

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

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ORDER NO. R4-2020-XXXX, NPDES NUMBER CA0060232

**WASTE DISCHARGE REQUIREMENTS
FOR THE TESORO LOGISTICS OPERATIONS, LLC
TESORO CARSON CRUDE TERMINAL**

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

Table 1. Discharger Information

Discharger:	Tesoro Logistics Operations, LLC (Discharger or Permittee)
Name of Facility:	Tesoro Carson Crude Terminal
Facility Address:	24696 South Wilmington Avenue Carson, CA 90745 Los Angeles County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Storm water runoff and/or hydrostatic test water commingled with stormwater	33.80308° N	-118.25492° W	Dominguez Channel Estuary

Table 3. Administrative Information

This Order was adopted on:	October 8, 2020
This Order shall become effective on:	December 01, 2020
This Order shall expire on:	November 30, 2025
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:	Minor discharge

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I, Renee Purdy, 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 October 8, 2020.

Renee Purdy, Executive Officer

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I. FACILITY INFORMATION

Information describing the Tesoro Carson Crude Terminal (Facility) is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

II. FINDINGS

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

- A. Legal Authorities.** This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (U.S. EPA) and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It serves as a NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.
- B. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes Findings for this Order. Attachments A through E and G through J are also incorporated into this Order.
- C. Notification of Interested Persons.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet.
- D. Consideration of Public Comment.** The Regional Water Board in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED, that this Order supersedes Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01, 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 is authorized to discharge from the identified facility and outfall into waters of the United States and shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for violations of the previous Order.

III. DISCHARGE PROHIBITIONS

- A.** Wastes discharged at Discharge Point 001 shall be limited to a maximum of 0.500 million gallons per day (MGD) of wastewater consisting of stormwater runoff and/or hydrostatic test water commingled with stormwater retained in either the inner or

outer pond for sedimentation. The hydrostatic test water shall consist only of wastewater generated by hydrotesting six newly constructed tanks at the Facility.

- B. The discharge of wastewater at a location other than specifically described in this Order is prohibited and constitutes a violation of the Order.
- C. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to the Dominguez Channel Estuary, or other waters of the United States, are prohibited.
- D. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or a nuisance as defined by section 13050 of the Water Code.
- E. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- F. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board (State Water Board) as required by the federal CWA and regulations adopted thereunder.
- G. Discharge of oil or any residuary product of petroleum to waters of the State, except in accordance with waste discharge requirements or other provisions of Division 7 of the Water Code, is prohibited.
- H. The discharge of any radiological, chemical, or biological warfare agent into the waters of the State is prohibited.
- I. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream that may ultimately be released to waters of the United States, is prohibited unless specifically authorized elsewhere in this permit or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.
- J. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.
- K. The discharge of trash to surface waters of the State or the deposition of trash where it may be discharged into surface waters of the State is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

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

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1. Discharge of Storm Water Comingled with Hydrostatic Test Water

When hydrostatic test water from the six new tanks is combined with storm water, the Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001.

Table 4. Final Effluent Limitations for Discharge of Storm Water Comingled with Hydrostatic Test Water at Discharge Point 001

Parameter	Units (Note a)	Average Monthly	Maximum Daily
pH	Standard units	---	Note b
BOD ₅ @ 20 °C	mg/L	20	30
BOD ₅ @ 20 °C	lbs/day	83	125
Oil and Grease	mg/L	10	15
Oil and Grease	lbs/day	42	63
Total Suspended Solids (TSS)	mg/L	50	75
TSS	lbs/day	209	313
Temperature (Note c)	°F	---	86
Turbidity	NTU	50	75
Phenolics, Total	mg/L	---	1.0
Phenolics, Total	lbs/day	---	4.2
Sulfides	mg/L	---	1.0
Sulfides	lbs/day	---	4.2
Total Residual Chlorine	µg/L	----	100
Total Residual Chlorine	lbs/day	----	0.42
Chronic Toxicity (Note d)	Pass or Fail, % Effect (TST)	Pass (Note e)	Pass or % Effect <50
<i>Enterococcus</i>	CFU or MPN/100 ml	(Note f)	(Note f)
Cadmium, Total Recoverable (TR)	µg/L	8	15
Cadmium, TR	lbs/day	0.033	0.063
Copper, TR	µg/L	3.1	6.14
Copper, TR	lbs/day	0.013	0.026
Lead, TR	µg/L	7	14
Lead, TR	lbs/day	0.03	0.06
Zinc, TR	µg/L	70	141
Zinc, TR	lbs/day	0.29	0.59
Chlordane	µg/L	0.00059	0.0012
Chlordane	lbs/day	2.5E-6	5.0E-6
4,4'-DDT	µg/L	0.00059	0.0012
4,4'-DDT	lbs/day	2.5E-6	5.0E-6

REVISITED TENTATIVE

(ppth) more than 5 percent of the time during the calendar year is: a six-week rolling geometric mean (GM) of enterococci not to exceed 30 colony forming units (cfu) or most probable number (MPN) per 100 milliliters (mL), calculated weekly, with 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. Only the geometric mean values shall be applied based on a statistically sufficient number of samples, which is generally not less than five samples distributed over a six-week period. However, if a statistically sufficient number of samples is not available to calculate the geometric mean, then attainment of the water quality standard shall be determined based only on the STV.

- 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.
- h. TCDD equivalents shall be calculated using the following formula, where the toxicity equivalency factors (TEFs) are as provided in the table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. 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	Toxicity Equivalence Factor (TEF)
2,3,7,8 - tetra CDD	1.0
1,2,3,7,8 - penta CDD	1.0
1,2,3,4,7,8 - hexa CDD	0.1
1,2,3,6,7,8 - hexa CDD	0.1
1,2,3,7,8,9 - hexa CDD	0.1
1,2,3,4,6,7,8 - hepta CDD	0.01
Octa CDD	0.0001
2,3,7,8 - tetra CDF	0.1
1,2,3,7,8 - penta CDF	0.05
2,3,4,7,8 - penta CDF	0.5
1,2,3,4,7,8 - hexa CDF	0.1
1,2,3,6,7,8 - hexa CDF	0.1
1,2,3,7,8,9 - hexa CDF	0.1
2,3,4,6,7,8 - hexa CDF	0.1
1,2,3,4,6,7,8 - hepta CDFs	0.01
1,2,3,4,7,8,9 - hepta CDFs	0.01
Octa CDF	0.0001

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End of Notes to Table 4

2. **Discharge of Storm Water Only** - Table 5 below summarizes the final effluent limitations for the storm water only discharge at Discharge Point 001. In addition, the Discharger shall indicate under penalty of perjury in the corresponding monitoring report that **storm water only** was discharged to surface water during the reporting period.

Table 5. Final Effluent Limitations for Discharge of Storm Water Only at Discharge Point 001

Parameter	Units (Note a)	Maximum Daily
pH	Standard units	Note b
Biochemical Oxygen Demand (5-day @ 20 degree Centigrade)	mg/L	30
Biochemical Oxygen Demand (5-day @ 20 degree Centigrade)	lbs/day	125
Oil and Grease	mg/L	15
Oil and Grease	lbs/day	63
Total Suspended Solids (TSS)	mg/L	75
TSS	lbs/day	313
Temperature (Note c)	°F	86
Turbidity	NTU	75
Phenolics, Total	mg/L	1.0
Phenolics, Total	lbs/day	4.2
Sulfides	mg/L	1.0
Sulfides	lbs/day	4.2
Chronic Toxicity (Note d)	Pass or Fail, % Effect (TST)	Pass or % Effect <50
<i>Enterococcus</i>	CFU or MPN/100 ml	(Note e)
Cadmium, Total Recoverable	µg/L	15
Cadmium, Total Recoverable	lbs/day	0.063
Copper, Total Recoverable	µg/L	6.14
Copper, Total Recoverable	lbs/day	0.026
Lead, Total Recoverable	µg/L	14
Lead, Total Recoverable	lbs/day	0.06
Zinc, Total Recoverable	µg/L	141
Zinc, Total Recoverable	lbs/day	0.59
Chlordane	µg/L	0.0012
Chlordane	lbs/day	5.0E-6
4,4'-DDT	µg/L	0.0012
4,4'-DDT	lbs/day	5.0E-6

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Parameter	Units (Note a)	Maximum Daily
Dieldrin	µg/L	0.00028
Dieldrin	lbs/day	1.2E-6
PCBs, Total (Note f)	µg/L	0.00034
PCBs, Total	lbs/day	1.4E-6
TCDD-Equivalents (Note g)	µg/L	2.8E-8
TCDD-Equivalents	lbs/day	1.2E-10
Benzo(a)anthracene	µg/L	0.098
Benzo(a)anthracene	lbs/day	0.00041
Benzo(a)pyrene	µg/L	0.098
Benzo(a)pyrene	lbs/day	0.00041
Chrysene	µg/L	0.098
Chrysene	lbs/day	0.00041
Pyrene	µg/L	22110
Pyrene	lbs/day	92.2

Notes to Table 5:

- a. The mass loading (lbs/day) limitations are based on the maximum flow at Discharge Point 001 (0.500 million gallons per day (MGD)) and are calculated as follows:

$$\text{mass} \left(\frac{\text{lbs}}{\text{day}} \right) = \text{Flow (MGD)} \times \text{Concentration} \left(\frac{\text{mg}}{\text{L}} \right) \times 8.34 \text{ (conversion factor)}$$

- b. The pH shall be within an instantaneous minimum of 6.5 standard unit and an instantaneous maximum of 8.5 standard unit at all times.
- 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 MDEL is exceeded when a toxicity test results in a “Fail,” and the percent effect is greater than or equal to 0.50.
- e. **Enterococcus:** 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 six-week rolling geometric mean of enterococci not to exceed 30 colony forming units (cfu) or most probable number (MPN) per 100 milliliters (mL), calculated weekly, with 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. Only the geometric mean values shall be applied based on a statistically sufficient number of samples, which is generally not less than five samples distributed over a six-week period. However, if a statistically sufficient number of samples is not available to calculate the geometric mean, then attainment of the water quality standard shall be determined based only on the STV.

- f. 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.
- g. TCDD equivalents shall be calculated using the following formula, where the toxicity equivalency factors (TEFs) are as provided in the table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. The TCDD equivalents are calculated as follows:

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

where: C_x = concentration of dioxin or furan congener x
 TEF_x = TEF for congener x

Toxicity Equivalency Factors

Congeners	Minimum 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 Notes to Table 5:

- B. Land Discharge Specifications – Not Applicable**
- C. Recycling Specifications – Not applicable**

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitation

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

1. The pH of bays or estuaries to 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. Natural conditions shall be determined on a case-by-case basis.

2. Elevated temperature waste discharges shall comply with limitations necessary to assure protection of beneficial uses. At no time shall the temperature be raised above 86 °F as a result of waste discharges.
3. The bacteria levels to exceed the following water quality objectives:
 - a. Geometric Mean Limits
Enterococcus density shall not exceed 30 colony-forming units (cfu) or most probable number (MPN)/100 mL.
 - b. Statistical Threshold Value (STV) Limit
Enterococcus density shall not exceed 110 cfu/100 mL.

The waterbody Geometric Mean shall not be greater than the applicable Geometric Mean Limit in any six-week interval, calculated weekly. The applicable STV shall not be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.
4. The mean annual dissolved oxygen concentration to fall below 7.0 mg/L. No single determination shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations.
5. Total ammonia (as N) concentrations to exceed the four-day average concentration of unionized ammonia of 0.035 mg/L and the one-hour average concentration of 0.233 mg/L
6. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
7. Where natural turbidity is between 0 to 50 NTU, increases in turbidity shall not exceed 20%. Where natural turbidity is greater than 50 NTU, increases in turbidity shall not exceed 10%.
8. Chlorine 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.
9. 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.
10. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
11. 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.
12. Accumulation of bottom deposits or aquatic growths.

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

B. Groundwater Limitations – Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D.
2. The Discharger shall comply with the following provisions. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:
 - a. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management programs developed to comply with NPDES permits issued by the Regional Water Board to local agencies.
 - b. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all

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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 waste materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- 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. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - i. Violation of any term or condition contained in this Order;
 - ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- g. The Facility shall be protected to reduce infrastructure vulnerability to extreme wet weather events, flooding, storm surges, and projected sea level rise resulting from current and future impacts associated with climate change.
- h. If there is any storage of hazardous or toxic materials or hydrocarbons at this Facility and if the Facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
- i. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Water Board as soon as they know or have reason to believe that they have begun or expect to begin to use or manufacture an intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.
- j. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify the Regional Water Board of such change 30 days prior to taking effect, 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 Regional Water Board.

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- k. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to the planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:
 - i. Name and general composition of the chemical,
 - ii. Frequency of use,
 - iii. Quantities to be used,
 - iv. Proposed discharge concentrations, and
 - v. U.S. EPA registration number, if applicable.
- l. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- m. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (213) 576-6600 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. The written notification shall also be submitted via email with reference to CI-6810 to losangeles@waterboards.ca.gov. Other noncompliance requires written notification as above at the time of the normal monitoring report.
- n. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Wat. Code § 1211.)
- o. The provisions of this order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.
- p. 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 to which the Discharger is or may be subject to under section 311 of the CWA.

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Special Provisions

1. Reopener Provisions

- a. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the federal CWA, and amendments thereto, the Regional Water Board may revise and modify this Order in accordance with such more stringent standards
- b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of any reasonable potential analysis (RPA).
- c. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new minimum levels (MLs).
- d. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update to a water quality objective or the adoption or revision of a Total Maximum Daily Load (TMDL) for Dominguez Channel Estuary.
- e. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.
- f. This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order and permit, and endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. **Updated Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan.** The Discharger shall submit to the Regional Water Board an

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updated Initial Investigation Toxicity Reduction Evaluation (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 V of the Monitoring and Reporting Program (Attachment E) for an overview of TRE requirements.

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

Consistent with the amendment to the Basin Plan, incorporating the *TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbors Waters* (Resolution No. R11-008 or 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. In the event that the discharge from the Facility exceeds the TSS and either the copper, lead or zinc effluent limitations, then the Discharger is also responsible for implementing the monitoring and reporting plan (Monitoring Plan) and quality assurance project plan (QAPP) for the water column, sediment, and fish tissue in the Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary. These plans shall follow the “TMDL Element - Monitoring Plan” provisions in the Water Quality Control Plan, Los Angeles Region (Basin Plan) Chapter 7, Section 7-40. The Harbor Toxics TMDL requires that the Monitoring Plan and Quality Assurance Project Plan (QAPP) shall be submitted 20 months after the effective date (March 23, 2012) of the TMDL for public review and subsequent Executive Officer approval. Since the effective date of this Order exceeds the deadline for the Monitoring Plan and QAPP, the Discharger shall join a group already formed, form its own collaborating group with other dischargers, or develop a site-specific monitoring plan.

If the Discharger decides to join a group already formed, the Discharger shall notify the Regional Water Board within 90 days of the effective date of the Order. Documentation of Discharger’s participation and responsibilities shall be provided with the notification. If the Discharger decides to develop a site specific Monitoring Plan with a QAPP, the Discharger shall notify the Regional Water Board within 90 days of the effective date of the Order and submit the plans to the Regional Water Board at that time for public comment, and subsequently, the Regional Water Board approval. The Discharger shall 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 shall include water column, sediment, and fish tissue monitoring. The Discharger shall submit the annual monitoring report to the Regional Water Board by the specified date in the proposed Monitoring Plan. The annual monitoring report shall indicate compliance and non-compliance with effluent limitations in Tables 4 and 5 that implement applicable waste load and/or load allocations.

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At a minimum, monitoring shall be conducted at the locations 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. The Compliance Monitoring Program shall include the following components:

- i. **Water Column Monitoring.** Water samples shall be collected at the outlet of the storm drains discharging to the estuary. Water samples shall be collected three times per year, during two wet weather events and one dry weather event. The first large storm event of the season shall be included as one of the wet weather monitoring events. Water samples shall be analyzed for a suite of compounds including, at a minimum, copper, lead, zinc, DDT, PCBs, benzo[a]anthracene, benzo[a]pyrene, chrysene, phenanthrene, and pyrene.

