dominguez Channel Estuary has an existing WILD, EST, RARE, MIGR, SPWN, and MAR beneficial uses. This Order establishes toxicity limits to protect those beneficial uses consistent with the Toxicity Provisions.

3.3.13. **Trash Amendments.** 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 Amendments) through Resolution No. 2015-0019, which was approved by the Office of Administrative Law (OAL) on December 2, 2015 and became effective upon U.S. EPA approval on January 12, 2016. The Trash Amendments established a narrative water quality objective and a prohibition on the discharge of trash, to be implemented through permits issued pursuant to CWA section 402(p), waste discharge requirements, or waivers of waste discharge requirements.

The Trash Amendments apply to all surface waters of the State, with the exception of those waters within the jurisdiction of the Los Angeles 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 Amendments. This Order incorporates the requirements of the Trash Amendments through the prohibition of trash discharges to the discharge point. This Order also requires the Discharger to develop and implement a Stormwater Pollution Prevention Plan (SWPPP), which must include specific BMPs used as stormwater control measures that the Discharger will undertake to prevent the discharge of trash from the Facility to the Dominguez Channel Estuary.

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

The State Water Board adopted the 2020-2022 California Integrated Report based on a compilation of the Los Angeles Water Boards’ Integrated Reports. These Integrated Reports contain both the Clean Water Act (CWA) section 305(b) water quality assessment and section 303(d) list of impaired waters. In developing the Integrated

Reports, the Water Boards solicit data, information, and comments from the public and other interested persons. On January 19, 2022, the State Water Board approved the CWA Section 303(d) List portion of the State's 2020-2022 Integrated Report (State Water Board Resolution Number 2022-0006). On May 11, 2022, U.S. EPA approved California's 2020-2022 Integrated Report. The CWA section 303(d) List can be found at the following link:

https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html

Certain receiving waters in the Dominguez Channel Watershed do not fully support beneficial uses and therefore have been classified as impaired on the 2020-2022 303(d) list and have been scheduled for TMDL development.

The Facility discharges to the Dominguez Channel Estuary within the Dominguez Channel Watershed. The *2020-2022 State Water Resources Control Board (State Water Board) California 303(d) List* includes the classification of the Dominguez Channel Estuary. The pollutants/stressors of concern include benthic community effects, benzo(a)anthracene, benzo(a)pyrene, chlordane (tissue), chrysene (C1-C4), copper, DDT (tissue & sediment), dieldrin (tissue), indicator bacteria, lead, PCBs, phenanthrene, pyrene, and toxicity. Following are summaries of TMDLs applicable to the Dominguez Channel Estuary:

3.4.1. **Harbor Toxics TMDL.** The Dominguez Channel and Greater Los Angeles and Long Beach Harbors Waters Toxic Pollutants TMDL (Harbor Toxics TMDL) is included in Chapter 7-40 of the Basin Plan. The Los Angeles Water Board adopted the Harbor Toxics TMDL on May 5, 2011, and amended the Basin Plan to incorporate the TMDL. The Harbor Toxics TMDL was approved by the State Water Board on February 7, 2012, the OAL on March 21, 2012, and the U.S. EPA on March 23, 2012. The Los Angeles Water Board adopted the reconsiderations of the Harbor Toxics TMDL on October 13, 2022, under Resolution No. R22-005 and is pending approval by the OAL and U.S. EPA. The Harbor Toxics TMDL contains monitoring requirements applicable to this discharge. Therefore, this Order contains effluent limitations and monitoring requirements based on the Harbor Toxics TMDL.

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

- a. Interim Sediment concentration-based waste load allocations (WLAs) (in mg/kg sediment) for copper, lead, zinc, DDT, PAHs, and PCBs.
- b. Final water column concentration-based WLAs ($\mu\text{g/L}$) for copper, lead, zinc, PAHs, chlordane, 4,4'-DDT, dieldrin, and total PCBs.
- c. Final concentration-based sediment WLA (in mg/kg dry sediment) for cadmium.
- d. Final concentration-based sediment WLAs (in mg/kg dry sediment) for bioaccumulative compounds: chlordane and dieldrin.
- e. Provisions for monitoring discharges and/or receiving waters to determine attainment of WLAs.

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. The TMDL includes provisions for a 20-year implementation schedule when warranted. This Order requires compliance with final WQBELs that implement the final WLAs instead of the interim WLAs since the Discharger has not discharged since 2001 and has demonstrated the ability to retain all stormwater runoff. Therefore, a TMDL-based compliance schedule is not warranted in this Order. The following discusses the implementation of the WLAs for the Harbor Toxics TMDL in this Order.

- a. **Final WLAs.** This Order requires WQBELs that are statistically-calculated based on final water column concentration-based WLAs (in $\mu\text{g/L}$, total metal) for copper (3.73), lead (8.52), zinc (85.6), PAHs [benzo(a)anthracene, benzo(a)pyrene, chrysene,] (0.049), chlordanes (0.00059), 4,4'-DDT (0.00059), dieldrin (0.00014), and total PCBs (0.00017) in the Dominguez Channel Estuary. The final water column WLAs were translated, consistent with the assumptions and requirements of TMDL WLAs, into WQBELs in this Order.

The discharge from the Facility only occurs during or after significant storm events. The Facility has not discharged to surface waters since 2001. As such, the Facility is considered an "irregular discharger" as specified in the Harbor Toxics TMDL. For these dischargers, the direct application of sediment allocations to the effluent is problematic because the volume of effluent necessary to collect a sufficient amount of TSS for sediment analysis using conventional analytical methods is very large and would require a level of planning that would be infeasible to implement for an irregular discharge. Therefore, an alternative method, SSC method, to determine compliance with the final concentration-based sediment waste load allocations is used. The SSC method is described in footnote a of Table E-3 of this Order.

The Los Angeles Water Board has determined that the WQBELs established in this Order (i.e., copper, lead, zinc, PAHs [benzo(a)anthracene, benzo(a)pyrene, chrysene, pyrene], chlordanes, 4,4'-DDT, dieldrin, and total PCBs) and final concentration-based sediment waste load allocations are consistent with, and constitute equivalency with, the Harbor Toxics TMDL's water and sediment based WLAs for minor and irregular discharges. The concentration of the pollutants in the effluent provides a measure of the pollutants discharged from the Facility to Dominguez Channel Estuary.

- b. **Interim WLAs.** The Harbor Toxics TMDL includes interim sediment allocations (in mg/kg dry sediment) for copper (220.0), lead (510.0), zinc (789.0), DDT (1.727), PAHs (31.6) and PCBs (1.490) at the Dominguez Channel Estuary. The Harbor Toxics TMDL also includes final sediment allocations (in $\mu\text{g/kg}$ dry sediment) for cadmium (1.2), chlordanes (0.5), and dieldrin (0.02).

Order No. R4-2017-0120 established interim sediment allocation monitoring thresholds based on the Harbor Toxics TMDL's interim sediment allocations for cadmium, copper, lead, zinc, DDT, PAHs (i.e., benzo(a)anthracene, benzo(a)pyrene, chrysene, or pyrene), and PCBs, and final sediment allocations for cadmium, chlordane, and dieldrin. This Order removes interim WLAs and establishes the final effluent limitations based on the final WLAs for aforementioned pollutants. As discussed above, this Discharger is discharging irregularly and interim WLAs are not warranted.

- c. **Monitoring an Reporting Plan (Monitoring Plan) and Quality Assurance Project Plan (QAPP).** In accordance with 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 is required to develop a Monitoring Plan and QAPP for the water column, sediment, and fish tissue in the Dominguez Channel, Torrance Lateral and Dominguez Channel Estuary. These plans must follow the "TMDL Element - Monitoring Plan" provisions in the Basin Plan, Chapter 7, Section 7-40. The TMDL required that the Monitoring Plan and QAPP shall be submitted 20 months after the effective date of the TMDL (March 23, 2012) for public review and subsequent Executive Officer approval. During the tenure of Order R4-2017-0040, the Discharger submitted a site-specific Monitoring Plan and QAPP to implement the monitoring and reporting requirements of the Harbor Toxics TMDL. If the Discharger decides to change the site-specific Monitoring Plan with a QAPP, the Discharger is required to notify the Los Angeles Water Board within 90 days of the effective date of the Order and submit them to the Los Angeles Water Board within 12 months of the effective date of the Order for public comment, and subsequently, Executive Officer approval.

The Discharger is required to implement the Monitoring Plan and QAPP after they are approved by the Executive Officer and after a discharge from the Facility occurs. The compliance monitoring program includes water column, sediment, and fish tissue monitoring. The Discharger is required to submit the annual monitoring report to the Los Angeles Water Board by the specified date in the proposed Monitoring Plan. The annual monitoring report must indicate compliance and non-compliance with applicable WLAs. Annual reports have not been submitted because the Facility has not discharged since 2001 and the Discharger has not begun to implement the Monitoring Plan and QAPP.

3.5. Other Plans, Polices and Regulations

- 3.5.1. **Climate Change Adaptation and Mitigation.** On March 07, 2017, the State Water Board adopted a resolution in recognition of the challenges posed by climate change that requires a proactive approach to climate change in all State Water Board actions, including drinking water regulation, water quality protection, and financial assistance (Resolution No. 2017-0012). The resolution lays the foundation for a response to climate change that is integrated into all State Water

Board actions, by giving direction to the State Water Board divisions and encouraging coordination with the Los Angeles Water Board. The Los Angeles Water Board also adopted “A Resolution to Prioritize Actions to Adapt and Mitigate the Impacts of Climate Change on the Los Angeles Region’s Water Resources and Associated Beneficial Uses” (Resolution No. R18-004) on May 10, 2018. The resolution summarizes the steps taken so far to address the impacts of climate change within the Los Angeles Water Board’s programs and lists a series of steps to move forward. These include the identification of potential regulatory adaptation and mitigation measures that could be implemented on a short-term and long-term basis by each of the Los Angeles Water Board’s programs to take into account, and assist in mitigating where possible, the effects of climate change on water resources and associated beneficial uses. This Order contains provisions to require planning and actions to address climate change impacts in accordance with both the State and Los Angeles Water Boards’ resolutions.

The Permittee shall develop a Climate Change Effects Vulnerability Assessment and Management Plan (Climate Change Plan) and submit the Climate Change Plan no later than 12 months after the effective date of this Order. The Climate Change Plan shall include an assessment of short and long-term vulnerabilities of the Facility and operations as well as plans to address any Facility vulnerabilities, treatment systems, and outfalls for predicted impacts to ensure that Facility operations are not disrupted, compliance with permit conditions is achieved, and receiving waters are not adversely impacted by discharges. Control measures shall include, but are not limited to, emergency procedures, contingency plans, alarm/notification systems, training, backup power and equipment, and the need for planned mitigations to ameliorate climate-induced impacts including, but not limited to, changing influent and receiving water quality and conditions, as well as the impact of rising sea level, wildfires, storm surges, and back-to-back severe storms which are expected to become more frequent.

- 3.5.2. **Environmental Justice and Advancing Racial Equity.** Water Code section 13149.2 requires regional water boards to make a finding on potential environmental justice, tribal impact, and racial equity considerations when issuing or reissuing individual waste discharge requirements or waivers of waste discharge requirements that regulate activity or a facility that may impact a disadvantaged or tribal community, and that includes a time schedule in accordance with subdivision (c) of Section 13263 for achieving an applicable water quality objective, an alternative compliance path that allows time to come into compliance with water quality objectives, or a water quality variance. Water Code section 189.7 requires the Los Angeles Water Board to conduct equitable, culturally relevant community outreach when a proposed discharge of waste may have disproportionate impacts on water quality in disadvantaged and/or tribal communities. The Los Angeles Water Board is also committed to developing and implementing policies and programs to advance racial equity and environmental justice so that race can no longer be used to predict life outcomes, and outcomes for all groups are improved.

This Order does not include a time schedule, alternative compliance path, or variance. Therefore, Water Code section 13149.2 does not apply to this permit reissuance. The area in the vicinity of the Facility does not meet the criteria of a disadvantaged community as defined in Water Code section 189.7(d)(1). Nevertheless, the area around the Facility has an average pollution burden score of 99, cleanup site score of 99, and a groundwater threat score of 99 on California's Office of Environmental Health Hazard Assessment (OEHHA's) CalEnviroScreen 4.0 tool, which indicates that the surrounding communities are disproportionately burdened by pollution for these indicators, in comparison to the rest of the State. Additionally, the discharge may impact tribal communities. The Los Angeles Water Board has therefore conducted outreach consistent with Water Code section 189.7 by reaching out to surrounding communities and tribal communities about this Order. The Los Angeles Water Board reviewed readily available information and any information raised to the Board by interested persons concerning anticipated water quality impacts resulting from adoption of this Order. Additionally, the Board has considered any environmental justice concerns within the Board's authority and by any interested persons regarding those impacts.

This Order regulates primarily stormwater commingled with boiler condensate and boiler blowdown from industrial areas that includes limitations to protect the receiving water. The discharges regulated under this Order are expected to be rare and under emergency circumstances only. Therefore, the Los Angeles Water Board anticipates that the issuance of this Order will not result in water quality impacts to disadvantaged or tribal communities or raise environmental justice concerns.

4. RATIONAL 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 CFR section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR 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 Discharger operates a petroleum refinery categorized as a cracking refinery as defined in 40 CFR 419.20. The pollutants of concern for the discharges covered under this Order were identified based on constituents regulated in the previous Order No. R4-2017-0120. Contributing waste streams consist of boiler condensate and blowdown, and storm water runoff from non-process areas (i.e., tank farms, parking lots, roadways, and other non-process areas). Pollutants commonly associated with these waste streams may include total oxidants (chlorine and bromine), solids, oil and grease, sulfides, phenol, metals, petroleum hydrocarbons, methyl tertiary butyl ether, tertiary butyl alcohol, and volatile organic compounds. In addition, biochemical oxygen demand (BOD), total suspended solids (TSS),

chemical oxygen demand (COD), oil and grease, phenolic compounds, total chromium and chromium (VI) are regulated under the Petroleum Refining Point Source Category Subpart B: Cracking Subcategory [40 CFR 419.22(e)(2); 40 CFR 419.23(e)(2); and 40 CFR 419.24(e)(2)] effluent limitation guidelines and standards (ELGs). The *Development Document for Effluent Limitations Guidelines and Standards for the Petroleum Refining Point Source Category* (Subpart B: Cracking Category) indicates these pollutants are common in the wastewater discharged from petroleum refineries and they are considered pollutants of concern. These pollutants have the potential to adversely affect the water quality and the aquatic life of the receiving water. These pollutants were regulated in Order R4-2017-0120 and are carried over in this Order.