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

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

Sediment quality objective evaluation as detailed in the SQO Part 1 (sediment triad sampling) shall be performed every 5 years in coordination with the Biological Baseline and Bight regional monitoring programs, if possible. Sampling and analysis for the full chemical suite (as included in Attachment A and Table 6 of the SQO document), two toxicity tests, and four benthic indices as specified in the SQO Part 1 shall be conducted and evaluated. If moderate

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toxicity as defined in SQO Part 1 is observed, results shall be highlighted in annual reports and further analysis and evaluation to determine causes and remedies shall be required in accordance with the Executive Officer approved Monitoring Plan. Locations for sediment triad assessment and the methodology for combining results from sampling locations to determine sediment conditions shall be specified in the Monitoring Plan. The sampling design shall be in compliance with section VII.E of SQO Part 1.

- iii. **Fish Tissue Monitoring.** Fish tissue samples shall be collected every two years from the Dominguez Channel Estuary and analyzed for chlordane, dieldrin, toxaphene, DDT, and PCBs. The target species in the Dominguez Channel Estuary shall be selected based on residency, local abundance and fish size at the time of field collection. Tissues analyzed shall be based on the most common preparation for the selected fish species.
- iv. **Sampling and Analysis Plan.** The Sampling and Analysis Plan must be proposed based on methods or metrics described in the *State Water Board Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality* (Resolution 2008-0070 – SQO Part 1), and the *American Society for Testing and Materials* (ASTM) or by U.S. EPA. The plan shall include a list of chemical analytes for the water column and sediment.
- v. **Quality Assurance Project Plan.** The Quality Assurance Project Plan (QAPP) shall describe the project objectives and organization, functional activities, and quality assurance/quality control protocols for the water and sediment monitoring. The QAPP shall include protocols for sample collection, standard analytical procedures, and laboratory certification. All samples shall be collected in accordance with Surface Water Ambient Monitoring Program (SWAMP) protocols.

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

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

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

- a. An updated **Storm Water Pollution Prevention Plan (SWPPP)** that describes site-specific best management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff and trash from being discharged directly to waters of the State. 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

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the permitted discharge point; describe the activities in each area and the potential for contamination of storm water runoff and the discharge of trash or hazardous waste/material; and address the feasibility of containment and/or treatment of storm water. 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 through Discharge Point 001. The SWPPP shall be developed in accordance with the requirements in Attachment G.

- b. An updated **Best Management Practices Plan (BMPP)** that will be implemented to reduce the discharge of pollutants to the receiving water. The BMPP shall include site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material and trash from being discharged to waters of the State. Further, the Discharger shall ensure that the storm water discharges from the Facility would neither cause nor contribute to a nuisance in the receiving water, and that unauthorized discharges (i.e. spills) to the receiving water have been effectively prohibited. In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material and trash discharges to surface waters. The BMPP may be included and submitted as part of the SWPPP.
- c. An updated **Spill Control Plan (SCP)** that shall be site-specific and shall cover all areas of the Facility including material storage areas. The SCP shall describe the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effects of such events. The SCP may be substituted for the Discharger's Spill Prevention Control and Countermeasure (SPCC) Plan.

Each plan shall cover all areas of the Facility draining to the ponds (Refer to Attachment B-3) and shall include an updated drainage map for the Facility. The plans shall be reviewed annually and at the same time and updated as required. Updated information shall be submitted to the Regional Water Board within 30 days of revision.

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

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

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

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- a. **Certified Wastewater Treatment Plant Operator.** Wastewater treatment facilities subject to this Order shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to California Code of Regulations (CCR), title 23, division 3, chapter 26 (Water Code sections 13625 – 13633).
- b. **Climate Change Effects Vulnerability Assessment and Mitigation Plan:** The Permittee shall consider the impacts of climate change as it affects the operation of the tank farm facility due to flooding or wildfire, or other climate-related changes. The Permittee shall develop a Climate Change Effects Vulnerability Assessment and Mitigation Plan (Climate Change Plan) to assess and manage climate change related effects associated with the tank farm operations, retention ponds, water supplies, collection system, water quality and beneficial uses. In the case of a tank farm, the Climate Change Plan shall also include the impacts from spills and any projected changes to the storm water and hydrostatic test water temperature and concentrations. The Climate Change Plan is due 12 months after adoption of this Order.
- c. **Alternate Power Source:** The Permittee shall maintain in good working order an alternate power source for operating the pump and pipeline facilities. All equipment shall be located to minimize failure due to moisture, liquid spray, flooding, and other physical phenomena. The alternate power source shall be designed to permit inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, the discharger shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power. The Permittee shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of pump failure or outage due to power failure or other cause, discharge of raw petroleum products or wastewater does not occur.

5. Other Special Provisions – Not Applicable

6. Compliance Schedules – Not Applicable

VII. COMPLIANCE DETERMINATION

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

A. Single Constituent Effluent Limitation

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

B. Effluent Limitations Expressed as a Sum of Several Constituents

If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the

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concentrations of a group of pollutants, consider constituents reported as “Not Detected” (ND) or “Not Detected but Not Quantified” (DNQ) to have concentrations equal to zero, provided that the applicable ML is used.

C. Effluent Limitations Expressed as a Median

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

1. If the number of measurements (n) is odd, then the median will be calculated as:

$$\text{median} = \frac{X_{(n+1)}}{2}$$

2. If the number of measurements (n) is even, then the median will be calculated as:

$$\text{median} = \frac{X_{\frac{n}{2}} + X_{\frac{n}{2}+1}}{2}$$

(i.e. the midpoint between the (n/2 and n/2+1) data points)

D. Multiple Sample Data

When determining compliance with an AMEL or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the Discharger shall compute the median in place of the mean in accordance with the following procedure:

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

E. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by section D above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation for the purpose of calculating mandatory minimum penalties; though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month) for the purpose of calculating discretionary administrative civil liabilities. 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. The Discharger will only be considered out of compliance for days when the discharge

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occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

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

1. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for that constituent, the Discharger has demonstrated compliance with the AMEL for each day of the month for that parameter.
2. If the analytical result of a single sample monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any constituent, the Discharger shall collect four additional samples at approximately equal intervals during the month. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. The concentration of a 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.
3. In the event of noncompliance with an AMEL, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated

F. Maximum Daily Effluent Limitations (MDEL)

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

G. Instantaneous Minimum Effluent Limitation

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

H. Instantaneous Maximum Effluent Limitation

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

I. Median Monthly Effluent Limitation (MMEL)

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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 an effluent violation, but compliance determination can be made for that month with respect to reporting violations.

J. Mass and Concentration Limitations

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

K. Chronic Toxicity

The discharge is subject to determination of “Pass” or “Fail” and “Percent Effect” from a single-effluent concentration chronic toxicity test at the discharge In-stream Waste Concentration (IWC) using the Test of Significant Toxicity (TST) statistical approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document, Appendix A, Figure A-1, and Table A-1* (EPA 833-R-10-003, 2010),

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

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

A test result that rejects this null hypothesis is reported as “Pass”. A test result that does not reject this null hypothesis is reported as “Fail”. The relative “Percent Effect” at the discharge IWC is defined and reported as:

$$\frac{((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100\%.$$

The Maximum Daily Effluent Limitation (MDEL) for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed using the TST statistical approach, results in “Fail” and the “Percent Effect” is $\geq 50\%$.

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

L. Bacterial Standards and Analyses

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

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

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. Only the geometric mean values shall be applied based on a statistically sufficient number of samples, which is generally not less than five samples distributed over a six-week period. However, if a statistically sufficient number of samples is not available to calculate the geometric mean, then attainment of the water quality standard shall be determined based only on the STV.

For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for *Enterococcus*). The detection method used for each analysis shall be reported with the results of the analysis.

Detection methods used for *Enterococcus* shall be those presented in Table 1A of 40 CFR § 136 or in the USEPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure* or any improved method determined by the Executive Officer and/or USEPA to be appropriate.

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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:

$$\text{Arithmetic mean } (\mu) = \frac{\sum x}{n}$$

where: $\sum x$ is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)

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

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.

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.

Chlordane

Shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

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.

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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.

DDT

Shall mean the sum of 4,4’DDT, 2,4’DDT, 4,4’DDE, 2,4’DDE, 4,4’DDD, and 2,4’DDD.

Degrade

Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

Detected, but Not Quantified (DNQ)

Sample results that are less than the reported Minimum Level, 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 waste load 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 headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Endosulfan

The sum of endosulfan-alpha and -beta and endosulfan sulfate.

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.

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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 part 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.

Halomethanes

Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

HCH

HCH shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

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:

$$\text{median} = \frac{X_{(n+1)}}{2}$$

If *n* is even, then:

$$\text{median} = \frac{X_{\frac{n}{2}} + X_{\frac{n}{2}+1}}{2}$$

(i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL)

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.

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Minimum Level (ML)

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

Mixing Zone

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

Not Detected (ND)

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

Ocean Waters

The territorial marine waters of the state as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

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)

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. PCBs as congeners shall be individually quantified (or quantified as mixtures of isomers of a single congener in co-elutions as appropriate) using EPA Method 1668c. PCBs as congeners shall be analyzed using EPA Method 1668c for three years and an alternate method may be used if none of the PCB congeners are detected for three years using EPA Method 1668c. To facilitate interpretation of sediment/fish tissue data collected pursuant to the Harbors Toxics TMDL, PCB congeners whose analytical characteristics resemble those of PCB-8, 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, 195, 201, 206 and 209 shall be reported as a sum and individually quantified (or quantified as mixtures of isomers of a single congener in co-elutions as appropriate).

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 Ocean Plan Table 1 pollutants through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent

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concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention

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

Reporting Level (RL)

The RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Source of Drinking Water

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

Standard Deviation (σ)

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

$$\text{Standard Deviation } (\sigma) = \frac{\sum(X-\mu)^2}{(n-1)^{0.5}}$$

where: x is the observed value; μ is the arithmetic mean of the observed values; and n is the number of samples.

Toxicity Reduction Evaluation (TRE)

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

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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.

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ACRONYMS AND ABBREVIATIONS

AMEL	Average Monthly Effluent Limitation
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	<i>Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i>
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20 °C
BPT	Best Practicable Treatment Control Technology
C	Water Quality Objective
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	Water Code
Discharger	Tesoro Logistics Operations, LLC r
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	State Water Resources Control Board, Drinking Water Division, Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Facility	Tesoro Carson Crude Terminal
GPD	gallons per day
IC	Inhibition Coefficient
IC ₁₅	Concentration at which the organism is 15% inhibited
IC ₂₅	Concentration at which the organism is 25% inhibited
IC ₄₀	Concentration at which the organism is 40% inhibited
IC ₅₀	Concentration at which the organism is 50% inhibited
IWC	In-stream Waste Concentration
LA	Load Allocations
LOEC	Lowest Observed Effect Concentration
µg/L	micrograms per Liter
mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
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

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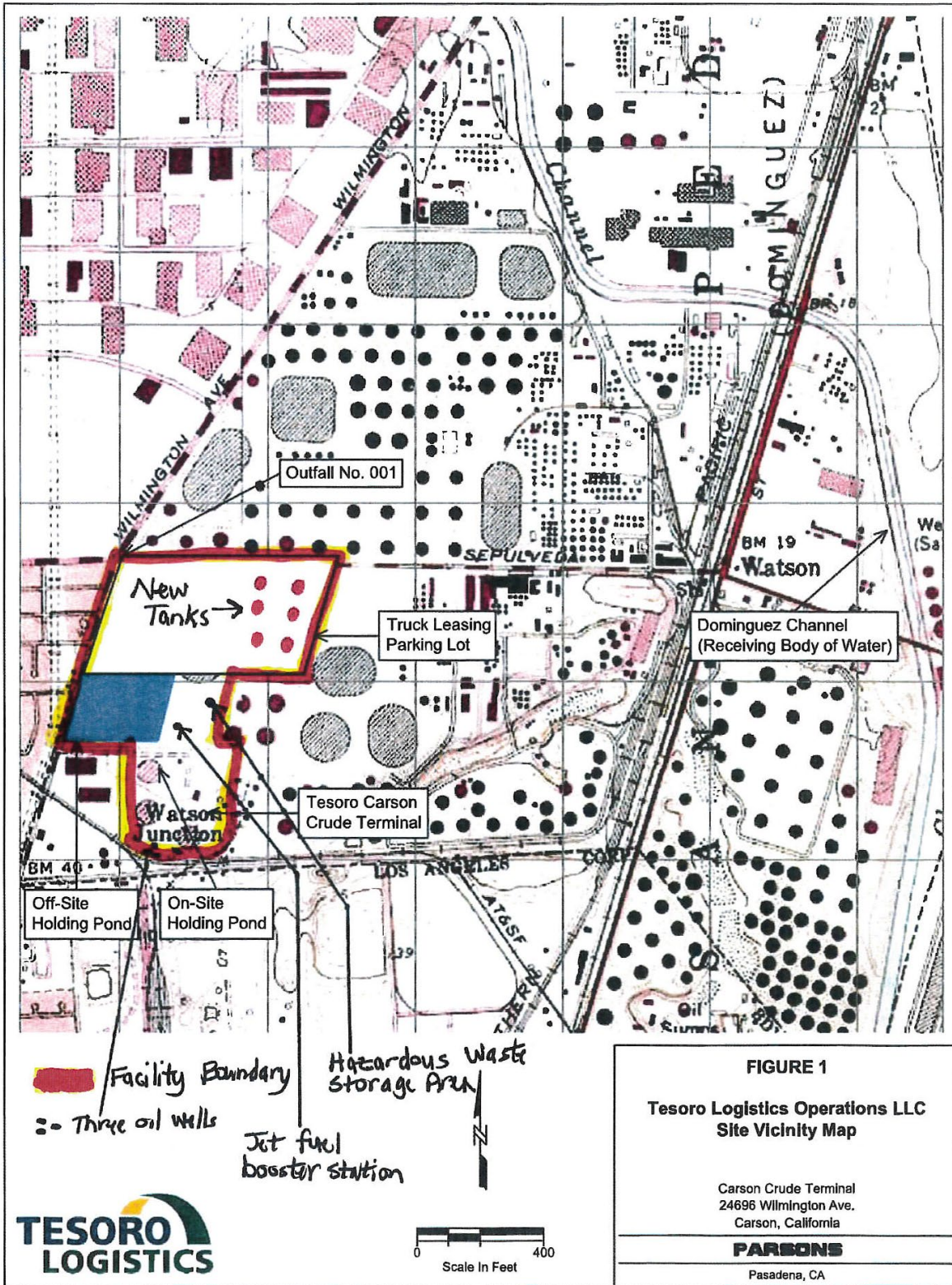
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NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NTR	National Toxics Rule
NTU	Nephelometric Turbidity Unit
OAL	Office of Administrative Law
PMEL	Proposed Maximum Daily Effluent Limitation
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
Ocean Plan	<i>Water Quality Control Plan for Ocean Waters of California</i>
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RPA	Reasonable Potential Analysis
SCP	Spill Contingency Plan
Sediment Quality Plan	<i>Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality</i>
SIP	State Implementation Policy (<i>Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California</i>)
SMR	Self-Monitoring Reports
SPCC	Spill Prevention Control and Countermeasures Plan
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	Test Acceptability Criteria
Thermal Plan	<i>Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California</i>
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document (<i>Technical Support Document for Water) Quality-based Toxics Control (EPA/505/2-90-001,1991)</i>
TSS	Total Suspended Solid
TST	Test of Significant Toxicity
TU _c	Chronic Toxicity Unit
U.S. EPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WET	Whole Effluent Toxicity
WLA	Waste Load Allocations
WQBELs	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
%	Percent

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ATTACHMENT B-1 – LOCATION MAP