4.1. Discharge Prohibitions.

Discharge Prohibitions in this Order are based on the federal CWA, the Code of Federal Regulations (CFR), the Basin Plan, the Water Code, State Water Board's plans and policies, U.S. EPA guidance and regulations, and previous permit 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.

4.2. Technology-based Effluent Limitations

4.2.1. **Scope and Authority.** Section 301(b) of the CWA and implementing U.S. EPA permit regulations at 40 CFR 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 CFR section 125.3(c), (d).

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

- a. Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, 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 U.S. EPA to develop ELGs representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR 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 Los Angeles Water Board must consider specific factors outlined in 40 C.F.R. section 125.3.

4.2.2. Applicable Technology-Based Effluent Limitations

The Facility is a petroleum refinery, categorized as a cracking facility, subjected to 40 C.F.R. part 419 Subpart B – Cracking Category effluent limitation guidelines (ELGs). ELGs for contaminated runoff (i.e., runoff which comes into contact with any raw material, intermediate product, finished product, by-product or waste product located on petroleum refinery property) have been established for the Petroleum Refining category, representing BPT, BCT, and BAT. TBELs for Discharge Point 001 are developed based on the ELGs for contaminated runoff included in 40 C.F.R. Part 419.

The wastewaters contributing to Discharge Point 001 include boiler condensate and boiler blowdown. These waste streams were evaluated with respect to applicability of production-based ELGs under 40 C.F.R. sections 419.22(a), 419.23(a), and 419.24(a), in Order No. R4-2017-0120. The discharge characteristics of boiler condensate and boiler blowdown are not closely tied to production. Based on the flow information submitted by the Discharger in the report of waste discharge (ROWD), boiler condensate and boiler blowdown comprise 0.1 to 0.5 percent of the discharge contributions to Discharge Point 001. Therefore, production-based ELGs were not applied for discharges at Discharge Point 001; the ELGs for contaminated stormwater are applied to the waste streams discharges at Discharge Point 001. In addition, Sections 419.22(e), 419.23(f), and 419.24(e) establish effluent limitations of 15 mg/L for oil and grease and 110 mg/L for TOC for contaminated stormwater runoff. The ELGs state that when the discharge exceeds the effluent limitation for oil and grease or TOC specified above, then effluent limitations for BOD, chromium, chromium (VI), COD, oil and grease, pH, phenolic compounds, and TSS, also established in sections 419.22(e), 419.23(f), and 419.24(e), are applicable. Due to lack of discharges, there is no current representative data to determine if the discharge concentration of oil and grease or TOC are below the specified limits above. In addition, there is a small quantity of boiler condensate and boiler blowdown that comingles with the stormwater. Therefore, this Order utilized the contaminated runoff ELGs that was also applied in the previous Orders (Order

Nos. R4-2012-0021 and R4-2017-0120) for discharges at Discharge Point 001. While the applicable ELGs established in 40 CFR sections 419.22(e), 419.23(f), and 419.24(e) are the same in both the previous orders and this order, the Los Angeles Water Board determined that there was a technical mistake in translating the ELGs in the previous orders. The MDEL and AMEL for TSS and the AMEL for chromium were transcribed incorrectly in the previous orders, but the correct transcription in this Order results in more stringent effluent limitations.

For the discharges through Discharge Point 001, the BPT, BAT and BCT limitations for BOD, TSS, COD, oil and grease, phenolic compounds, total chromium, and chromium (VI) are applicable. The limitation for pH is discussed in Section 4.3.2.a. below. The most stringent of BPT, BCT, and BAT are applied as effluent limitations to the discharge.

A summary of the technology-based effluent limitations is shown in Table F-3.

Table F-3. Summary of Technology-based Effluent Limitations – Discharge Point 001

Parameter	Units	Average Monthly Effluent Limitations	Maximum Daily
BOD ₅ @ 20°C	mg/L	26	48
Total Suspended Solids (TSS)	mg/L	21	33
Chemical Oxygen Demand (COD)	mg/L	180	360
Oil and Grease	mg/L	8	15
Phenolic Compounds (4AAP)	mg/L	0.17	0.35
Chromium, Total	µg/L	210	600
Chromium (VI)	µg/L	28	62

4.3. Water Quality-Based Effluent Limitations (WQBELs)

4.3.1. **Scope and Authority.** CWA Section 301(b) and 40 CFR 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 CFR 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) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state’s narrative criterion, supplemented with other relevant information, as

provided in 40 CFR section 122.44(d)(1)(vi). WQBELs must also be consistent with the assumptions and requirements of TMDL Waste Load Allocations (WLAs).

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.

4.3.2. **Applicable Beneficial Uses and Water Quality Criteria and Objectives**

The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for water bodies in the Los Angeles region. The beneficial uses applicable to the Dominguez Channel Estuary are summarized in section 3.3.1 of this Fact Sheet. The Basin Plan includes both narrative and numeric water quality objectives applicable to the receiving water as described below:

- a. **pH.** This Order includes effluent limitations for pH to ensure compliance with Basin Plan Objectives for pH. This Order uses effluent limitations based on the Basin Plan because they are more stringent than the ELGs for pH in 40 CFR 419.22(e)(2) and 419.24(e)(2).
- b. **Bacteria.** This Order revises effluent limitations for Enterococci to protect potential contact water recreation (REC-1) beneficial uses of the receiving water based on the Bacteria Provisions.
- c. **Temperature.** The Basin Plan states that temperature objectives for enclosed bays and estuaries are specified in the Thermal Plan. The Thermal Plan states “elevated temperature waste discharges shall comply with limitations necessary to assure protection of beneficial uses.” A Los Angeles Water Board Study, Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bay in the Los Angeles Region, determined that the maximum temperature of discharges that is protective of beneficial uses (aquatic life) is 86°F. A maximum effluent temperature limitation of 86°F, consistent with the Thermal Plan is included in this Order.
- d. **Total Residual Chlorine.** The Basin Plan requires that “chloride residual shall not be present in surface water discharges at concentrations that exceed 0.1 mg/L and shall not persist in receiving waters at any concentration that causes impairment of beneficial uses.” Order R4-2017-0120 established an MDEL for total residual chlorine equal to 0.1 mg/L and that limitation is retained in this Order.

Priority pollutant water quality criteria in the CTR are applicable to the Dominguez Channel Estuary. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with section 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of

the time. The CTR criteria for saltwater, or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations to protect the beneficial uses of the Dominguez Channel Estuary, a water of the United States.

The Facility’s last discharge event was in 2001. Due to the lack of discharges to surface water, no effluent or receiving water monitoring has been conducted by the Discharger during the term of Order No. R4-2017-0120.

The table below summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the effluent for Discharge Point 001 or from the receiving water based on the latest data submitted in 2001 to the Los Angeles Water Board.

Table F-4. Applicable Water Quality Criteria

CTR No	Constituent	Selected Criteria (µg/L)	CTR Acute Saltwater Criteria (µg/L)	CTR Chronic Saltwater Criteria (µg/L)	CTR Human Health for Consumption of Organisms only (µg/L)	Harbor Toxics TMDL Waste Load Allocation (µg/L)	Notes
4	Cadmium, TR	9.36	42.5	9.36	---	---	---
5b	Chromium (VI)	50	1,100	50	---	---	---
6	Copper, TR	3.7	5.8	3.7	---	3.73	---
7	Lead, TR	8.5	220	8.5	Narrative	8.52	---
8	Mercury, TR	0.051	---	---	0.051	---	a
9	Nickel, TR	8.3	75	8.3	4,600	---	---
11	Silver, TR	5	20	5	Narrative	---	---
13	Zinc, TR	2.2	2.2	---	---	---	---
14	Cyanide, Total (as CN)	1.0	1.0	1.0	220,000	---	---
60	Benzo(a)anthracene	0.049	---	---	0.049	---	b
61	Benzo(a)pyrene	0.049	---	---	0.049	---	b
68	Bis(2-Ethylhexyl)Phthalate	5.9	---	---	5.9	---	---
73	Chrysene	0.049	---	---	0.049	---	---
88	Hexachlorobenzene	0.00077	---	---	0.00077	---	---
107	Chlordane	0.00059	0.09	0.004	0.00059	0.00059	---
108	4,4'-DDT	0.00059	0.13	0.001	0.00059	0.00059	---
111	Dieldrin	0.00014	0.71	0.0019	0.00014	0.00014	---
119-125	Polychlorinated biphenyls (PCBs)	0.00017	---	0.03	0.00017	---	b
---	Total PAH	---	---	---	---	0.049	c

Footnotes to Table F-4

- a. This permit carries over the mercury effluent limitations from the previous permit, based on the CTR criteria, because the Facility has not discharged since 2001. There is no current data available to evaluate the mercury effluent limitations based on the Mercury Provisions.

- b. 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.
- c. CTR human health criteria for PCBs applies to total PCBs, e.g., the sum of all congener or isomer or homolog or aroclor analyses. Total PCBs as aroclors 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.

End of Footnotes to Table F-4

Table F-4 above also summarizes the applicable water column TMDL-based WLAs for copper, lead, zinc, PAHs, chlordane, 4,4'-DDT, dieldrin, and total PCBs contained in the Harbor Toxics TMDL applicable to the Dominguez Channel Estuary. These WLAs are applicable to the discharge at Discharge Point 001 to the Dominguez Channel Estuary. This Order implements the applicable WLAs as required in the Harbor Toxics TMDL. The WLAs are converted into effluent limitations by applying the CTR-SIP procedures to calculate the averaging period in accordance with the Harbor Toxics TMDL.

4.3.3. Determining the Need for WQBELs

a. Reasonable Potential Analysis (RPA) Methodology

In accordance with section 1.3 of the SIP, the Los Angeles 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 an applicable TMDL-based WLA, then WQBELs are developed consistent with any assigned WLA pursuant to 40 CFR section 122.44(d)(1)(vii)(B). Otherwise, the Los Angeles 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:

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

Sufficient effluent and receiving water data are needed to conduct a complete RPA. If the data are not sufficient, the Discharger will be required

to gather the appropriate data for the Los Angeles Water Board to conduct the RPA. Upon review of the data, and if the Los Angeles Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

No effluent monitoring data from the term of Order No. R4-2017-0120 or the previous Order R4-2012-0021 was available for an RPA. Therefore, no new RPA is conducted in preparing this Order. However, this section includes information on Trigger 3 calculations conducted during the development of Order No. R4-2017-0120, on which the Los Angeles Water Board based the WQBELs in this Order.

b. Priority Pollutants with a Total Maximum Daily Load (TMDL)

The Los Angeles Water Board developed WQBELs for copper, lead, zinc, chlordane, 4,4'- DDT, dieldrin, total PCBs, benzo(a)anthracene, benzo(a)pyrene, chrysene and pyrene that have available WLAs under the Harbor Toxics TMDL. The Los Angeles Water Board developed water quality-based effluent limitations for these pollutants pursuant to 40 C.F.R. section 122.44(d)(1)(vii), which does not require or contemplate a separate reasonable potential analysis during the permitting stage when there is an available WLA for the discharge in a TMDL. Similarly, the SIP at Section 1.3 recognizes that reasonable potential analysis at the permit development stage is not conducted if a TMDL has been developed.

c. Reasonable Potential Analysis Results for Mercury – Mercury Provisions

As discussed in section 3.3.11 of this Fact Sheet, this Order implements the Mercury Provisions as monitoring requirements. Table 1 of the Mercury Provisions establishes a water quality objective of 12 ng/L (0.012 µg/L) for flowing water bodies with MAR and/or WILD beneficial use designations such as the Dominguez Channel Estuary. The Mercury Provisions outline modified Reasonable Potential Analysis procedures that consist of comparing the highest observed annual average mercury concentration with the Table 1 criteria. Los Angeles Water Board staff reviewed monitoring data from the Facility's last discharge in 2001, and the monitoring data indicated non-detect with a method detection limit of 1 µg/L (1000 ng/l). According to the Mercury Provisions, "non-detect" data with the detection limit higher than 4 ng/l are not suitable for the analysis. Since the collected data did not meet the minimum detection limit stated by the Mercury Provisions, those data did not qualify for evaluation and there were no data available upon which to base an RPA. Thus, the reasonable potential to cause or exceed the water quality standard for mercury is not determined at this time. However, monitoring requirement for mercury in effluent and receiving water are included in Attachment E with a new detection limit of 0.5 ng/L (0.0005 ug/L),

which the Mercury Provisions specify as a quantification limit for the water samples.

4.3.4. **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 the WLA established as part of a TMDL.
 - ii. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).
 - iii. Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Los Angeles Water Board.
- b. The Harbor Toxics TMDL establishes WLAs for copper, lead, zinc, benzo(a)anthracene, benzo(a)pyrene, chrysene, chlordane, 4,4'-DDT, dieldrin, and total PCBs; WQBELs for these constituents are calculated following the procedures in section 1.4 of the SIP.

c. **WQBELs Calculation Example**

Using chromium (VI) as an example, the following demonstrates how WQBELs were established for this Order. The development and calculation of all WQBELs for this Order use the process described below. The development and calculation of all WQBELs for this Order uses the process described below. The process for developing these limits is in accordance with the Metals TMDL and section 1.4 of the SIP.

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:

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

Where C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators.

D = The dilution credit

B = The ambient background concentration

As discussed above, this Order does not allow dilution; therefore

$$\text{ECA} = C$$

When a WLA has been established through a TMDL for a parameter, the WLA is set equal to the ECA.

For chromium (VI), the applicable water quality criteria are:

$$\text{ECA}_{\text{acute}} = 1,100 \mu\text{g/L}$$

$$ECA_{\text{chronic}} = 50 \mu\text{g/L}$$

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

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

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

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. If the data set is greater than 10 samples, and at least 20% of the samples in the data set are reported as detected, the CV shall be equal to the standard deviation of the data set divided by the average of the data set.

For chromium (VI), the following data were used to develop the acute and chronic LTAs 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}
0	0.6	0.321	0.527

$$LTA_{\text{acute}} = 1,100 \mu\text{g/L} \times 0.321 = 353 \mu\text{g/L}$$

$$LTA_{\text{chronic}} = 50 \mu\text{g/L} \times 0.527 = 26.4 \mu\text{g/L}$$

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

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

For chromium (VI), the most limiting LTA is LTA_{chronic}

$$LTA = LTA_{\text{chronic}} = 24.4 \mu\text{g/L}$$

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.

$$AMEL_{\text{aquatic life}} = LTA \times AMEL_{\text{multiplier95}}$$

$$MDEL_{\text{aquatic life}} = LTA \times MDEL_{\text{multiplier99}}$$

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

No. of Samples Per Month	CV	Multiplier _{MDEL99}	Multiplier _{AMEL95}
4	0.60	3.11	1.55

$$AMEL_{\text{aquatic life}} = 26.4 \mu\text{g/L} \times 1.55 = 41 \mu\text{g/L}$$

$$MDEL_{\text{aquatic life}} = 26.4 \mu\text{g/L} \times 3.11 = 82 \mu\text{g/L}$$

Calculation of human health AMEL and MDEL.