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REVISED TENTATIVE

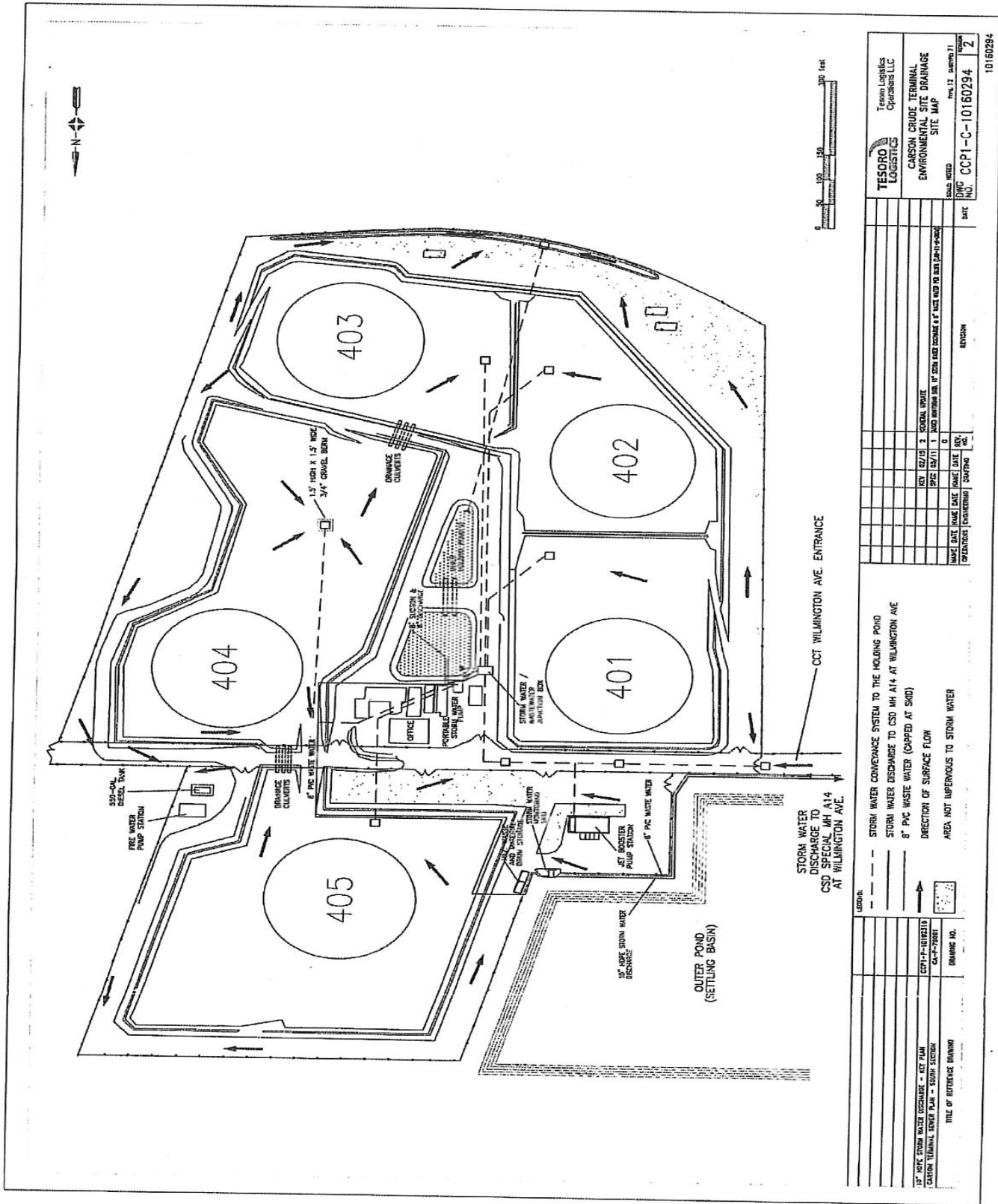
ATTACHMENT B-2 – AREA MAP SHOWING PROPOSED SIX NEW TANKS



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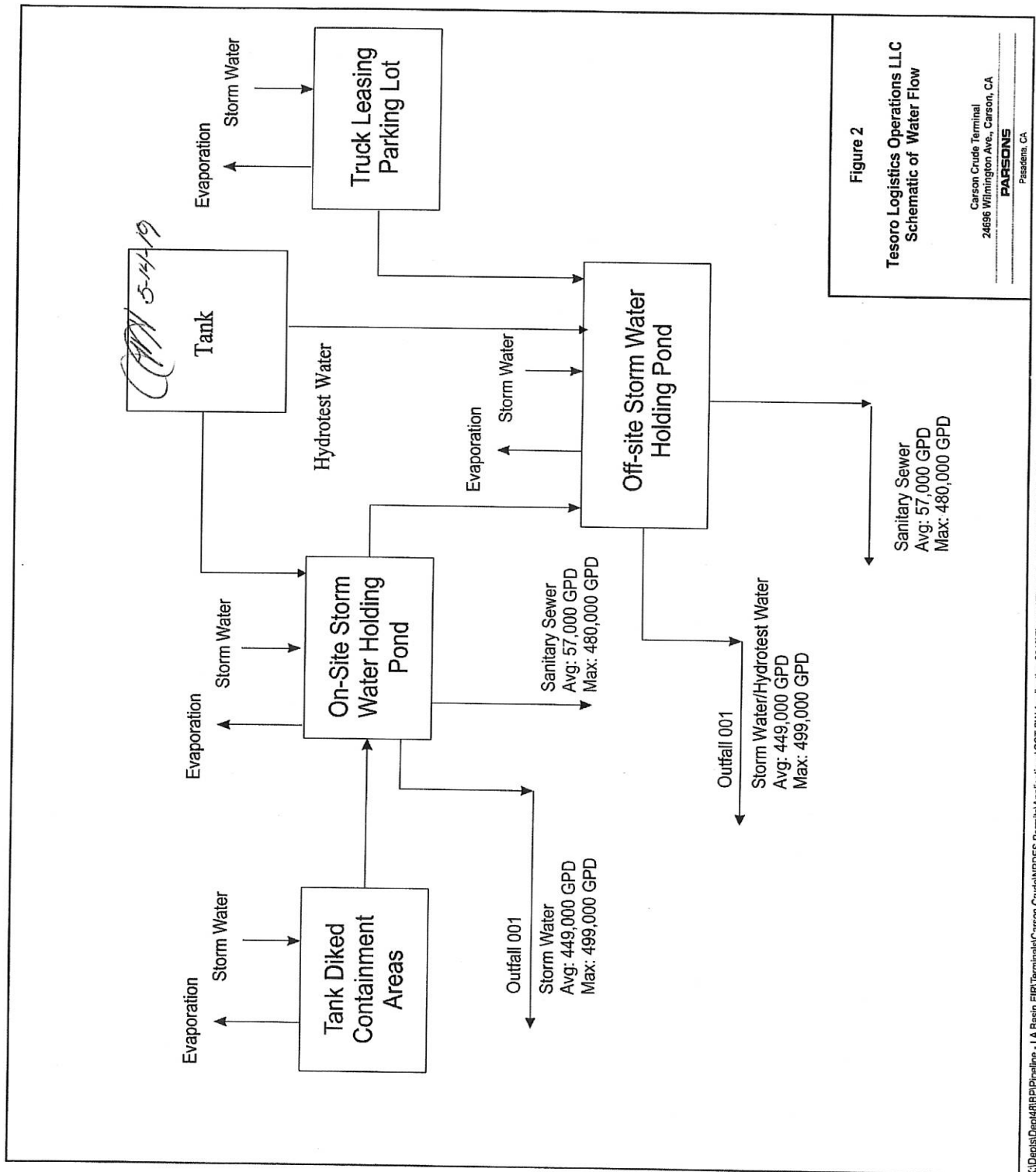
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ATTACHMENT B-3 – SITE DRAINAGE MAP



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ATTACHMENT C – FLOW SCHEMATIC



K:\Depist\Dept\6818\PIPipeline - LA Basin FR\Terminals\Carson Crude\NPDES Permits\Applications\CT SW Application 2013\Figures\Figure 2 - Tesoro Schematic of Stormwater Flow.cdr

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ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the 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. (40 CFR § 122.41(a); Wat. Code, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

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

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F. Inspection and Entry

The Discharger shall allow the Regional 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)(4)(b); 40 CFR § 122.41(i); Wat. Code, §§ 13267, 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(b)(i); 40 CFR § 122.41(i)(1); Wat. Code, §§ 13267, 13383);
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(b)(ii); 40 CFR § 122.41(i)(2); Wat. Code, §§ 13267, 13383);
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(4)(b)(ii); 40 CFR § 122.41(i)(3); Wat. Code, §§ 13267, 13383); and;
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (33 U.S.C. § 1318(a)(4)(b); 40 CFR § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR § 122.41(m)(1)(i).)
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 122.41(m)(4)(i)(A));

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- 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 Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 122.41(m)(4)(ii).)
5. Notice
- a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the date of the bypass. The notice shall be sent to the Regional Water Board. As of December 21, 2020, shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J 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 V.E below (24-hour notice). The notice shall be sent to the Regional Water Board. As of December 21, 2020, notices shall be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J 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).)

H. Upset

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

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR § 122.41(n)(2).)

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2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b 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 I.C above. (40 CFR § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

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

III. STANDARD PROVISIONS – MONITORING

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

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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:

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

IV. STANDARD PROVISIONS – RECORDS

- A. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 CFR § 122.41(j)(2).)
- B. Records of monitoring information shall include:
 1. The date, exact place, and time of sampling or measurements (40 CFR § 122.41(j)(3)(i));
 2. The individual(s) who performed the sampling or measurements (40 CFR § 122.41(j)(3)(ii));
 3. The date(s) analyses were performed (40 CFR § 122.41(j)(3)(iii));
 4. The individual(s) who performed the analyses (40 CFR § 122.41(j)(3)(iv));
 5. The analytical techniques or methods used (40 CFR § 122.41(j)(3)(v)); and
 6. The results of such analyses. (40 CFR § 122.41(j)(3)(vi).)
- C. Claims of confidentiality for the following information will be denied (40 CFR § 122.7(b)):
 1. The name and address of any permit applicant or Discharger (40 CFR § 122.7(b)(1)); and
 2. Permit applications and attachments, permits and effluent data. (40 CFR § 122.7(b)(2).)

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V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or U.S. EPA within a reasonable time, any information which the Regional 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 Regional Water Board, State Water Board, or U.S. EPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); Wat. Code, §§ 13267, 13383.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, V.B.5, and V.B.6 below. (40 CFR § 122.41(k).)
2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 CFR § 122.22(a)(1).)
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 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

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- c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 CFR § 122.22(b)(3).)
4. All permit applications shall be signed by a general partner or the proprietor, respectively. (40 CFR § 122.22(a)(2).)
5. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR § 122.22(c).)
6. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 CFR § 122.22(d).)
7. Any person providing the electronic signature for documents described in Standard Provisions – V.B.1, V.B.2, or V.B.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting V.B, and shall ensure that all relevant requirements of 40 CFR part 3 (Cross-Media Electronic Reporting) and 40 CFR part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R § 122.22(e).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.41(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J and comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR part 136, or 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 Regional Water Board or State Water Board. (40 CFR § 122.41(l)(4)(ii).)

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4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR § 122.41(l)(4)(iii).)

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance 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.

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

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F. Planned Changes

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR § 122.41(l)(1)(ii).)

The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions— Notification Levels VII.A.1). (40 CFR § 122.41(l)(1)(ii).)

G. Anticipated Noncompliance

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

H. Other Noncompliance

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

I. Other Information

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

J. Initial Recipient for Electronic Reporting Data

The owner, operator, or the duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 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).)

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VI. STANDARD PROVISIONS – ENFORCEMENT

- A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13268, 13385, 13386, and 13387.
- B.** The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [section 122.41(a)(2)] [Water Code sections 13385 and 13387].
- C.** Any person may be assessed an administrative penalty by the Regional Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [40 CFR section 122.41(a)(3)].
- D.** The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this

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Order shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 CFR section 122.41(j)(5)].

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

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

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

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

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

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) (CI-6810)

The Code of Federal Regulations (40 CFR § 122.48) require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

- A. An effluent sampling station shall be established for Discharge Point 001 and shall be located where representative samples of effluent can be obtained.
- B. Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.
- C. The Regional Water Board shall be notified in writing of any changes in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
- D. Pollutants shall be analyzed using the analytical methods described in 40 CFR sections 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 Regional Water Board or the State Water Resources Control Board (State Water Board).
- E. Laboratory Certification. Laboratories analyzing monitoring samples shall be certified by the State Water Board, Drinking Water Division, Environmental Laboratory Accreditation Program (ELAP), 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 from ELAP.
- F. 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.
- G. Each monitoring report must affirm in writing that *“all analyses were conducted at a laboratory certified for such analyses by the State Water Board, 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”*.
- H. The monitoring reports shall specify the analytical method used, the Method Detection Limit (MDL), and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:
 - 1. An actual numerical value for sample results greater than or equal to the ML; or
 - 2. “Detected, but Not Quantified (DNQ)” if results are greater than or equal to the laboratory’s MDL but less than the ML; or,

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3. “Not-Detected (ND)” for sample results less than the laboratory’s MDL with the MDL indicated for the analytical method used.

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

Current MLs 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 of SIP), February 24, 2005, Appendix 4.

- I. The MLs employed for effluent analyses to determine compliance with effluent limitations shall be lower than the effluent limitations established in this Order for a given parameter as per the 40 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 limitations, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test and associated laboratory QA/QC procedures.
- J. The MLs employed for effluent analyses not associated with determining compliance with effluent limitations in this Order shall be lower than the lowest applicable water quality objective, for a given parameter as per the 40 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, reporting levels (RLs), and method detection limits (MDLs).

The Regional 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.

1. When the pollutant under consideration is not included in Appendix 4 of the SIP;
2. When the Discharger and Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in 40 CFR part 136 (revised August 28, 2017);
3. When the Discharger agrees to use an ML that is lower than that listed in Appendix 4 of the SIP;
4. 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,
5. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the 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

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such cases, the Discharger, the Regional Water Board, and the State Water Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

- K.** Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR section 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.
- L.** Field analyses with short sample holding times such as pH, total residual chlorine, dissolved oxygen 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 per manufacturer's instructions. A manual containing the standard operating procedures for all field analyses, including records of personnel proficiency training, instruments calibration and maintenance, and quality control procedures shall be maintained onsite, and shall be available for inspection by Regional Water Board staff. Information including instrument calibration, time of sample collection, time of analysis, name of analyst, quality assurance/quality control data, and measurement values shall be clearly documented during each field analysis and submitted to the Regional Water Board as part of the corresponding regular monitoring report.
- M.** All analyses shall be accompanied by the chain of custody, including but not limited to data and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.
- N.** The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments to ensure accuracy of measurements or shall insure that both equipment activities will be conducted.
- O.** The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study 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
- P.** For parameters that both average monthly and maximum daily 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 may 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

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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 may be increased to weekly and may 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.

- Q.** In the event wastes are transported to a different disposal site during the reporting period, the following shall be reported in the monitoring report:
1. Types of wastes and quantity of each type;
 2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and
 3. Location of the final point(s) of disposal for each type of waste.

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

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

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	A sampling station shall be established where a representative sample effluent can be obtained immediately prior to discharging to Discharge Point 001 (Latitude: 33.80308° N; Longitude: -118.25492° W)
-	LDM-001	A Land Discharge Monitoring (LDM) sampling station shall be established where a representative sample of hydrostatic testing water can be obtained immediately prior to discharging to the outer pond or from the inner pond to the outer pond.
---	RSW-001	A sampling station shall be established at a location in the receiving water (Dominguez Channel Estuary) at least 50 feet upstream of the discharge point into the receiving water.