Step 5: For the ECA based on human health, set the AMEL equal to the ECA_{human health}. In the case of chromium (VI), there are no human health criteria..

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

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

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

For chromium (VI), MDEL_{human health} is not applicable.

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

There are no applicable WLAs based on human health for chromium (VI), therefore, the MDEL and AMEL for aquatic life have been selected as these are the more stringent WQBELs.

Therefore, the WQBELs are:

$$AMEL_{\text{chromium (VI)}} = 26.4 \mu\text{g/L} \times 1.55 = 41 \mu\text{g/L}$$

$$\text{MDEL}_{\text{chromium (VI)}} = 26.4 \mu\text{g/L} \times 3.11 = 82 \mu\text{g/L}$$

However, the WQBELs calculated for chromium (VI) are less restrictive than the applicable ELGs for contaminated runoff. Therefore the technology-based effluent limitations (AMEL = 28 $\mu\text{g/L}$; MDEL = 62 $\mu\text{g/L}$) are applied in this Order.

4.3.5. Whole Effluent Toxicity (WET)

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

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

Order No. R4-2017-0120 contained chronic toxicity effluent limitations. The Discharger 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) statistical 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, and rejecting the null hypothesis in accordance with the TST statistical approach described in Section III.B.3. of the Toxicity Provisions

The null hypothesis (H_0) for the TST approach is:

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

A test result that rejects the null hypothesis is reported as “Pass.” A test result that does not reject this null hypothesis is reported as “Fail.”

Considering the Facility is categorized as a petrochemical refinery, the Facility has the potential to discharge a number of petroleum product-related pollutants, which individually may not be present in toxic concentrations, but could exhibit aggregate toxic effects as a whole, this Order includes monitoring of chronic toxicity once per discharge event for the effluent at Discharge Point 001 for process wastewater commingled with stormwater.

4.4. Final Effluent Limitation Considerations

4.4.1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR 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. All effluent limitations in this Order are at least as stringent (and in some cases, more stringent) as the effluent limitations in Order No. R4-2017-0120 except for effluent limitations for total coliform, fecal coliform, and *Enterococcus* as described below.

Order R4-2017-0120 contained effluent limitations for total coliform, fecal coliform, and *Enterococcus*. These limitations were based on the Basin Plan. As discussed in section 3.3.6 of this Fact Sheet, this Order now includes an effluent limitation based on the Bacteria Provisions. The Bacteria Provisions include WQOs for enterococci for waters with REC-1 beneficial use where the salinity is greater than 1 ppt more than 5 percent of the time during the calendar year. Because the Bacteria Provisions do not include water quality objectives for total coliform and fecal coliform, this Order removes the effluent limitations for total coliform and fecal coliform. Additionally, this Order modifies the maximum daily effluent limitation (MDEL) for enterococci because the Bacteria Provisions incorporate a statistical threshold value (STV). The STV is a set value that approximates the 90th percentile of the water quality distribution of a bacterial population. Since the Discharger is an irregular discharger, this Order incorporates an effluent limitation equivalent to the STV. The STV is 110 cfu/100 mL, which is slightly less stringent than the previous MDEL for enterococci (a single sample maximum of 104/100 mL).

CWA section 402(O)(2)(A) authorizes relaxation of effluent limits based on water quality standards where material and substantial alterations to the permitted facility occurred after permit issuance justify the application of a less stringent effluent limitation. CWA section 402(O)(2)(B) authorizes relaxation of effluent limitations where there is new information. Here, there is over twenty years of data indicating that the Permittee's changes to its operations has been sufficient capacity to retain process wastewater and stormwater onsite in its Storm Water Pond and/or overflow containment ponds without the need to discharge to the Dominguez Channel Estuary. Due to lack of recent data of effluent water quality in the event of a discharge, as well as changes in the storm intensity and frequency due to climate change, an effluent limitation for bacteria remains appropriate. However, the State Water Board has determined that fecal coliform and total coliform are outdated indicators that can lead to false positives that do not identify water quality violations in certain environmental conditions. (See e.g. section 5.2.1, Bacteria Provisions Staff Report.) Therefore, this Order replaces and updates the effluent limitations for bacteria indicators based on the updated science, as memorialized in the Bacteria Provisions and associated documents.. In light of changes to the Facility's operations and updates to the science on

bacterial indicators, removal of the total and fecal coliform effluent limitations and relaxation of the enterococci limitation is consistent with allowed under the CWA section 402(O)(2)(A) and (B).

4.4.2. Antidegradation Policies

40 CFR section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. On October 28, 1968, the State Water Board established California's antidegradation policy when it adopted Resolution Number 68-16, Statement of Policy with Respect to Maintaining the Quality of the Waters of the State (Resolution 68-16). Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings.

The renewal of this NPDES permit is consistent with Resolution 68-16 because it is not expected to allow degradation of receiving water quality. The permitted discharge is not a new discharge, and this Order does not provide for an increase in the permitted design flow or allow for a reduction in the level of treatment. The final limitations in this Order, which include concentration-based and mass-based limitations, 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.

The removal of the effluent limitations for total coliform and fecal coliform will not allow degradation because the most recent Bacteria Provisions do not include total and fecal coliforms as indicators for this type of receiving water. Additionally, the relaxation of the MDEL for *Enterococcus* also will not cause degradation because this number was based on an alternative way to calculate health risk. This Order still includes effluent limitations for *Enterococcus* based on the Bacteria Provisions. U.S. EPA studies have concluded that enterococci is the most reliable indicator organism to assess whether the REC-1 beneficial use is being attained for non-marine waters where the salinity is greater than 1 parts per thousand (ppt) more than 5 percent of the time during the calendar year. The numeric limits for *Enterococcus* in the Bacteria Provisions correspond with the risk protection level of 32 illnesses per 1,000 recreators. Further, there is a rigorous monitoring program in place in this Order to ensure that any discharges will not degrade any historical or existing receiving water quality. Therefore, the permitted discharge is consistent with 40 CFR section 131.12, the antidegradation provision, and Resolution 68-16.

4.4.3. 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 CFR 122.45(f)(1) requires that all permit limitations, standards or prohibitions be expressed in terms of mass units except under the following conditions: (1) for pH, temperature, radiation or other pollutants that cannot appropriately be expressed by mass limitations; (2) when applicable standards or limitations are expressed in terms of other units of measure; or (3) if in establishing technology-based permit

limitation on a case-by-case basis limitation based on mass are infeasible because the mass or pollutant cannot be related to a measure of production. The limitations, however, must ensure that dilution will not be used as a substitute for treatment. This Order includes mass-based effluent limitations, where appropriate, to comply with Section 122.45(f)(1).

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)

Mass-based effluent limitations applicable to Discharge Point 001 for stormwater discharges are based on a maximum flow of 11 MGD for the Facility.

4.4.4. **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, COD, oil and grease, phenolic compounds, total chromium, and chromium VI. Restrictions on these pollutants are discussed in section 4.2.2 of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

Water quality-based effluent limitations have been 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 CFR 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 U.S. EPA on May 18, 2000. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by U.S. EPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to U.S. EPA prior to May 30, 2000, but not approved by U.S. EPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR section 131.21(c)(1). The remaining water quality objectives and beneficial uses implemented by this Order were approved by U.S. EPA 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.

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

Parameter	Units	Average Monthly	Maximum Daily	Basis for Limit	Notes
Biochemical Oxygen Demand 5-day @ 20°C (BOD)	milligram per liter (mg/L)	26	48	E, ELG	---
BOD	pounds per day (lbs/day)	2,420	4,400	E, ELG	a
Oil and Grease	mg/L	8.0	15	E, ELG	---
Oil and Grease	lbs/day	737	1,376	E, ELG	a
pH	standard units	--	6.5 to 8.5	E, BP	b
Temperature	degrees Fahrenheit (°F)	--	86	E, TP	c
Total Suspended Solids (TSS)	mg/L	21	33	E, ELG	---
TSS	lbs/day	1,927	3,027	E, ELG	a
Chemical Oxygen Demand (COD)	mg/L	180	360	E, ELG	---
COD	lbs/day	16,500	33,000	E, ELG	a
Chronic Toxicity	Pass or Fail, and % Effect (TST)	Pass	Pass or % Effect <50	E, BP	d
Enterococci	CFU/100mL or MPN/100mL	---	110	BAC	e
Phenolic Compounds	mg/L	0.17	0.35	E, ELG	---
Phenolic Compounds	lbs/day	15	32	E, ELG	a
Settleable Solids	ml/L	0.1	0.3	E, BP	---
Sulfide	mg/L	---	1.0	E, BP	---
Sulfide	lbs/day	---	92	E, BP	a
Total Residual Chlorine	mg/L	---	0.1	E, BP	---
Total Residual Chlorine	lbs/day	---	9.2	E, BP	a
Copper, Total Recoverable (TR)	µg/L	3.1	6.1	E, TMDL	---
Copper, TR	lbs/day	0.28	0.56	E, TMDL	a
Chromium (VI)	µg/L	28	62	E, ELG	---
Chromium (VI)	lbs/day	2.5	5.7	E, ELG	a
Chromium	µg/L	210	600	E, ELG	---
Chromium	lbs/day	19	55	E, ELG	a
Lead, TR	µg/L	7.0	14	E, TMDL	---
Lead, TR	lbs/day	0.64	1.3	E, TMDL	a
Mercury, TR	µg/L	0.05	0.10	E, CTR	---
Mercury, TR	lbs/day	0.0046	0.0092	E, CTR	a
Nickel, TR	µg/L	6.8	14	E, CTR	---

Parameter	Units	Average Monthly	Maximum Daily	Basis for Limit	Notes
Nickel, TR	lbs/day	0.62	1.3	E, CTR	a
Silver, TR	µg/L	1.1	2.2	E, CTR	---
Silver, TR	lbs/day	0.10	0.20	E, CTR	a
Zinc, TR	µg/L	70	141	E, TMDL	---
Zinc, TR	lbs/day	6.4	13	E, TMDL	a
Cyanide, Total (as CN)	µg/L	0.5	1.0	E, CTR	---
Cyanide, Total (as CN)	lbs/day	0.046	0.092	E, CTR	a
4,4-DDT	µg/L	0.00059	0.0012	E, TMDL	f
4,4-DDT	lbs/day	5.4×10^{-5}	1.1×10^{-4}	E, TMDL	a
Bis (2-Ethylhexyl) Phthalate	µg/L	5.9	12	E, CTR	---
Bis (2-Ethylhexyl) Phthalate	lbs/day	0.54	1.1	E, CTR	a
Benzo(a)anthracene	µg/L	0.049	0.098	E, TMDL	f
Benzo(a)anthracene	lbs/day	0.0045	0.0090	E, TMDL	a
Benzo(a)pyrene	µg/L	0.049	0.098	E, TMDL	f
Benzo(a)pyrene	lbs/day	0.0045	0.0090	E, TMDL	a
Chlordane	µg/L	0.00059	0.0012	E, TMDL	f
Chlordane	lbs/day	5.4×10^{-5}	1.1×10^{-4}	E, TMDL	a
Chrysene	µg/L	0.049	0.098	E, TMDL	f
Chrysene	lbs/day	0.0045	0.0090	E, TMDL	a
Dieldrin	µg/L	0.00014	0.00028	E, TMDL	f
Dieldrin	lbs/day	1.3×10^{-5}	2.6×10^{-5}	E, TMDL	a
Hexachlorobenzene	µg/L	0.00077	0.0015	E, CTR	---
Hexachlorobenzene	lbs/day	7.0×10^{-5}	1.4×10^{-4}	E, CTR	a
Pyrene	µg/L	11,000	22,068	E, TMDL	f
Pyrene	lbs/day	1,009	2,025	E, TMDL	a
Total PCBs	µg/L	0.00017	0.00034	E, TMDL	f and g
Total PCBs	lbs/day	1.6×10^{-5}	3.1×10^{-5}	E, TMDL	a

Footnotes for Table F-5

BAC = Bacteria Provision; BP = Basin Plan; BPJ = Best Practical Judgment; CTR = California Toxic Rule; E = Existing Requirement; TMDL= Total Maximum Daily Load; TP = Thermal Plan

- The mass (lbs/day) limitations are based on a maximum flow of 11 MGD from Discharge Point 001 and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.
- The effluent limitations for pH are 6.5 as an Instantaneous Minimum and 8.5 as an Instantaneous Maximum.
- The effluent limitation for temperature is 86°F as an Instantaneous Maximum.
- The maximum daily effluent limitation (MDEL) for chronic toxicity shall be reported as “Pass” or “Fail” and “% Effect”. The average monthly is a Median Monthly Effluent Limitation (MMEL), and the MMEL shall be reported as “Pass” or “Fail.” The MMEL for chronic toxicity only applies when

there is a discharge on more than one day in a calendar month period. During such calendar months, if the chronic aquatic toxicity routine monitoring test results in a “Fail”, then the Discharger shall complete a maximum of two MMEL compliance tests. The MMEL compliance tests shall be initiated within the same calendar month that the first routine monitoring test was initiated that resulted in the “Fail” at the IWC. If the first chronic MMEL compliance test results in a “Fail” at the IWC, then the second MMEL compliance test is not necessary because the “Fail” results from the first two tests would constitute a violation of the chronic toxicity MMEL.

- e. The bacteria water quality objective for all waters where the salinity is greater than 1 part per thousand (ppt) 5 percent or more of the time during the calendar year is: a six-week rolling geometric mean of Enterococci not to exceed 30 colony forming units (CFU) per 100 milliliters (mL), calculated weekly, and a statistical threshold value (STV) of 110 CFU/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.
- f. Samples analyzed for chlordane, 4,4'-DDT, dieldrin, PCB total, benzo(a)anthracene, benzo(a)pyrene, chrysene, and pyrene must be unfiltered samples.
- g. Total PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resembles those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

End of Footnotes for Table F-5

Table F-6. Summary of Final Sediment Effluent Limitations for Discharge Point 001

Parameter	Units	Sediment, Final Concentration-Based Allocations	Basis for Limit
Cadmium, TR	mg/kg	1.2	TMDL
Chlordane	mg/kg	0.5	TMDL
Dieldrin	mg/kg	0.02	TMDL

Compliance with the final concentration-based sediment allocation for cadmium (by any of the first four means) and chlordane and dieldrin (by any of the five means) may be demonstrated by:

1. Final sediment allocation of cadmium, chlordane and dieldrin as shown in Table F-6 is met in the effluent. The Discharger may collect sufficient effluent sample volume to provide an adequate amount of effluent sediments (suspended solids) for sediment analyses. The analytical result of the effluent sediment can be used for the direct comparison with the sediment allocations for cadmium, chlordane, and dieldrin.
2. Where the analysis of suspended sediments in stormwater samples is required to determine compliance with the established sediment limitations and collection of suspended sediment from stormwater samples with sufficient yields to perform the analysis required is not feasible use the suspended sediment concentration (SSC) method described in footnote a of Table E-3 may be used.
3. 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 Provisions of the Water Quality Control Plan for Enclosed Bays and Estuaries of California (Sediment Quality Provisions) is met.