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III. INFLUENT MONITORING REQUIREMENTS – NOT APPLICABLE

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location – EFF-001

1. The Discharger shall monitor storm water and/or storm water commingled with hydrostatic test water from the construction and testing of the six new tanks at Monitoring Location EFF-001 as follows. The Discharger will indicate in the corresponding monitoring report that storm water only and/or storm water commingled with hydrostatic test water was discharged to surface water during the reporting period. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding minimum level:

Table E-2. Effluent Monitoring Requirements at Monitoring Location EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency (Note a)	Required Analytical Test Method
Total Flow	MGD	Meter	Once per Day (Note b)	---
pH	std. units	Grab (Note c)	Once per Discharge Event	(Note d)
Temperature	°F	Grab	Once per Discharge Event	(Note d)
Biochemical Oxygen Demand (5-day @ 20 degree Centigrade)	mg/L and lbs/day (Note e)	Grab or Composite (Note f)	Once per Discharge Event	EPA Method 405.1
Oil and Grease	mg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
Total Suspended Solids (TSS)	mg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
<i>Enterococcus</i> (Note h)	CFU or MPN/100 mL	Grab	Once per Discharge Event (Note g)	EPA Method 1600, 40 CFR Part 136
<i>Enterococcus</i> , Rolling 6-Week Geometric Mean (Note h)	CFU or MPN/100 mL	Calculate	Once per Week (Note i)	EPA Method 1600, 40 CFR Part 136
Chronic Toxicity (Note j)	Pass or Fail and Percent Effect (TST)	Grab or Composite	Once per Year (Note k)	(Note d)
Ammonia, Total (as N)	mg/L and lbs/day	Grab or Composite	Once per Year (Note k)	(Note d)
Chlorine, Total Residual	mg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
Dissolved Oxygen	mg/L	Grab	Once per Discharge Event	(Note d)

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Parameter	Units	Sample Type	Minimum Sampling Frequency (Note a)	Required Analytical Test Method
Electrical Conductivity @ 25°C	µmhos/cm	Grab	Once per Discharge Event	(Note d)
Methyl Tert-butyl Ether (MTBE)	µg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
Methylene Blue Active Substances (MBAS)	mg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Phenolics, Total	mg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
Settleable Solids	ml/L	Grab or Composite	Once per Discharge Event	(Note d)
Sulfides, Total	mg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Tertiary butyl alcohol (TBA)	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Total Dissolved Solids, (TDS)	mg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Turbidity	NTU	Grab or Composite	Once per Discharge Event	(Note d)
Total Organic Carbon	mg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
Total Petroleum Hydrocarbons (TPH)- as Gasoline (C4-C12)	µg/L and lbs/day	Grab	Once per Discharge Event	EPA Method 503.1 or 8015B
TPH as Diesel (C13-C22)	µg/L and lbs/day	Grab	Once per Discharge Event	EPA Method 503.1, 8015B, or 8270
TPH as Waste Oil (C23+)	µg/L and lbs/day	Grab	Once per Discharge Event	EPA Method 503.1, 8015B, or 8270
Xylenes, Total	µg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
Antimony, TR	µg/L and lbs/day	Grab or Composite	Once per Year (Note k)	(Note d)
Arsenic, TR	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Beryllium, TR	µg/L and lbs/day	Grab or Composite	Once per Year (Note k)	(Note d)
Cadmium, TR	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)

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Parameter	Units	Sample Type	Minimum Sampling Frequency (Note a)	Required Analytical Test Method
Chromium (III)	µg/L and lbs/day	Grab or Composite	Once per Year (Note k)	(Note d)
Chromium (VI)	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Copper, TR	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Lead, TR	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Mercury, TR (Note l)	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Nickel, TR	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Selenium, TR	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Silver, TR	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Thallium, TR	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Zinc, TR	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
1,1-Dichloroethylene	µg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
1,2-Dichloroethane	µg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
1,4-Dichlorobenzene	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
1,1-Dichloroethane	µg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
4,4'-DDT (Note m)	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Benzene	µg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
Carbon Tetrachloride	µg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
Chlordane (Note m)	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Dieldrin (Note m)	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Ethylbenzene	µg/L and lbs/day	Grab	Once per Discharge Event	(Note d)

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Parameter	Units	Sample Type	Minimum Sampling Frequency (Note a)	Required Analytical Test Method
Polychlorinated Biphenyls (PCBs) (Note m)	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Tetrachloroethylene	µg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
Toluene	µg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
Vinyl Chloride	µg/L and lbs/day	Grab	Once per Discharge Event	(Note d)
Remaining Priority Pollutants (excluding asbestos) (Note n)	µg/L and lbs/day	Grab or Composite	Once per Year (Note k)	(Note d)
TCDD Equivalents (Note o)	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Benzo(a)anthracene (Note m)	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Benzo(a)pyrene (Note m)	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Chrysene (Note m)	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)
Pyrene (Note m)	µg/L and lbs/day	Grab or Composite	Once per Discharge Event	(Note d)

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Notes to Table E-2

- a. During periods of extended discharge, no more than one sample per week (or a 7-day period) is required.
- b. The meter or calculated flow shall be recorded daily during each period of discharge. Periods of no flow shall also be reported.
- c. Grab samples must be collected during the first hour of discharge. If, for safety reasons, a sample cannot be obtained during the first hour of discharge, a sample shall be obtained at the first safe opportunity, and the reason for the delay shall be included in the report. If there is no discharge to surface waters, then no monitoring is required. In the corresponding monitoring report, the Discharger will indicate, under statement of perjury, that no effluent was discharged to surface water during the reporting period.
- d. 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 Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select a sufficiently sensitive method from the listed methods and corresponding ML necessary to demonstrate compliance with applicable effluent limitations.

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

$$M = 8.34 \times C_e \times Q$$

where: M = mass discharge for a pollutant, pounds/day
Ce = measured concentration for a pollutant, mg/L
Q = actual discharge flow rate, MGD

- f. As per 40 CFR section 122.21(g)(7)(ii), the Discharger has the option to either:
 - i. Collect a grab sample within 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 corresponding quarterly report; or
 - ii. Collect a flow-weighted composite sample for the entire duration of the discharge or for the first three hours of the discharge. The flow-weight composite sample may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of the discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes.

However, grab samples **must** be collected for the analyses of the following parameters: pH, temperature, oil and grease, bacteria (enterococcus), bis(2ethylhexyl)phthalate and volatile and semi-volatile organics.

- g. The Discharger shall collect five samples equally spaced over a 30-day period, if possible.
- h. The U.S. EPA recommends using U.S. EPA Method 1600 or other equivalent method to measure culturable enterococci determined by the Regional Water Board to be appropriate
- i. The 6-week rolling geometric mean shall be calculated each week for enterococci using the results from samples collected during the 6-week period ending on that week. Only the geometric mean values shall be applied based on a statistically sufficient number of samples, which is generally not less than five samples distributed over a six-week period. However, if a statistically sufficient number of samples is not available to calculate the geometric mean, then attainment of the water quality standard shall be determined based only on the STV. The results shall be reported in the corresponding quarterly monitoring report.
- j. Refer to section V, Whole Effluent Toxicity Testing Requirements.
- k. 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.
- l. The Discharger shall use ultra-clean sampling (U.S. EPA Method 1669) and ultra-clean analytical methods (U.S. EPA Method 1631) for mercury monitoring. The minimum level for mercury is 2 ng/l (or 0.002 µg/l).
- m. Water samples analyzed for these pollutants shall not be filtered.
- n. Priority Pollutants as defined by the California Toxics Rule (CTR) 40 CFR Part 131.
- o. TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the

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minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners. The TCDD Equivalents are calculated as follows:

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

where: C_x = concentration of dioxin or furan congener x
 TEF_x = TEF for congener x

Toxicity Equivalency Factors

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

End of Notes to Table E-2.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity Testing

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

The chronic toxicity IWC for the discharges at Discharge Point 001 is 100 percent effluent.

2. Sample Volume and Holding Time

The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. 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.

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

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

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

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

Species sensitivity rescreening is required every 24 months if there has been discharge during dry weather conditions. If the discharge is intermittent and occurs only during wet weather, rescreening is required every five years. If rescreening is necessary, the Discharger shall rescreen with the marine vertebrate species, a marine invertebrate species, and the alga species previously referenced, and continue to monitor with the most sensitive species. If the first suite of rescreening tests demonstrates that the same species is the most sensitive then the rescreening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the Discharger may proceed with suites of screening tests for a minimum of three, but not to exceed five suites.

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

5. Quality Assurance and Additional Requirements

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

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

6. Accelerated Monitoring Schedule for Maximum Daily Single Result: “Fail” and “% Effect ≥ 50 ”

The Maximum Daily single result of “Fail” and % Effect ≥ 50 shall be used to determine that accelerated testing needs to be conducted.

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

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

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

1. A description of the investigation and evaluation techniques that would be used to identify potential causes and source of toxicity, effluent variability, and treatment system efficiency.
2. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the Facility, and
3. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of who would conduct the TIEs (i.e., an in-house expert or outside contractor).

C. Toxicity Identification Evaluation and Toxicity Reduction Evaluation Process

1. **Toxicity Identification Evaluation (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 shall initiate a TIE using, as guidance, EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity*

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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.

2. **Toxicity Reduction Evaluation (TRE).** The Discharger shall immediately initiate a TRE and, within 15 days, submit to the Executive Officer a Detailed TRE Work Plan, which shall follow the generic Initial Investigation TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the Executive Officer:
 - a. Further actions by the Discharger to investigate, identify, and correct the causes of toxicity.
 - b. Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.
 - c. A schedule for these actions, progress reports, and the final report.
3. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.
4. The Discharger shall continue to conduct routine effluent monitoring for compliance determination purposes while the TIE and/or TRE is taking place. Additional accelerated monitoring and TRE work plans are not required once a TRE has begun.
5. The Regional Water Board 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.

D. Reporting

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

1. The toxicity test results for the TST approach, reported as “Pass” or “Fail” and “Percent Effect” at the chronic toxicity IWC for the discharge.
2. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).
3. TRE/TIE results. The Regional Water Board Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses.

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4. Statistical program (e.g., TST calculator, CETIS, etc.) output results for each toxicity test.
5. Any additional QA/QC documentation or any additional chronic toxicity-related information, upon request by Regional Water Board staff.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

Land Discharge Monitoring Location LDM-001

Although minimal infiltration is expected from the outer pond to the groundwater, Land Discharge Monitoring shall be conducted when hydrostatic test water is discharged to the outer pond or from the inner pond to the outer pond. The Discharger shall monitor the hydrostatic test water discharge to the outer pond as follows:

Table E-3. Land Discharge Monitoring Requirements at Monitoring Location LDM-001

Parameter	Units	Sample Type	Minimum Sampling Frequency (Note a)	Required Analytical Test Method
Nitrate + Nitrite (sum as nitrogen)	mg/L	Grab	Once per Year	(Note b)
TDS	mg/L	Grab	Once per Year	(Note b)
Sulfate	mg/L	Grab	Once per Year	(Note b)
Chloride	mg/L	Grab	Once per Year	(Note b)
Boron	mg/L	Grab	Once per Year	(Note b)
Copper, Total Recoverable	µg/L	Grab	Once per Year	(Note b)
Lead, Total Recoverable	µg/L	Grab	Once per Year	(Note b)

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Notes to Table E-3

- a. Sampling shall be during the first hour of the hydrostatic test water discharge to the outer pond. If there is no discharge to the outer pond from the tanks, no sampling is required. In that event, the Discharger shall indicate, under penalty of perjury, that no hydrostatic test water was discharged to the outer pond during the reporting period.
- b. 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.

End of Notes to Table E-3

VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Surface Water Monitoring Location RSW-001:

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 Location RSW-001, as follows:

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

Parameter	Units	Sample Type	Minimum Sampling Frequency (Note a)	Required Analytical Test Method
pH (Note b)	Standard unit	Grab	Once per Year	(Note c)
Dissolved Oxygen	mg/L	Grab	Once per Year	(Note c)
Salinity (Note b)	Parts per thousand (ppt)	Grab	Once per Year	(Note c)
Temperature (Note b)	°F	Grab	Once per Year	(Note c)
Enterococcus	CFU/100mL	Grab	Once per Year	(Note d)
Priority Pollutants except asbestos (Note e)	µg/L	Grab	Once per Year	(Note c)
TCDD Equivalents (Note f)	µg/L	Grab	Once per Year	(Note c)

Notes to Table E-4

- a. Sampling shall be during the first hour of the first discharge event of the year. 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, no sampling is required. In that event, the Discharger shall indicate, under statement of perjury, that no effluent was discharged to surface water during the reporting period.
- b. Receiving water pH, salinity, and temperature must be analyzed at the same time the samples are collected for Priority Pollutants analysis.
- 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.
- d. The U.S. EPA recommends using U.S. EPA Method 1600 or other equivalent method to measure culturable enterococci determined by the Regional Water Board to be appropriate.
- e. Priority Pollutants are those constituents referred to in 40 CFR Part 131.
- f. TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

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

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where: C_x = concentration of dioxin or furan congener x
 TEF_x = TEF for congener x

Toxicity Equivalency Factors

Congeners	Minimum Levels (pg/L)	Toxicity Equivalency 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 Notes to Table E-4

IX. OTHER MONITORING REQUIREMENTS

A. Visual Observation

1. A visual observation station shall be established at the pump station of the inner and outer ponds.
2. General observations shall be made at either pump station when discharges occur. All observations shall be reported in the semiannual monitoring report. Observations shall be descriptive where possible, such that colors, approximate amounts, or types of materials are apparent. The following observations shall be made:
 - a. Tidal stage, time, and date of observation
 - b. Weather conditions
 - c. Color of water
 - d. Appearance of oil films or grease, or floatable materials
 - e. Extent of visible turbidity or color patches
 - f. Description of odor, if any,
 - g. Presence and activity of California Least Tern and California Brown Pelican.

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B. 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.

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

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

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

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

B. Self-Monitoring Reports (SMRs)

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

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website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit quarterly SMRs including the results of all required monitoring using 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.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Once per Day	December 1, 2020	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	May 1 August 1 November 1 February 1
Once per Discharge Event	December 1, 2020	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
Once per Year	December 1, 2020	January 1 through December 31	February 1

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

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- 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.
5. **Compliance Determination.** Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above, Section VII of this Order, and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).
6. **Multiple Sample Data.** When determining compliance with an AMEL or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
- a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
 - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
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.

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- b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

C. Discharge Monitoring Reports (DMRs)

DMRs are 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:

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

D. Other Reports

- 1. Within 90 days of the effective date of this permit, the Discharger is required to submit the following to the Regional Water Board:
 - a. Initial Investigation TRE workplan
 - b. Updated SWPPP
 - c. Updated BMPP
 - d. 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 Regional Water Board within 30 days of revisions.

- 2. Within 90 days of the effective date of this Order, the Discharger must submit to the Regional Water Board notification of whether the Discharger will continue to develop a site-specific plan or participate with the Collaboration Group to complete the regional monitoring required by the Harbor Toxics TMDL and included in section VI.C.2.b. of the Waste Discharge Requirements of this Order, or if the Discharger will be developing a site specific plan. If developing a new site-specific plan. The Discharger shall provide proof of joining a collaborating group, or if developing a site-specific plan, that plan is due to the Regional Water Board within 90 days from the effective date of this Order. Regional Water Board staff will review the plan and provide an opportunity for public comment. The Discharger shall begin monitoring after the Monitoring Plan and QAPP are approved by the Executive Officer and after a discharge from the Facility occurs, unless otherwise directed by the Executive Officer.
- 3. According to the Harbor Toxics TMDL, the Discharger shall submit an annual monitoring/implementation report to the Regional Water Board. The report shall describe the measures implemented and the progress achieved toward meeting

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the assigned WLAs. The annual report shall be received by the Regional Water Board by the specified date in the proposed Monitoring Plan.

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.