4. Sediment numeric targets for cadmium, chlordane, and dieldrin is met in bed sediments over a 3-year averaging period.
5. Fish tissue target of 5.6 and 0.46 µg/kg wet weight (µg/kg ww) fish tissue for chlordane and dieldrin, respectively, is met in species resident to the TMDL waterbodies. Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Sediment Quality Provisions, as amended to address contaminants in resident finfish and wildlife.

4.5. Interim Effluent Limitations – Not Applicable

4.6. Land Discharge Specifications – Not Applicable

4.7. Recycling Specifications – Not Applicable

5. 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 and applicable statewide water quality control plans. As such, they are a required part of the proposed Order.

5.1. Surface Water

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. These water quality objectives include the requirement to maintain existing or historically high-quality waters pursuant to federal regulations (40 CFR section 131.12) and State Water Board Resolution Number 68-16. Receiving water limitations in this Order are included to ensure protection of beneficial uses of the receiving water and are based on water quality objectives contained in the Basin Plan and applicable statewide water quality control plans. If there is reasonable potential or a U.S. EPA-approved TMDL, then WQBELs are included in this Order to ensure protection of water quality standards.

5.2. Groundwater – Not Applicable

6. RATIONALE FOR PROVISIONS

6.1. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 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 CFR 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 CFR allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR section 123.25, this Order omits federal conditions that

address enforcement authority specified in 40 CFR 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).

6.2. Special Provisions

6.2.1. Reopener Provisions

These provisions are based on 40 CFR part 123. The Los Angeles Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new federal regulations, modification in toxicity requirements, or adoption of new regulations by the State Water Board or Los Angeles Water Board, including revisions to the Basin Plan or revisions to a TMDL.

6.2.2. Special Studies and Additional Monitoring Requirements

- a. **Initial Investigation Toxicity Reduction Evaluation Workplan.** This provision is based on section 4 of the SIP, Toxicity Control Provisions, which establishes minimum toxicity control requirements for implementing the narrative toxicity objective for aquatic life protection established in the basin plans of the State of California.
- b. **Harbor Toxics TMDL Water Column, Sediment, and Fish Tissue Monitoring for Dominguez Channel, Torrance, and Dominguez Channel Estuary Compliance Monitoring Program.** 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 collaborating group or develop a site-specific plan to comply with this requirement. Details on these requirements are provided in Section 6.3.2.b. and Attachment E Section 8.5 of this Order.

6.2.3. Best Management Practices and Pollution Prevention

- a. **Stormwater Pollution Prevention Plan (SWPPP).** Order No. R4-2017-0120 required the Discharger to develop and implement a SWPPP. This Order requires the Discharger to update the SWPPP and continue to implement a SWPPP approved by the Executive Officer of the Los Angeles Water Board. The SWPPP shall outline site-specific management processes for minimizing stormwater runoff pollution and for preventing contaminated stormwater runoff from being discharged directly into the Dominguez Channel Estuary. At a minimum, the management practices shall ensure that raw materials and chemicals do not come into contact with stormwater. SWPPP requirements are included as Attachment G, based on 40 CFR section 122.44(k).
- b. **Best Management Practices Plan (BMPP).** Order No. R4-2017-0120 required the Discharger to develop and implement BMPs in order to reduce the number of pollutants entering the discharge. This Order requires the

Discharger to update and continue to 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 and to ensure that unauthorized non-stormwater 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 stormwater discharges.

- c. **Spill Contingency Plan (SCP).** This Order requires the Discharger to update and continue to implement a SCP to control the discharge of pollutants. The SCP shall include a technical report on the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events at the site. This provision is included in this Order to minimize and control the amount of pollutants discharged in case of a spill. The SCP shall be site specific and shall cover all areas of the Facility.

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

This provision included in Section 6.3.4 of the Waste Discharge Requirements of this Order is based on the requirements of 40 CFR section 122.41(e).

6.2.5. **Climate Change Effects Vulnerability Assessment and Mitigation Plan**

The Permittee is required to address potential climate change impacts through the development and implementation of a Climate Change Effects Vulnerability Assessment and Mitigation Plan (Climate Change Plan), which is due 12 months after the effective date of this Order. This requirement is based on the need to adapt to and mitigate the effects of climate change on permitted facilities as described in State Water Board's Resolution No. 2017-0012 and the Los Angeles Water Board's Resolution No. R18-004.

6.2.6. **Other Special Provisions – Not Applicable**

6.2.7. **Compliance Schedules – Not Applicable**

7. **RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

CWA section 308 and 40 CFR sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code section 13383 also authorizes the Los Angeles 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.

7.1. **Influent Monitoring – Not Applicable**

7.2. **Effluent Monitoring**

Monitoring for pollutants expected to be present in the discharge is required as established in the MRP (Attachment E) and as required in the SIP. To demonstrate

compliance with effluent limitations, the Order retains and updates the monitoring requirements from Order No. R4-2017-0120 to determine compliance with the effluent limitations in section 4.1.1 and 4.1.2 of the Order.

The SIP states that the Los Angeles 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. The Los Angeles Water Board will use the additional data to conduct an RPA and determine if additional WQBELs are required. The Los Angeles Water Board may reopen the permit to incorporate additional effluent limitations and requirements, if necessary.

7.3. Whole Effluent Toxicity Testing Requirements

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. A chemical at a low concentration can have chronic effects but no acute effects. For this permit, chronic toxicity monitoring in the discharge is required. The chronic toxicity testing requirements are based on U.S. EPA's 2010 TST statistical approach.

7.4. Receiving Water Monitoring

7.4.1. Surface Water

This Order includes receiving water limitations and therefore, monitoring requirements are included in the MRP to determine compliance with the receiving water limitations established in Limitations and Discharge Requirements. The Facility is also required to perform general observations of the receiving water when discharges occur and report the observations in the monitoring report. Attention shall be given to the presence or absence of floating or suspended matter, discoloration, aquatic life, visible film, sheen or coating, fungi, slime, or objectionable growths.

According to the SIP, the Los Angeles Water Board is requiring that the Discharger conduct the upstream and downstream receiving water monitoring for the CTR priority pollutants at Monitoring Location RSW-001 and RSW-002 at the same time the samples are collected for priority pollutant analysis.

7.4.2. Groundwater – Not Applicable

7.5. Other Monitoring Requirements

7.5.1. Stormwater Monitoring Requirements. Because the discharge is comprised, in part, of stormwater, the Discharger is required to measure and record the rainfall each day of the month. The Discharger is also required to conduct visual observations of all stormwater discharges in the vicinity of the discharge to

observe the presence of floating and suspended materials, oil and grease, discoloration, turbidity, and odor.

7.5.2. **Regional Monitoring.** Monitoring is required to determine compliance with the assigned wasteload and load allocations specified in the Harbor Toxics TMDL. The Discharger may join a group of stakeholders in the development of Regional Monitoring program(s) to address pollutants as specified in the Harbor Toxics TMDL.

8. PUBLIC PARTICIPATION

The Los Angeles Water Board is considering the issuance of WDRs that will serve as a NPDES permit for the Facility. As a step in the WDR adoption process, the Los Angeles Water Board staff has developed tentative WDRs. The Los Angeles Water Board encourages public participation in the WDR adoption process.

8.1. Notification of Interested Parties

The Los Angeles 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 was provided access to the agenda and any changes in dates and locations through the Los Angeles Water Board's website at:

<http://www.waterboards.ca.gov/losangeles>

8.2. 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 adriana.vallejo@waterboards.ca.gov.

To be fully responded to by staff and considered by the Los Angeles Water Board, the written comments were due at the Los Angeles Water Board office by **5:00 p.m. on March 14, 2024**. Written comments submitted after the deadline may not be accepted into the record or considered by the Los Angeles Water Board if doing so would prejudice any party or the Board.

8.3. Public Hearing

The Los Angeles 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: April 25, 2024
Time: 9:00 AM
Location: Junipero Serra Building (Carmel Room)
320 West 4th Street
Los Angeles, CA 90013

Interested people were invited to attend. At the public hearing, the Los Angeles Water Board heard testimony pertinent to the discharge, WDRs, and permit.

8.4. Reconsideration of Waste Discharge Requirements

Any person aggrieved by this action of the Los Angeles 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

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

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

8.5. 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 Los Angeles Water Board by calling 213-576-6600.

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

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

8.6. Register of Interested Persons

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

8.7. Additional Information

Requests for additional information or questions regarding this order should be directed to Adriana Vallejo at adriana.vallejo@waterboards.ca.gov.

ATTACHMENT G – STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS

1. IMPLEMENTATION SCHEDULE

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

2. OBJECTIVES

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

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

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

3. PLANNING AND ORGANIZATION

3.1. Pollution Prevention Team.

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

3.2 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 stormwater pollutant control measures or relate to the requirements of this Permit. As examples, facility operators whose facilities are subject to federal Spill Prevention Control and Countermeasures' requirements should already have instituted a plan to control spills of certain hazardous materials. Similarly, facility operators whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

**TABLE A
 FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL
 STORMWATER POLLUTION PREVENTION PLANS**

Phase	Tasks
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-stormwater 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

4. SITE MAP

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

The following information shall be included on the site map:

- 4.1. The facility boundaries; the outline of all stormwater 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 stormwater discharges and authorized non-stormwater discharges may be received.
- 4.2. The location of the stormwater collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect stormwater discharges, authorized non-stormwater discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, skim ponds, diversion barriers, etc.
- 4.3. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.
- 4.4. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in section 6.1.4. below have occurred.
- 4.5. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

5. LIST OF SIGNIFICANT MATERIALS

The SWPPP shall include a list of significant 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.

6. DESCRIPTION OF POTENTIAL POLLUTANT SOURCES

The SWPPP shall include a narrative description of the facility's industrial activities, as identified in section 4.5. above, associated potential pollutant sources and potential pollutants that could be discharged in stormwater discharges or authorized non-

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 stormwater discharges.

stormwater discharges. At a minimum, the following items related to the facility's industrial activities shall be considered:

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

The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to stormwater or non-stormwater discharges, and the preventative measures taken to ensure spills or leaks do not reoccur. The list shall be updated as appropriate during the term of this Order.
- 6.5. **Non-Stormwater Discharges.** Facility operators shall investigate the facility to identify all non-stormwater 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-stormwater discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the non-stormwater discharges and associated drainage area.

Non-stormwater 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-stormwater discharges with significant materials (as defined in Footnote 1 of section 5 above) or equipment,

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

6.7. **Trash.** Describe the facility locations where trash may be generated as a result of facility operations and on-site activities.

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

7. **ASSESSMENT OF POTENTIAL POLLUTANT SOURCES**

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

7.1 Which areas of the facility are likely sources of pollutants in stormwater discharges and authorized non-stormwater discharges, and

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

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 stormwater discharges and authorized non-stormwater 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.

8. **STORMWATER BEST MANAGEMENT PRACTICES**

8.1. The SWPPP shall include a narrative description of the stormwater BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections 5 and 6 above). The BMPs shall be developed and implemented to reduce or prevent pollutants in stormwater discharges and authorized non-stormwater discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

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

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Vehicle & Equipment Fueling	Fueling	Spill 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 stormwater 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 stormwater discharges and authorized non-stormwater discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source similar to Table B.

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

8.2.1. 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 stormwater discharges and authorized non-stormwater discharges. They are considered low technology, cost-effective measures. Facility operators should consider all possible non-structural BMPs before considering additional structural BMPs. Below is a list of non-structural BMPs that should be considered:

- **Good Housekeeping.** Consists of practical procedures to maintain a clean and orderly facility.

- **Preventive Maintenance.** Includes the regular inspection and maintenance of structural stormwater controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.
- **Spill Response.** Includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.
- **Material Handling and Storage.** Includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to stormwater and authorized non-stormwater discharges.
- **Employee Training.** 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 stormwater. 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.
- **Waste Handling/Recycling.** This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.
- **Recordkeeping and Internal Reporting.** 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.
- **Erosion Control and Site Stabilization.** 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.
- **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.
- **Quality Assurance.** Includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.

8.2.2. Structural BMPs

When non-structural BMPs as identified above are ineffective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in stormwater discharges and authorized non-stormwater discharges. Below is a list of potential structural BMPs:

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

9. ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION

The facility operator shall conduct one comprehensive site compliance evaluation each year. The SWPPP shall be revised, as appropriate, and submitted to the Los Angeles Water Board along with the annual monitoring report. The revisions shall be implemented no later than 90 days after submission. The evaluation is subject to review by the Los Angeles Water Board Executive Officer and modifications may be required. Evaluations shall include the following:

- 9.1. A review of all visual observation records, inspection records, and sampling and analysis results.
- 9.2. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
- 9.3. 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.
- 9.4. 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 10.3. below 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 5.4.5 of Attachment D.

10. SWPPP GENERAL REQUIREMENTS

- 10.1. The SWPPP shall be retained onsite and made available upon request of a representative of the Los Angeles Water Board and/or local stormwater management agency (local agency) which receives the stormwater discharges.
- 10.2. The Los Angeles Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this Section. As requested by the Los Angeles Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Los Angeles Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide written certification to the Los Angeles Water Board and/or local agency that the revisions have been implemented.
- 10.3. 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 stormwater discharge, (ii) cause a new area of industrial activity at the facility to be exposed to stormwater, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.
- 10.4. 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 Order.
- 10.5. When any part of the SWPPP is infeasible to implement by the deadlines specified in this Order due to proposed significant structural changes, the facility operator shall submit a report to the Los Angeles 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 stormwater discharges and authorized non-stormwater discharges. Such reports are subject to Los Angeles Water Board approval and/or modifications. Facility operators shall provide written notification to the Los Angeles Water Board within 14 days after the SWPPP revisions are implemented.
- 10.6. The SWPPP shall be provided, upon request, to the Los Angeles Water Board. The SWPPP is considered a report that shall be available to the public by the Los Angeles Water Board under Section 308(b) of the Clean Water Act.