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ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4B192010019
Discharger	Tesoro Logistics Operations, LLC
Name of Facility	Tesoro Carson Crude Terminal
Facility Address	24696 South Wilmington Avenue
	Carson, CA 90745-6126
	Los Angeles County
Facility Contact, Title and Phone	Lynnea L. Giordani, Advanced Environmental Professional, (562) 499 - 2332
Authorized Person to Sign and Submit Reports	Timothy W. Hayes, Region Manager, LA Basin Operations – (562) 499 - 2249
Mailing Address	1300 Pier B Street, Long Beach, CA 90813
Billing Address	Same as Mailing Address
Type of Facility	Petroleum Bulk Stations and Pipeline Transportation (SIC 5171) Facility, Crude Petroleum Pipelines, (SIC 4612)
Major or Minor Facility	Minor
Threat to Water Quality	3
Complexity	C
Pretreatment Program	No
Recycling Requirements	None
Facility Permitted Flow	0.500 million gallons per day (MGD)
Facility Design Flow	Not Applicable
Watershed	Dominguez Channel Watershed
Receiving Water	Dominguez Channel Estuary
Receiving Water Type	Enclosed Bay, and Estuary

- A. Tesoro Logistics Operations, LLC (Discharger or Tesoro) is the owner and operator of the Tesoro Carson Crude Terminal (Facility), a tank farm for storage of bulk crude oil and pipeline transportation.

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

- B. The Facility was permitted to discharge storm water to the Dominguez Channel Estuary, a water of the United States and of the State. The storm water discharge is currently regulated by Order No. R4-2014-0189, (adopted on September 11, 2014), as amended by Order No. R4-2014-0189-A01, which was adopted on June 1, 2017, and it expired on October 31, 2019. This Order serves as a permit under the National Pollutant Discharge Elimination System (NPDES) Program (NPDES Permit No. CA0060232). Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.
- C. The Discharger filed a report of waste discharge (ROWD) and submitted an application for renewal of its waste discharge requirements (WDRs) and NPDES permit on May 2, 2019. The ROWD included a request to include hydrostatic test water from six new tanks commingled with stormwater in the waste stream discharge regulated under this Order. This would allow the flexibility to store the hydrostatic test water from the testing of the first two new tanks in the stormwater retention basins until the rest of the tanks are ready for hydrostatic testing. Each tank has a capacity of 21 million gallons and the Discharger would like to minimize the amount of potable water needed for the hydrostatic testing. The hydrostatic test water would remain in the outer pond until the remaining new tanks are ready for testing. During that time, there is a possibility that stormwater runoff would be added to the outer pond. After the pond contents are used by the remaining new tanks for hydrostatic testing, the commingled wastewater would be discharged to the storm drain system. After the new tanks are hydrostatically tested and put into service, these tanks would likely not be hydrostatically tested for approximately another 15 years. Currently, the discharge of hydrostatic test water from existing tanks from the Facility is regulated under General NPDES Permit No. CAG674001 (Order No. R4-2019-0052, *Waste Discharge Requirements for Discharges of Low Threat Hydrostatic Test Water to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties*, adopted by this Regional Water Board on May 9, 2019). The Discharger would like to maintain coverage under the General NPDES permit for the discharge of hydrostatic test water from the existing tanks, so this Order only covers discharges related to hydrostatic testing of the new tanks.

Supplemental information was requested on May 14, 2019 and was received on May 15, 2019. The application was deemed complete on May 28, 2019. A site visit was conducted on August 1, 2019, to observe operations and collect additional data to develop permit limitations and requirements for waste discharge.

- D. Federal regulations at 40 CFR section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, Table 3 of this Order limits the duration of the discharge authorization. However, pursuant to 40 CFR section 122.6(d) 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.

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II. FACILITY DESCRIPTION

The Facility is a tank farm used for the storage and pipeline transfer of bulk crude oil. Crude oil is transferred to the Facility via pipeline from Tesoro Marine Terminals (T2 and Berth 121). Crude oil is transferred from the Facility via pipeline to the Tesoro Carson Refinery, which is located on an adjacent property to the north of the Facility. The Facility consists of a total of five above-ground storage tanks (AST): two ASTs with a capacity of 450,000 barrels (18.9 million gallons) each; and three ASTs with a capacity of 376,000 barrels (15.792 million gallons) each. Each of the ASTs is within a diked containment area to capture any leakage from the tanks. The Facility also includes three oil wells along the southern perimeter of the site that are owned by Cooper and Brain, Inc. The Discharger operates the Southwest Booster Station, which pumps Jet-A fuel from the Carson Refinery to the Los Angeles International Airport. In addition, the Discharger maintains a hazardous waste storage area in the northcentral area of the site. Hazardous waste is stored in 55-gallon drums and other Department of Transportation approved packaging within a contained area covered by a canopy roof.

The Facility is operated remotely from the Tesoro Operations Control Center located at the Tesoro East Hynes office at 5905 Paramount Boulevard, Long Beach and the Tesoro T2 office at 1300 Pier B Street in Long Beach, California. The Discharger also performs manual operations at the Facility.

A. Description of Wastewater and Treatment or Controls

The Facility has two storm water retention ponds; the on-site holding pond or inner pond located within the confines of the Facility, and the off-site holding pond or outer pond located adjacent to the Facility along the northwestern side. The inner pond is made of impervious concrete and the capacity is 1.638 million gallons. The outer pond is unlined and made of a combination of pervious rock and a compacted earthen bottom. The estimated capacity of the outer pond is 29 to 32 million gallons, depending on the amount of silt that has accumulated on the bottom of the pond over the years.

Storm water runoff from the diked tank containment areas, the Southwest Booster Station, oil wells, the pump/meter area, and area roadways drain via catch basins to the inner pond. Storm water that accumulates within the containment area is visually inspected for pollutants and sheen prior to release (if the quality appears acceptable) to the inner pond via roadway catch basins. Storm water is retained within the inner pond for sedimentation and only discharged when the volume of water in the pond necessitates a discharge. Prior to every discharge, a sample is collected and a visual observation is made of the pond surface. Any oil sheen that is observed is then removed using hydrophobic oil-absorbent pads and/or booms. As an additional precaution, the suction pipe for the pond discharge pump originates and draws water well below the high level of the pond, preventing discharge of any potential oil sheens. All pond discharges are controlled by Tesoro operators.

The outer pond is utilized as a secondary storm water retention basin. The facility has the option of pumping storm water from the inner retention pond to the outer retention pond. The outer pond also collects storm water runoff from the adjacent truck and container parking lot, located north of the outer pond, which is also

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owned by Tesoro Logistics Operations, LLC. The outer pond also acts as an evaporation basin between wet weather events. If excess rainfall is experienced during the wet season and the outer pond approaches capacity, the retained water may be discharged to surface waters as allowed under this NPDES permit.

The Facility conducts hydrostatic testing on newly constructed tanks as part of its American Petroleum Institute (API) 653 Aboveground Storage Tank (AST) inspection, prior to putting the new tanks into service. The hydrostatic test water from the new tanks is routed to either the inner pond or the outer pond and commingles with stormwater prior to discharge at Discharge Point 001. Sodium metabisulfite is added to the hydrostatic test water to reduce the chlorine level prior to discharge. This permit authorizes the discharge of hydrostatic test water from the newly constructed six tanks commingled with storm water from the inner or outer pond to Discharge Point 001.

Additional wastewaters generated at the site include tank draw water, discharges from crude transfer pressure relief valves, storm water from the Southwest Booster Station relief tank, and miscellaneous oily water sources. These wastewaters are collected and transferred to the Tesoro Carson Refinery for product reclamation and water treatment and are not included in discharges covered by this Order.

In 2010, the Discharger obtained an industrial wastewater discharge permit with the Los Angeles County Sanitation District (LACSD Permit No. 21301) to discharge storm water and hydrostatic test water to the sanitary sewer if the effluent from the Facility cannot meet the limitations in this Order.

Prior to discharge under the NPDES permit, a sample is collected, analyzed, and a visual observation is made of the inner and outer pond surfaces. Representative discharge samples are also obtained at the required frequency during active discharge and as specified by the NPDES and LACSD permits. If sample results indicate effluent quality would not meet NPDES permit limitations, then the storm water and/or hydrostatic test water commingled with storm water is discharged to the sanitary sewer under the LACSD permit. If sample results indicate effluent quality is within NPDES permit limits, then storm water and/or hydrostatic test water from the six new tanks from the inner and/or outer pond is pumped to a dedicated line that exits the site at the northwestern section of the site. During discharge, an effluent sample is collected to provide a representative sample for compliance monitoring.

The ROWD reported an average and maximum flow of 0.499 MGD. Order No. R4-2014-0189, as amended by Order No. R4-2014-0189-A01 allows a maximum flow of 0.500 MGD. Because the current permitted flow is slightly higher than the reported flow in the ROWD and the Discharger would like to retain the permitted flow, the maximum flow of 0.500 MGD in Order No. R4-2014-0189, as amended by Order No. R4-2014-0189-A01 has been retained in this Order.

B. Discharge Points and Receiving Waters

Storm water runoff and/or hydrostatic test water from the six new tanks is pumped intermittently from either the inner or outer holding ponds through PVC piping that follows the Facility's access road to the Facility's entrance on Wilmington Avenue

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and then northward along Wilmington Avenue and discharges into a storm water drop inlet (Discharge Point 001) located at the southeastern corner of Wilmington Avenue and Sepulveda Boulevard in Carson, California (Latitude: 33.80308° North, Longitude: -118.25492° West). Effluent that empties into the storm water drop inlet at Discharge Point 001 is conveyed via a storm sewer that empties into Dominguez Channel Estuary, a water of the United States.

The Facility is authorized to discharge up to 0.500 MGD of storm water runoff and/or hydrostatic test water from the six new tanks from either the inner or outer holding pond. Attachment B depicts the site map, site drainage map, and aerial view of the Facility. Attachment C depicts the schematic diagram of the wastewater flow.

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

1. Historic Final Effluent Limitations for Discharge Point No. 001.

- a. Effluent limitations contained in Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01 and monitoring data collected during storm water discharges at Discharge Point 001 during the first quarter 2017 (February and March 2017), and first quarter 2019 (January, February, and March 2019) are summarized in Table F-2 below.

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Maximum Daily Limit	Highest Reported Concentrations (From 2/22/2017 thru 3/7/2019)
BOD ₅ @ 20 °C	mg/L	30	2.1
BOD ₅ @ 20 °C	lbs/day (Note a)	125	---
Oil and Grease	mg/L	15	<1.3
Oil and Grease	lbs/day	63	---
Total Suspended Solids (TSS)	mg/L	75	2.4
TSS	lbs/day	313	6.92
Phenolics, Total	mg/L	1.0	0.035
Phenolics, Total	lbs/day	4.2	0.11
Sulfides	mg/L	1.0	<0.027
Sulfides	lbs/day	4.2	---
Ammonia	mg/L	0.233	0.17
Total Residual Chlorine	mg/L	No limit	<0.1
Turbidity	NTU	75	3.6
Settleable Solids	ml/L	No limit	0.1
Chronic Toxicity (Note b)	Pass or Fail and % effect for TST approach	No limit	Pass
<i>Enterococci</i>	MPN/100ml	(Note c)	220
Fecal Coliform	MPN/100ml	(Note c)	930
Total Coliform	MPN/100ml	(Note c)	1600
Total Petroleum hydrocarbon (TPH) as Motor Oil)	mg/L	No limit	<0.088

Parameter	Units	Maximum Daily Limit	Highest Reported Concentrations (From 2/22/2017 thru 3/7/2019)
Methylene Active Substances (MBAS)	mg/L	No limit	0.18
Antimony, Total Recoverable (TR)	µg/L	No limit	0.68
Arsenic, TR	µg/L	No limit	5.1
Cadmium	µg/L	No limit	<0.25
Chromium III	µg/L	No limit	1300
Chromium Total	µg/L	No limit	1.7
Chromium VI	µg/L	No limit	0.26
Copper, TR (Note d)	µg/L	6.14	4.6
Copper, TR	lbs/day	0.0256	---
Lead, TR (Note d)	µg/L	14.0	0.6
Lead, TR	lbs/day	0.0584	---
Mercury, TR	µg/L	No limit	<0.1
Nickel, TR	µg/L	No limit	1.7
Selenium, TR	µg/L	117	0.58
Selenium, TR	lbs/day	0.49	---
Zinc, TR (Note d)	µg/L	141	36
Zinc, TR	lbs/day	0.588	---
4,4'-DDT (Note d)	µg/L	0.0012	<0.0038
4,4'-DDT	lbs/day	5.0 x 10 ⁻⁶	---
Chlordane (Note d)	µg/L	0.0012	<0.096
Chlordane	lbs/day	5.0 x 10 ⁻⁶	---
Dieldrin (Note d)	µg/L	0.00028	<0.0019
Dieldrin	lbs/day	1.2 x 10 ⁻⁶	---
PCBs, Total (Note d)	µg/L	0.00034	<0.24
PCBs, Total	lbs/day	1.4 x 10 ⁻⁶	---
Diethyl phthalate	µg/L	No limit	0.38
Diesel Oil	µg/L	No limit	290
Gasoline	µg/L	No limit	43
Fluoranthene	µg/L	No limit	0.11
Methyl Bromide	µg/L	No limit	2.1
Benzo(a)anthracene (Note e)	µg/L	0.098	<0.031
Benzo(a)anthracene	lbs/day	0.00041	---
Benzo(a)pyrene (Note e)	µg/L	0.098	<0.017
Benzo(a)pyrene	lbs/day	0.00041	---
Chrysene (Note e)	µg/L	0.098	<0.016
Chrysene	lbs/day	0.00041	---
Pyrene (Note e)	µg/L	22,068	<0.047
Pyrene	lbs/day	92	---
TCDD-Equivalents (Note f)	µg/L	2.8 x 10 ⁻⁸	8.60E-07
TCDD-Equivalents	lbs/day	1.2 x 10 ⁻¹⁰	---

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Notes to Table F-2

- a. The mass (lbs/day) limitations are based on a maximum permitted flow of 0.500 MGD and is calculated as follows:
Mass (lbs/day) = Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor).
The reported mass was based on the actual measured flow rate during sampling.
- b. No effluent limitation. The Discharger is only required to monitor chronic toxicity.
- c. Bacteria Limitations Requirements. Bacteria limits are established for both geometric means and single samples. The Basin Plan includes an implementation provision for geometric means: “The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period):
 - i. Rolling 30-day Geometric Mean Limits:
 - 1. Total coliform density shall not exceed 1,000/100 ml.
 - 2. Fecal coliform density shall not exceed 200/100 ml.
 - 3. Enterococcus density shall not exceed 35/100 ml.
 - ii. Single Sample Maximum (SSM)
 - 1. Total coliform density shall not exceed 10,000/100 ml.
 - 2. Fecal coliform density shall not exceed 400/100 ml.
 - 3. Enterococcus density shall not exceed 104/100 ml.
 - 4. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.
- d. The effluent limitations are based on the wasteload allocations (WLAs) in the *Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Water* (Harbor Toxics TMDL), Regional Water Board Resolution No. R11-008, and calculated using the CTR-SIP procedures.
- e. CTR human health criteria were not established for total PAHs. Therefore, the effluent limits are based on the CTR human health criteria for the individual PAHs; benzo(a)anthracene, benzo(a)pyrene, and chrysene of 0.049 µg/L. The CTR criterion for pyrene of 11,000 µg/L is assigned as an individual WLA to pyrene. The effluent limitations are calculated based on SIP procedures.
- f. TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners. The TCDD Equivalents are calculated as follows:

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

where: C_x = concentration of dioxin or furan congener x
 TEF_x = TEF for congener x

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Toxicity Equivalency Factors

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

End of Notes to Table F-2

- b. Additional effluent limitations contained in Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01 and monitoring data for stormwater discharges from Discharge Point 001.
 - i. **pH Limitations** – The effluent limitations for pH are 6.5 as Instantaneous Minimum and 8.5 as Instantaneous Maximum.
 The highest reported pH concentration range was 6.8 to 8.16 units
 - ii. **Temperature Limitation** - Effluent limitation for temperature is 86 degrees Fahrenheit (°F) as Instantaneous Maximum.
 The highest reported temperature was 66.2 °F.
 - c. A performance goal for cadmium of 15 µg/L was established based on the CTR criteria calculated using SIP procedures. This performance goal is not an enforceable effluent limitation. Rather, it acts as a trigger to determine when sediment monitoring is required for this compound. The reported cadmium concentration was non-detected (<0.25 µg/L).
2. The following are the Harbor Toxics Final Concentration-Based Sediment Waste Load Allocations (WLAs) and Monitoring Data at Discharge Point 001.

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Table F-3. Final Concentration-Based Sediment WLAs and Monitoring Data at Discharge Point 001

Parameter	Units	Sediment, Final Concentration-Based Waste Load Allocations	Highest Reported Concentrations (Sampling Event on 11/8/2017)
Cadmium, TR	mg/kg dry sediment	1.2	1.7
Chlordane	µg/kg dry sediment	0.5	<9.9
Dieldrin	µg/kg dry sediment	0.02	<5.0

D. Compliance Summary

Data submitted to the Regional Water Board during the first quarter 2019 indicate that the Discharger has exceedances of the bacteria limitations for discharges from Discharge Point 001 (Monitoring Location EFF-001) as outlined in the table below:

Table F-4. Effluent Limitation Violations

Violation Date	Type of Limitation	Pollutant	Unit	Effluent Limitation	Result
2/4/2019	Daily Maximum	<i>Enterococci</i>	MPN/100mL	104	180
2/4/2019	Daily Maximum	Fecal Coliform	MPN/100mL	400	540
3/5/2019	Daily Maximum	Fecal Coliform	MPN/100mL	400	540
3/7/2019	Daily Maximum	<i>Enterococci</i>	MPN/100mL	104	220
3/7/2019	Daily Maximum	Fecal Coliform	MPN/100mL	400	930

The monitoring report indicated that the Carson Crude facility is not equipped with bathroom facilities, therefore human sewage is not believed to be the source of the enterococci and fecal coliform in the discharge water. The source of the enterococci and fecal coliform is from natural sources with the most likely source being the birds that use the outer pond for bathing and feeding. Tesoro increased the frequency of sampling for total coliform, fecal coliform and enterococcus to biweekly. Because of further exceedances to the fecal coliform and enterococcus limits, the discharge was terminated immediately upon receiving the analytical results on March 12, 2019. The violations are being evaluated for appropriate enforcement action.

E. Planned Changes

Tesoro plans to construct up to six storage tanks at the Facility, each tank with a capacity of 500,000 barrels (bbls). Tesoro anticipates starting the construction of six tanks in phases beginning in 2022 (contingent upon Tesoro's receipt of the South Coast Air Quality Management District (AQMD) permit) and finish the construction in 2023. Tesoro anticipates that the six tanks will be commissioned in 2023 and 2024. The newly constructed tanks will each require hydrostatic testing before putting them into service. In order to conserve water, Tesoro plans to use a combination of city-supplied water and impounded storm water from the outer pond for the hydrostatic testing. Hydrostatic testing starts by filling the tank with water, which is expected to take approximately one week. The water is held in the

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tank for 30 days to ensure the integrity of the tank. The water will then be transferred to the next newly-constructed tank that requires testing and held for the 30-day holding time and then either transferred to the next newly-constructed tank (if ready for its hydrostatic test), or discharged back to the outer pond. The water in the outer pond will be utilized for the hydrostatic testing of the next tank. This process will be completed once all six tanks have been hydrostatically tested. During the period when the tanks are being tested and the outer pond approaches capacity, any excess water will be discharged to the storm drain system under the this NPDES permit for the commingled stormwater and hydrostatic test water from the new tanks. Discharge of hydrostatic test water from the five existing tanks to the storm drain is authorized under General NPDES Permit No. CAG674001. Upon completion of the hydrostatic testing, the tanks will be placed into crude oil service. Future hydrostatic testing of these tanks is usually completed every 15-20 years in conjunction with their API 653 inspection. During these inspections, the tank is completely emptied, cleaned, inspected, and any required repairs are made. Sometimes these repairs trigger the need for a hydrostatic test to ensure tank integrity, so a hydrostatic test would be completed at that time.

The tentative schedule to complete hydrostatic testing of the new tanks is as follows:

1. Tank #1 Hydrostatic testing begins in 2023
2. Tank #2 Hydrostatic testing begins in 2023
3. Tank #3 Hydrostatic testing begins in 2023
4. Tank #4 Hydrostatic testing begins in 2023 or 2024
5. Tank #5 Hydrostatic testing begins in 2023 or 2024
6. Tank #6 Hydrostatic testing begins in 2023 or 2024

The hydrostatic test water may be discharged in 2023 or 2024.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the 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 location described in Table 2 of the Order, subject to the WDRs in this Order.

B. California Environmental Quality Act (CEQA)

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

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

1. **Water Quality Control Plan.** The *Water Quality Control Plan for the Los Angeles Region* (Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. Requirements in this Order implement the Basin Plan. In addition, the Basin Plan implements State Water Board Resolution 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply (MUN), including the Los Angeles Coastal Groundwater Basin (West Coast). However, the Dominguez Channel Estuary was never designated as MUN. Beneficial uses applicable to the Dominguez Channel Estuary and the Los Angeles Coastal Groundwater Basin (West Coast) are as follows:

Table F-5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Dominguez Channel Estuary	<p><u>Existing:</u> Contact (REC-1) (Note a) and non-contact (REC-2) water recreation; commercial and sport fishing (COMM); estuarine habitat (EST); marine habitat (MAR); wildlife habitat (WILD); preservation of rare and endangered species (RARE); migration of aquatic organisms (MIGR); and spawning, reproduction, or early development (SPWN).</p> <p><u>Potential:</u> Navigation (NAV)</p>
--	Coastal Plain of Los Angeles (West Coast) Groundwater Basin	<p><u>Existing</u> Municipal and Domestic Water Supply (MUN); industrial service supply (IND); industrial process supply (PROC); and agricultural supply (AGR).</p>

Notes to Table F-5

- a. Access prohibited by Los Angeles County Department of Public Works.

End of Notes to Table F-5

Since MUN is a beneficial use of the West Coast Basin, the groundwater objectives are based on the primary and secondary drinking water standards (MCLs) in the Domestic Water Quality and Monitoring Regulations, CCR, title 22, chapter 15, and Basin Plan objectives. These limitations are necessary to ensure the protection of public health and the use of the groundwater basin for domestic supply. The Basin Plan objectives for the West Basin are:

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Table F-6. Water Quality Objectives (mg/L) for Groundwater in Central Basin

DWR Basin No	Basin	Total Dissolved Solids (TDS)	Sulfate	Chloride	Boron
Coastal Plain of Los Angeles (West) DWR Basin No. 4-11.03	West Coast Basin	800	250	250	1.5

- 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 Resources Control Board (State Water Board) in 1974, and amended by Resolution No. 95-84 on November 16, 1995: The Enclosed Bays and Estuaries Policy 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 wastewater to the Dominguez Channel Estuary. The wastewater is comprised primarily of storm water and/or hydrostatic test water from the newly constructed six tanks commingled with storm water and is not considered to be industrial process wastewater. This Order contains provisions necessary to protect all beneficial uses of the receiving water.

- 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 May 18, 1972, and again on September 18, 1975 (Resolution No. 75-89). The Thermal Plan contains temperature objectives for coastal and interstate waters and enclosed bays and estuaries of California.

For estuaries, the provisions of 5.B.(1) through (3) of the Thermal Plan include the following specific water quality objectives for new discharges¹ to estuaries:

¹ New discharges under the Thermal Plan are any discharge that is not considered an "existing discharge". Existing discharges are any discharges taking place prior to the adoption of the Thermal Plan on January 7, 1971 or where waste discharge requirements had been issued and construction had commenced prior to the adoption of the Thermal Plan.

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- (1) Elevated temperature waste discharges shall comply with item 5(A)(1) of the Thermal Plan. Provisions of 5(A)(1) of Thermal Plan include the following:

Elevated temperature waste discharges shall comply with the following:

- 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 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
- (2) Thermal waste discharges having a maximum temperature greater than 4°F above the natural temperature of the receiving water are prohibited.
 - (3) Additional limitations shall be imposed when necessary to assure protection of the beneficial uses.

The facility's discharge is not considered a thermal waste discharge. Therefore, the provisions of 5.B.(1)1.a. are the applicable water quality objective. To determine the limitations necessary to ensure protection of beneficial uses, a white paper was developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*. The white paper evaluated the optimum temperatures for aquatic species routinely present in surface water bodies within the Los Angeles Region including: steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. A maximum effluent temperature limitation of 86°F was determined to be appropriate for protection of aquatic life. The Facility discharges to Dominguez Channel Estuary. Therefore, a maximum temperature effluent limitation of 86°F is included in this Order for the protection of aquatic life and beneficial uses of the receiving waters along with the restriction that the maximum temperature of waste discharges shall not exceed the natural temperature of the receiving waters by more than 20°F. Requirements of this Order implement the Thermal Plan.

- 4. Sediment Quality.** The State Water Board adopted the *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1, Sediment Quality* on September 16, 2008, and it became effective on August 25, 2009 (Enclosed Bays and Estuaries Plan). The State Water Board amended the sediment quality provisions of the Enclosed Bays and Estuaries Plan through Resolution No. 2018-0028; these amendments became effective upon approval by U.S. EPA on March 11, 2019. The Enclosed Bays and Estuaries Plan supersedes other narrative sediment quality objectives and establishes new sediment quality objectives and

related implementation provisions for specifically defined sediments in most bays and estuaries. Requirements of this Order implement sediment quality objectives of the Enclosed Bays and Estuaries Plan.

5. Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries in California – Part 3 Bacteria Provisions (Bacteria Provisions).

On August 7, 2018, the State Water Resources Control 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 (ISWEBE)*; 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. The Office of Administrative Law (OAL) approved the regulatory action on February 4, 2019. On March 22, 2019 U.S. EPA approved the Bacteria Objectives and they became effective. Requirements of this permit implement the Bacteria Provisions.

6. 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. The CTR contains water quality criteria for priority pollutants applicable to all surface waters in California.

7. 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 Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the 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. Requirements of this Order implement the SIP.

8. Antidegradation Policy. Federal Regulation 40 CFR section 131.12 require that the state water quality standards include an antidegradation policy consistent with the federal law and policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16 ("Statement of Policy with Respect to Maintaining High Quality of Waters in California"). Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires

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that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board’s Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution 68-16. Requirements of this Order implement federal and state antidegradation policies as described in section IV.D.2 of this Fact Sheet.

The storage of hydrostatic test water in the outer pond for a limited amount of time is not expected to result in degradation of the West Coast groundwater basin. The water used for hydrostatic testing is potable/domestic water supplied by municipalities or potable water purveyors and meets the 22 CCR primary and secondary drinking water standards (MCLs) and is thus considered a low threat to water quality and the environment. In addition, although the outer pond is not lined, any liquid leakage is expected to be minimal, which has been confirmed by the storage of stormwater for extended periods of time. To ensure the protection of groundwater quality, this Order sets forth monitoring requirements for any hydrostatic test water that is stored in the outer pond and this permit may be reopened as necessary if monitoring results indicate that groundwater quality may be degraded.

- 9. 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. The requirements of this Order are consistent with anti-backsliding as described in section IV.D.1 of this Fact Sheet.
- 10. Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either *the California Endangered Species Act* (Fish and Game Code, §§ 2050 to 2097) or the *Federal Endangered Species Act* (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state, including protecting rare and endangered species. The Discharger is responsible for meeting all requirements of the applicable federal and state *Endangered Species Act*.
- 11. Trash Amendments.** The State Water Board adopted the “*Amendment to the Ocean Plan and Part I Trash Amendments 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.

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The Trash Amendments apply to all surface waters of the State, with the exception of those waters within the jurisdiction of the Regional Water Board where trash or debris Total Maximum Daily Loads (TMDLs) are in effect prior to the effective date of the Trash Provisions. There are currently no Trash TMDLs for the Dominguez Channel Estuary or its tributaries, 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 Discharge Point 001. This Order also requires the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP), which shall include specific Best Management Practices (BMPs) used as storm water control measures that the Discharger will undertake to prevent the discharge of trash from the Facility to the Dominguez Channel Estuary. The Discharger is required to detail and submit to the Regional Water Board the updated SWPPP.

12. Mercury Provisions. The State Water Board adopted “*Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California - Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions*” (Mercury Provisions) through Resolution 2017-0027, which was approved by OAL on June 28, 2017 and became effective upon U.S. EPA approval on July 14, 2017. The Mercury Provisions established one narrative and four numeric water quality objectives for mercury and three new beneficial use definitions, implemented through NPDES permits issued pursuant to CWA section 402, waste discharge requirements, or waivers of waste discharge requirements. The Mercury Provisions included specific implementation provisions for individual non-storm water NPDES permits for municipal and industrial dischargers; storm water discharges regulated by Municipal Separate Storm Sewer System (MS4) permits and the Industrial General Permit; as well as for storm water from mine site remediation sites; dredging activities; wetland projects and nonpoint source discharges.

The Mercury Provisions prescribe specific implementation provisions for individual industrial permittees based on waterbody type. Because this permit regulates the discharge of storm water and/or hydrostatic test water, 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. Table 1 of the Mercury Provisions establishes mercury numeric action level (NAL) 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 data reported for mercury was not detected at 0.1 µg/L, thus indicating that there was no reasonable potential for this discharge to cause or contribute to an excursion of mercury. Therefore, this Order does not include WQBELs for mercury since the data did not demonstrate reasonable potential.

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

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all CWA 303(d)-listed water bodies and pollutants, the Regional Water Board plans to develop and adopt

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TMDLs that will specify wasteload allocations (WLAs) for point sources and load allocations (LAs) for non-point sources, as appropriate.

U.S. EPA approved the State Water Board's 2014-2016 CWA section 303(d) List of Impaired Waters (2014-2016 303(d) List) on April 6, 2018. Certain receiving waters in the Los Angeles and Ventura Counties' watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2014-2016 CWA section 303(d) List and have been scheduled for TMDL development.

The Facility discharges to the Dominguez Channel Estuary. The 2014-2016 State Water Board's California 303(d) List of impaired water bodies includes the Dominguez Channel Estuary. The pollutants of concern include benthic community effects, benzo(a)pyrene (3,4 Benzopyrene-7-d), benzo[a]anthracene, chlordane (tissue), chrysene (C1-C4), copper, indicator bacteria, lead, polychlorinated biphenyls (PCBs), phenanthrene, pyrene, and toxicity.

The following are summaries of the TMDLs for Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters:

1. Bacteria TMDL. The Regional Water Board approved the *Los Angeles Harbor Bacteria TMDL* through Resolution 2004-011 on July 1, 2004. The State Water Board, Office of Administrative Law (OAL), and USEPA approved the TMDL on October 21, 2004, January 5, 2005, and March 1, 2005, respectively. The Bacteria TMDL only addresses Inner Cabrillo Beach and the Main Ship Channel of the Los Angeles Inner Harbor. This Order therefore includes bacteria limitations based on water quality objectives (WQOs) included in the *Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Bacteria Provisions and a Water Quality Standards Variance Policy*, applicable to Dominguez Channel Estuary and not based on the Bacteria TMDL.

2. Harbor Toxics TMDL. The Regional Water Board adopted Resolution No. R11-008 on May 5, 2011, that amended the Basin Plan to incorporate the *TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbors Waters* (Harbor Toxics TMDL). The Harbor Toxic 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 Harbor Toxics TMDL contains requirements applicable to this discharge. Therefore, this Order contains effluent limitations and monitoring requirements consistent with the assumptions and requirements of the applicable waste load allocations (WLAs) in the Harbor Toxics TMDL.

For minor NPDES permits and irregular dischargers into the Dominguez Channel Estuary, the Harbor Toxics TMDL included:

- a. Sediment interim concentration-based allocations (in mg/kg sediment) for copper, lead, zinc, 4,4'-DDT, PAHs, and PCBs (Basin Plan, Chapter 7, Section 7-40, p. 7-499).
- b. Water column final concentration-based WLAs (µg/L) for copper, lead, zinc, PAHs, chlordane, 4,4'-DDT, dieldrin, and total PCBs (Basin Plan, Chapter 7, Section 7-40, pp. 7-501 - 7-502).

- c. Final concentration-based sediment WLA (in mg/kg dry sediment) for cadmium (Basin Plan, Chapter 7, Section 7-40, pp. 7-505).
- d. Final concentration-based sediment WLAs (in mg/kg dry sediment) for bioaccumulative compounds: chlordane and dieldrin (Basin Plan, Chapter 7, Section 7-40, pp. 7-509).
- e. Provisions for monitoring discharges and/or receiving waters during the TMDL's 20-year implementation schedule to determine compliance with wasteload and load allocations as appropriate.

3. Implementation of the Harbor Toxics TMDL.

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

a. Water Column WLAs. This Order includes WQBELs that are statistically-calculated based on saltwater water column final concentration-based WLAs in µg/L for copper (3.73), lead (8.52), zinc (85.6), PAHs [(0.049 applied individually to benzo(a)anthracene, benzo(a)pyrene, and chrysene), and pyrene (11,000)], chlordane (0.00059), 4,4'-DDT (0.00059), dieldrin (0.00014), and total PCBs (0.00017). CTR human health criteria were not established for total PAHs. Therefore, the CTR criterion for individual PAHs of 0.049 µg/L is applied individually to benzo(a)anthracene, benzo(a)pyrene, and chrysene. The CTR criterion for pyrene of 11,000 µg/L is assigned as an individual WLA to pyrene.

The Harbor Toxics TMDL assigns a final sediment WLA for cadmium (1.2 mg/kg dry sediment) but does not assign a concentration-based WLA for cadmium in the water portion of the effluent. Therefore, WQBELs for cadmium [Average Monthly Effluent Limitation (AMEL) = 8 µg/L, and Maximum Daily Effluent Limitation (MDEL) = 15 µg/L] have been derived in this Order using CTR criteria and the SIP procedures. Compliance with this WQBEL for cadmium will be used to demonstrate compliance with the sediment WLA for cadmium since this Facility is an irregular discharger as discussed in Section III.D.3.b below.

The Regional Board has determined that the WQBELs established in this Order (i.e., cadmium, copper, lead, zinc, PAHs [benzo(a)anthracene, benzo(a)pyrene, chrysene, pyrene], chlordane, 4,4'-DDT, dieldrin, and total PCBs) 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. Sediment Interim Allocations. 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 µg/kg dry sediment) for cadmium (1.2), chlordane (0.5), and dieldrin (0.02).

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Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01 established interim sediment allocation monitoring thresholds based on the Harbor Toxics TMDL's interim sediment allocations for 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 the requirements for monitoring sediment in the effluent for the purposes of determining compliance with sediment WLAs. The discharge from the Facility consists of storm water and/or hydrostatic test water commingled with storm water, and discharge only occurs during significant storm events and/or hydrostatic testing when the retention ponds reach full capacity. Discharge from the Facility occurred during the first quarter 2017 (February and March 2017), and first quarter 2019 (January, February, and March 2019) during the term of the previous Order. As such, the Facility is considered an "irregular discharger" as specified in the Harbor Toxics TMDL and is assigned concentration-based water column waste load allocations equal to the CTR saltwater targets for metals and the CTR human health targets for organic compounds. 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 total suspended solids (TSS) for sediment analysis is very large and would require a level of planning that would be infeasible to implement for an irregular discharge. The alternative of analyzing bed sediments in the receiving water to demonstrate compliance with the Harbor Toxics TMDL is also problematic because it is not possible to link bed sediment contaminant levels with the quality of the discharge due to the infrequent nature of the Facility's discharge in combination with contributions of pollutants from other ongoing discharges. Therefore, this Order includes WQBELs for cadmium, copper, lead, zinc, PAHs [benzo(a)anthracene, benzo(a)pyrene, chrysene, pyrene], chlordane, 4,4'-DDT, dieldrin, and total PCBs based on the water column WLAs as discussed above in section III.D.3.a of this Fact Sheet.

Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01 included performance goals for cadmium. Effluent monitoring data collected during the first quarter 2017 and first quarter 2019 resulted in nondetectable concentrations of cadmium. Bed sediment monitoring data collected on November 8, 2017, had a cadmium concentration of 1.7 mg/kg. There is a final sediment allocation for cadmium assigned to Dominguez Channel Estuary. Since the discharges are irregular this Order requires monitoring for compliance with the final sediment allocations through water column monitoring. This Order establishes WQBELs for cadmium as discussed in Section III.D.3.a. above. The previous Order included a performance goal equal to MDEL=15 µg/L because the discharge is storm water only. Effluent monitoring requirements for cadmium were retained to determine compliance with the WQBELs.

c. Water Column, Sediment, and Fish Tissue Monitoring for Dominguez Channel, Torrance and Dominguez Channel Estuary. As defined in the amendment to the Basin Plan incorporating the *TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbors*

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Waters (Basin Plan, Chapter 7, Section 7-40, also known as the Harbor Toxics TMDL), the Discharger is a “responsible party” because it is an “Individual Industrial Permittee”. As such, either individually or with a collaborating group, the Discharger shall develop a monitoring and reporting plan (Monitoring Plan) and quality assurance project plan (QAPP) for the water column, sediment, and fish tissue in Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary Compliance Monitoring Program. These plans shall follow the “TMDL Element - Monitoring Plan” provisions in the Basin Plan, Chapter 7, Section 7-40. The TMDL requires that the Monitoring Plan and QAPP shall be submitted 20 months after the effective date (March 23, 2012) of the TMDL for public review and subsequent Executive Officer approval. During the tenure of Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01, the Discharger met this requirement through the development of a site-specific plan. Within 90 days of the effective date of this Order, the Discharger must submit to the Regional Water Board notification if the Discharger decides to join a collaborating group rather than continue to utilize the approved site-specific plan to complete the regional monitoring required by the Harbor Toxics TMDL. If joining a collaborating group, the Discharger shall provide proof of its participation. If continuing to utilize the approved site-specific plan, the Discharger shall submit any modifications of the plan to the Regional Water Board at that time. Regional Water Board staff will review the revised plan and provide an opportunity for public comment. After the receipt of the comments, the Executive Officer will request updates or approve the revised plan. The Discharger shall implement the new plan after they are approved by the Executive Officer and after a discharge from the Facility occurs. The Discharger shall continue to implement the existing plan until any new plan is approved and site-specific monitoring begins under the new plan. The Discharger shall submit the annual monitoring report to the Regional Water Board by the specified date in the proposed Monitoring Plan. The annual monitoring report shall indicate compliance and non-compliance with WQBELs.

E. Other Plans, Policies and Regulations

Climate Change Adaptation and Mitigation. On March 7, 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 Regional Water Boards. The Los Angeles Water Board adopted a similar resolution, “A Resolution to Prioritize Actions to Adapt to 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 and lists a series of steps to move forward. These

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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 Regional Water Boards’ resolutions.

The Discharger shall develop a Climate Change Effects Vulnerability Assessment and Management Plan (Climate Change Plan) and submit the Climate Change Plan to the Regional Water Board for the Executive Officer’s approval no later than 12 months after adoption 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 vulnerabilities of collection systems, facilities, treatment systems, and outfalls for predicted impacts in order 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 (where applicable), wildfires, storm surges and back-to-back severe storms that are expected to become more frequent.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 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 Facility is a tank farm for the storage and pipeline transfer of bulk crude oil. Contributing waste streams consist of storm water runoff from the diked containment areas around the five ASTs, from the Jet-A booster pump station, and from the three oil wells along the southern perimeter of the Facility. An additional waste stream is the hydrostatic test water from the newly constructed six tanks and storm water runoff from diked containment areas around the six new tanks.

Effluent limitations in the prior permit (Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01) were established for pH, temperature, biochemical oxygen demand (BOD₅), oil and grease, total suspended solids (TSS), turbidity, phenolics, sulfides, ammonia, TCDD-equivalents, and bacteria (total coliform, fecal coliform, and *enterococcus*). These constituents were identified based on a review of pollutants commonly found in discharges from bulk petroleum product storage facilities, materials stored or used on-site, and/or were historically detected in the effluent. In addition, the

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prior Order established effluent limitations for copper, lead, selenium, zinc, PAHs (applied individually to benzo(a)anthracene, benzo(a)pyrene, and chrysene), and pyrene, chlordane, 4,4'-DDT, dieldrin, and total PCBs and because of the established WLAs for these constituents in the Harbor Toxics TMDL. Storm water runoff and hydrostatic test water commingled with storm water may contain pollutants including oil and grease, trace metals, solids, and total residual chlorine (from hydrostatic test water), thus these pollutants remain pollutants of concern. Further, pollutants identified on the 303(d) list for the Dominguez Channel Estuary, identified in section III.D of this Fact Sheet, are also considered pollutants of concern. Storm water and hydrostatic test water from the six new tanks commingled with storm water may carry a combination of pollutants that may contribute to chronic toxicity. Therefore, toxicity, an indicator of the presence of toxic pollutants, is also considered a pollutant of concern.

Storm water-only discharges from the Facility are intermittent. During the term of the prior permit, storm water discharges occurred during the first quarter 2017 (February and March 2017), and first quarter 2019 (January, February, and March 2019) when the retention ponds reached the full capacity and the discharge to the sanitary sewer was restricted. Therefore, average monthly effluent limitations (AMELs) are not applicable for storm water only discharges, and only maximum daily effluent limitations (MDELs) have been established for storm water-only discharges at Discharge Point 001. The discharges of the storm water commingled with the hydrostatic test water from the six new tanks may occur for a longer period of time and it includes wastewater. AMELs and MDELs are applicable to the hydrostatic test water commingled with storm water discharges at Discharge Point 001.

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

Mass-based effluent limitations are established based on the maximum allowable discharge flow rate of 0.500 MGD, based on the prior permit which is slightly higher the average flow (0.499 MGD) reported in the report of waste discharge (ROWD).

A. 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. This Order includes new provisions for trash and mercury in order to implement the statewide Trash Amendments. and Mercury Provisions, respectively. The provisions included in this Order are consistent with the requirements set for

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other dischargers within the Los Angeles Region that are regulated by NPDES permits.

B. Technology-Based Effluent Limitations (TBELs)

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.

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

- a. Best practicable treatment control technology (BPT) represents the average of the best existing performance by well-operated facilities within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering a two-part reasonableness test in accordance with the methodology developed by the U.S. EPA, as published in the Federal Register notice on July 9, 1986 (51 FR 24974). 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 effluent limitations, guidelines and standards (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

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Regional Water Board must consider specific factors outlined in 40 CFR section 125.3.

2. Applicable Technology-Based Effluent Limitations

ELGs have not been developed for the discharges from the petroleum bulk storage and distribution facilities. Thus, no effluent limitations based on ELGs are prescribed in this permit.

The technology-based requirements in this Order are based on case-by-case numeric limitations developed using BPJ in accordance with 40 C.F.R. section 125.3. Technology-based effluent limitations (TBEL) were established in the previous permit (Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01). Maximum daily effluent limitations for BOD₅, oil and grease, TSS, phenols, sulfides, and turbidity were included for discharges at Discharge Point No. 001 in the previous Order. The limitations for these pollutants are consistent with technology-based limitations included in other Orders within the State for similar types of discharges. The Regional Board considered other relevant factors pursuant to 40 C.F.R. section 125.3 and concluded that the limitations are appropriate. Pursuant to federal antibacksliding regulations, this Order retains effluent limitations for these pollutants as technology-based effluent limitations.

Discharges from the Facility are not subject to Federal ELGs. Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01 required the Discharger to update their Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices Plan (BMPP). This Order also requires the Discharger to update and continue to implement a SWPPP and the BMPP to outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into the storm drain. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water that could be discharged to surface waters. The BMPP shall establish site-specific procedures that will ensure proper operation and maintenance of equipment and storage areas, to ensure that unauthorized non-storm water discharges do not occur at the Facility.

Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01 required the Discharger to update their Spill Contingency Plan (SCP). This Order requires the Discharger to update and continue to implement their SCP. A Spill Prevention Control and Countermeasure Plan (SPCC), developed in accordance with 40 C.F.R. Part 112, may be substituted for the SCP.

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

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

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Table F-7. Summary of Technology-Based Effluent Limitations

Parameter	Units (Note a)	Average Monthly (Note b)	Maximum Daily (Note b)
Biochemical Oxygen Demand (BOD) (5-day@20 Deg. C)	mg/L	20	30
BOD	lbs/day	83	125
Oil and Grease	mg/L	10	15
Oil and Grease	lbs/day	42	63
Total Suspended Solids (TSS)	mg/L	50	75
TSS	lbs/day	209	313
Phenols	mg/L	---	1.0
Phenols	lbs/day	---	4.2
Sulfides	mg/L	---	1.0
Sulfides	lbs/day	---	4.2
Turbidity	NTU	50	75

Notes to Table F-7

- a. The mass (lbs/day) limitations are based on a maximum flow of 0.500 MGD and is calculated as follows:

$$\text{mass} \left(\frac{\text{lbs}}{\text{day}} \right) = \text{Flow(MGD)} \times \text{Concentration} \left(\frac{\text{mg}}{\text{L}} \right) \times 8.34 \text{ (conversion factor)}$$

- b. The average monthly and maximum daily effluent limitations are applicable to the discharge of storm water commingled with hydrostatic test water at Discharge Point 001. The storm water-only discharges at Discharge Point 001 only include maximum daily effluent limitations.

End of Notes to Table F-7

C. Water Quality-Based Effluent Limitations (WQBELs)

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 in the receiving water.

40 CFR Section 122.44(d)(1)(i) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard in the receiving water, 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

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information, as provided in section 122.44(d)(1)(vi). Permit WQBELs must also be consistent with TMDL WLAs approved by USEPA.

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

The specific procedures for determining reasonable potential for discharges from the Facility, and if necessary, for calculating WQBELs, are contained in the U.S.EPA Technical Support Document for Water Quality-Based Toxics Control (TSD) for storm water discharges and in the SIP for non-storm water discharges. The TSD in section 3.3.8 in the first paragraph on page 64 states: *“The statistical approach shown in Box 3-2 or an analogous approach developed by a regulatory authority can be used to determine the reasonable potential.”* The Regional Water Board has determined the procedures for determining reasonable potential and calculating WQBELs contained in the SIP for non-storm water discharges may be used to evaluate reasonable potential and calculate WQBELs for storm water discharges as well. As described in the statement from the TSD, an analogous approach may also be used to evaluate reasonable potential and calculate WQBELs for storm water discharges as well. Hence, for this Order, the Regional Water Board used the SIP methodology to evaluate reasonable potential for discharges through Discharge Point No. 001.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

As noted in Section III of this Fact Sheet, the Regional Water Board adopted a Basin Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The beneficial uses applicable to Dominguez Channel Estuary are summarized in Section III.C.1 of this Fact Sheet. The Basin Plan includes both narrative and numeric water quality objectives applicable to the receiving water.

Priority pollutant water quality criteria in the CTR are applicable to 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, in accordance with 40 CFR section 131.38(c)(3), saltwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time. The Regional Water Board determined that because the discharge is within the Estuary, saltwater and human health consumption of organism CTR criteria are applicable. In this Order 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 table below summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the effluent at EFF-

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001, or for which the receiving water is identified to be impaired. These criteria were used to develop effluent limitations included in this Order.

Table F-8. 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)
1	Antimony, Total Recoverable (TR)	4,300	---	---	4,300	---
2	Arsenic, TR	36	69	36	---	---
4	Cadmium, TR	9.36	42.5	9.36	---	---
5b	Chromium VI	50	1,100	50	---	---
6	Copper, TR	3.73	5.78	3.73	---	3.73
7	Lead, TR	8.52	220.82	8.52	---	8.52
9	Nickel, TR	8.3	75	8.3	4,600	---
10	Selenium, TR	71	291	71	---	---
13	Zinc, TR	85.62	95.14	85.62	---	85.6
16	TCDD-Equivalents	1.4x10 ⁻⁸	---	---	1.4x10 ⁻⁸	---
34	Methyl Bromide	4,000	---	---	4,000	---
60	Benzo(a)anthracene	0.049	---	---	0.049	---
61	Benzo(a)pyrene	0.049	---	---	0.049	---
73	Chrysene	0.049	---	---	0.049	---
79	Diethyl phthalate	120,000	---	---	120,000	---
86	Fluoranthene	370	---	---	370	---
	Total PAH (Note a)	---	---	---	---	0.049
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) (Note b,)	0.00017	---	0.03	0.00017	0.00017

Notes to Table F-8

- a. CTR human health criteria were not established for total PAHs. Therefore, the CTR criterion for individual PAHs of 0.049 µg/L is applied individually to benzo(a)anthracene, benzo(a)pyrene, and chrysene. The CTR criteria for pyrene is 11,000 µg/L.
- b. CTR human health criteria for PCBs applies to total PCBs, e.g., the sum of all congener or isomer or homolog or aroclors analyses. Total PCBs as aroclors shall

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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 Notes to Table F-8

Table F-7 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 discharges 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 in accordance with the Harbor Toxics TMDL.

The Harbor Toxics TMDL assigns a final sediment WLA for cadmium (1.2 mg/kg dry sediment) but does not assign a concentration-based WLA for cadmium in the water portion of the effluent. Therefore, WQBELs for cadmium have been derived in this Order using CTR criteria and the SIP procedures. Compliance with this WQBEL for cadmium will be used to demonstrate compliance with the sediment WLA for cadmium.

The Harbor Toxics TMDL assigned concentration-based waste load allocations (WLAs) to any future minor NPDES permits or enrollees under a general NPDES permit. The TMDL states, *“The allocations are set equal to the saltwater targets for metals and equal to the human health targets for the organic compounds in CTR. The averaging period for the concentration-based WLAs shall be consistent with that specified in the regulation establishing the criterion or objective or relevant implementation guidance published by the establishing agency.”*

3. Determining the Need for WQBELs

a. Reasonable Potential Analysis (RPA) Methodology

Consistent with section 1.3 of the SIP, the Regional Water Board conducts a Reasonable Potential Analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. If there is an applicable TMDL-based WLA, then WQBELs are developed using the WLA pursuant to 40 CFR section 122.44(d)(1)(vii)(B). Otherwise, the Regional Water Board analyzes effluent and receiving water data and identifies the maximum observed effluent concentration (MEC) and maximum background concentration (B) in the receiving water for each constituent. To determine reasonable potential, the MEC and the B are then compared with the applicable water quality objectives (C) outlined in the CTR, NTR, as well as the Basin Plan. For all pollutants that have a reasonable potential to cause or contribute to an excursion above a state water quality standard, numeric WQBELs are required.

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

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

Sufficient effluent and receiving water data are needed to conduct a complete RPA. If data are not sufficient, the Discharger may be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification. Monitoring data for storm water discharges reported during the period of first quarter 2017 thru first quarter 2019, are used for the RPA.

b. Reasonable Potential Analysis Results for Priority Pollutants

The discharge of storm water commingled with hydrostatic test water (from six new tanks) is a new waste stream in this Order and no monitoring data were available for an RPA. As discussed above, the Regional Water Board determines reasonable potential by applying steps 1-8 of section 1.3 of the SIP. When effluent data is unavailable or insufficient, the SIP directs the Regional Water Board to skip to Step 5 (related to ambient conditions). If ambient data is unavailable or insufficient, Step 7 of the SIP directs the Regional Water Board to consider other available information to determine if a WQBEL is required.

Per Step 7, the Regional Board considered information such as the CWA 303(d) listing for a pollutant, discharge type, compliance history, or other applicable factors to determine whether WQBELs were required. Because of the operations (storage and transfer of crude oil) at the Facility, the pollutants of concern are oil and grease, trace metals, solids, and total residual chlorine (from hydrostatic test water from six new tanks). The prior Order (Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01) included WQBELs for TCDD-equivalents, selenium, and toxicity. These constituents were identified based on a review of pollutants commonly found in discharges from bulk petroleum product storage facilities, materials stored or used on-site, and/or were historically detected in the effluent. In addition, the prior Order established effluent limitations for copper, lead, selenium, zinc, PAHs (applied individually to benzo(a)anthracene, benzo(a)pyrene, and chrysene), pyrene, chlordane, 4,4'-DDT, dieldrin, and total PCBs, and a performance goal for cadmium and because of the established WLAs for these constituents in the Harbor Toxics TMDL. Further, pollutants identified on the 303(d) list for the Dominguez Channel Estuary, such as benthic community effects, benzo(a)pyrene (3,4 Benzopyrene-7-d), benzo[a]anthracene, chlordane (tissue), chrysene (C1-C4), copper, indicator bacteria, lead, polychlorinated biphenyls (PCBs), phenanthrene, pyrene, and toxicity are also considered pollutants of concern. Storm water and hydrostatic test water commingled with

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storm water may carry a combination of pollutants that may contribute to chronic toxicity. Therefore, toxicity, an indicator of the presence of toxic pollutants, is also considered a pollutant of concern. Therefore, WQBELs have been established for TCDD-equivalents, toxicity, cadmium, copper, lead, zinc, PAHs (applied individually to benzo(a)anthracene, benzo(a)pyrene, and chrysene), and pyrene, chlordane, 4,4'-DDT, dieldrin, and total PCBs for the discharge of storm water commingled with hydrostatic test water.

For the storm water only discharge, the RPA was performed using data collected by the Discharger at Monitoring Location EFF-001 during the term of Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01 (from February 2017 through March 2019). Based on the RPA, pollutants that demonstrate reasonable potential are copper and TCDD-Equivalents. In addition, based on the sediment monitoring data (Table F-3 in this Fact Sheet), cadmium demonstrates reasonable potential. The table below summarizes results from the RPA. Only CTR pollutants that were detected in the effluent or receiving water are included in the table.

Table F-9. Summary of Reasonable Potential Analysis

CTR Number	Constituent	Applicable Water Quality Criteria (C) (µg/L)	Maximum Detected Effluent Conc. (MEC) (µg/L)	Maximum Detected Receiving Water Conc. (B) (µg/L)	RPA Result Need Limit?	Reason
1	Antimony	4300	0.68	Not Detected	No	MEC < C
2	Arsenic	36	5.1	2.5	No	MEC < C
5a	Chromium (III)	No Criteria	1300	Not Detected	No	No Criteria
5b	Chromium (VI)	50	0.26	Not Detected	No	MEC < C
6	Copper	3.73	4.6	10	Yes	TMDL
7	Lead	8.52	0.6	4.1	Yes (See Item c below)	TMDL
9	Nickel	8.3	1.7	2.5	No	MEC < C
10	Selenium	71	0.58	Not Detected	No	MEC < C
13	Zinc	85.6	36	58	Yes (See Item c below)	TMDL
16	TCDD-Equivalents	1.4x10 ⁻⁸	8.60E-07	7.00E-07	Yes	MEC > C
34	Methyl Bromide	4,000	2.1	---	No	MEC < C
61	Benzo(a)pyrene	0.049	0.17	Not Detected	Yes (See Item c below)	TMDL s
79	Diethyl phthalate	120,000	0.387.0	0.33	No	MEC < C

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CTR Number	Constituent	Applicable Water Quality Criteria (C) (µg/L)	Maximum Detected Effluent Conc. (MEC) (µg/L)	Maximum Detected Receiving Water Conc. (B) (µg/L)	RPA Result Need Limit?	Reason
86	Fluoranthene	370	0.11	0.14	No	MEC < C

c. Pollutants with Total Maximum Daily Load (TMDL)

The Regional Water Board developed WQBELs for cadmium, copper, lead, zinc, benzo(a)anthracene, benzo(a)pyrene, chrysene, pyrene, chlordane, 4,4'-DDT, dieldrin, and total PCBs based on the waste load allocations included in the Harbor Toxics TMDL. The Regional 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 an additional reasonable potential analysis at the permitting stage for effluent limitations consistent with the assumption and requirements of a TMDL WLA. Similarly, Section 1.3 of the SIP recognizes that a reasonable potential analysis is not necessary at the permitting stage if a TMDL has been developed.

d. Reasonable Potential Analysis Results for Mercury – Mercury Provision

As discussed in section III.C.12 above, this Order implements the Mercury Provisions. Table 1 of the Mercury Provisions establishes mercury numeric action level (NAL) 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 Mercury Provisions outline modified Reasonable Potential Analysis procedures that consist of comparing the highest observed annual average mercury concentration with the Table 1 criteria. Regional Water Board staff reviewed monitoring data during years of discharge (2017 through 2019). The monitoring data indicated non-detect (<0.1 µg/L). The CTR includes a water quality objective of 0.051 µg/L. Since the monitoring data was non-detect, the Facility has not demonstrated reasonable potential and an effluent limitation for mercury is not established in this Order. Monitoring requirements for mercury are included in this Order to evaluate reasonable potential.

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).

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- iii. Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Water Board.
- b. WQBELs for copper, lead, zinc, benzo(a)anthracene, benzo(a)pyrene, chrysene, pyrene, chlordane, 4,4'-DDT, dieldrin, and total PCBs are established based on the final WLAs established in the Harbor Toxics TMDL. As mentioned above, the Harbor Toxics TMDL assigns a final sediment WLA for cadmium but does not assign a concentration-based WLA for cadmium in the water portion of the effluent. Therefore, the WQBELs for cadmium are established based on the CTR. The WQBELs for TCDD equivalents are established based on the CTR.
- c. In this Order, no dilution credit is being allowed. However, in accordance with the reopener provision in section VI.C.1.f in the Order, this Order may be reopened upon the submission by the Discharger of adequate information to establish appropriate dilution credits or a mixing zone, as determined by the Regional Water Board.
- d. The process for developing the limits is in accordance with Section 1.4 of the SIP. Two sets of Average Monthly Effluent Limitations (AMEL) and Maximum Daily Effluent Limitation (MDEL) values are calculated separately, one set for the protection of aquatic life and the other for the protection of human health. The AMEL and MDEL limitations for aquatic life and human health are compared, and the most restrictive AMEL and the most restrictive MDEL are selected as the WQBEL.

Example of WQBELs Calculation

Using total recoverable copper as an example, the following demonstrates how WQBELs were established for this Order. The development and calculation of all WQBELs in this Order are described below:

Calculation of aquatic life AMEL and MDEL

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

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

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

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

D = The dilution credit, and

B = The ambient background concentration

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

$$ECA = C$$

For total recoverable copper, the applicable WLA is:

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$$ECA = WLA_{\text{chronic}} = 3.73 \mu\text{g/L}$$

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

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

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

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 Not Detected, 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. Since there is less than 10 samples, CV shall be set equal to 0.6.

For total recoverable copper, based on the Harbor Toxics TMDL, the following data were used to develop the chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals):

Number of Samples	CV	ECA Multiplier _{acute}	ECA Multiplier _{chronic}
9	0.60	Not Applicable	0.527

Total Recoverable Copper:

Note that for total recoverable copper, the TMDL WLA is based on the chronic criterion in the CTR, and therefore only chronic multipliers will be used to develop the effluent limitations.

$$LTA_{\text{copper}} = 3.73 \mu\text{g/L} \times 0.527 = 1.97 \mu\text{g/L}$$

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

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

For total recoverable copper, only the chronic LTA is calculated, no comparison is made

$$LTA = LTA_{\text{copper}} = 1.97 \mu\text{g/L}$$

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Step 4: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as Average Monthly Effluent Limitations (AMEL) and Maximum Daily Effluent Limitation (MDEL). The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the CV of the data set, the number of samples (for AMEL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in section 1.4, Step 5 of the SIP and will not be repeated here.

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

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

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

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

Number. of Samples Per Month	CV	Multiplier _{MDEL 99}	Multiplier _{AMEL 95}
4	0.6	3.11	1.55

$$AMEL = 1.97 \mu\text{g/L} \times 1.55 = 3.1 \mu\text{g/L}$$

$$MDEL = 1.97 \mu\text{g/L} \times 3.11 = 6.1 \mu\text{g/L}$$

Calculation of human health AMEL and MDEL

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

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

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

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

There are no human health criteria for total recoverable copper. Therefore, there will be no AMEL or MDEL calculated from human health criteria for copper.

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

AMEL _{aquatic life}	MDEL _{aquatic life}	AMEL _{human health}	MDEL _{human health}
3.1 µg/L	6.1 µg/L	Not Applicable	Not Applicable

The lowest (most restrictive) effluent limits are based on aquatic health and were incorporated into this Order. For copper, the AMEL and MDEL based on aquatic life criteria are established as the WQBELs.

Final WQBELs for Total Recoverable Copper:

AMEL = 3.1 µg/L

MDEL = 6.1 µg/L

WLAs for copper, lead, zinc, benzo(a)anthracene, benzo(a)pyrene, chrysene, pyrene, chlordane, 4,4'-DDT, dieldrin, and total PCBs have been established in the Harbor Toxics TMDL; therefore, effluent limitations for these parameters are established based on the Harbor Toxics TMDL. In addition, the WQBELs for TCDD is based on human health criteria as there is no aquatic life criteria.

5. WQBELs Based on Basin Plan Objectives

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

- a. **pH.** This Order includes instantaneous minimum and maximum effluent limitations for pH to ensure compliance with the Basin Plan objectives.
- b. **Ammonia.** The Basin Plan includes objectives for waters not characteristic of freshwater for unionized ammonia of 0.233 mg/L (1-hour avg.) and 0.035 mg/L (4-day avg.). The unionized ammonia objectives were translated to ammonia (total as N) objectives based on receiving water values for pH, temperature and salinity. The translated objectives are 0.85 mg/L (1-hour avg.), 0.47 mg/L (4-day avg.) and 0.19 mg/L (30-day avg.). Effluent monitoring for ammonia (total as N) from February 22, 2017 through March 7 2019, indicates a maximum result for that period was 0.17 mg/L, which is below the calculated objectives. Therefore, reasonable potential has not been demonstrated and this Order does not establish effluent limitations for ammonia based on Basin Plan objectives. Monitoring requirements for this pollutant are retained in this Order.
- c. **Dissolved Oxygen.** This Order applies the water quality objective for dissolved oxygen as a receiving water limitation. This Order requires effluent and receiving water monitoring for dissolved oxygen.

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- d. **Temperature.** This Order includes an instantaneous effluent temperature limitation of 86°F based on the Thermal Plan and consistent with a white paper entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*. This effluent limitation was determined to be appropriate for the protection of the Basin Plan objective for temperature. Additionally, this Order includes the following effluent limitation consistent with the Thermal Plan: the maximum temperature of the effluent shall not exceed the natural receiving water temperature by more than 20°F.
- e. **Turbidity.** Where natural turbidity is between 0 to 50 NTU, increases shall not exceed 20%. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%. This Order applies the water quality objective for turbidity as a receiving water limitation in addition to the technology-based effluent limitation.
- f. **Total Suspended Solids.** The Basin Plan requires that, “Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses.” This narrative objective has been translated into a numeric effluent limitation, based on U.S EPA’s *Quality Criteria for Water* (commonly known as the “Gold Book”). In the Gold Book, U.S EPA notes that in a study downstream from a discharge where inert suspended solids were increased to 80 mg/L, the density of macroinvertebrates decreased by 60 percent...”. This indicates that suspended solids concentrations of 80 mg/L in the receiving water resulted in adverse effects to aquatic life. Therefore, the maximum daily TBEL of 75 mg/L for Total Suspended Solids (TSS) is expected to be protective of receiving water quality, consistent with what is typically established for similar discharges in the Los Angeles Region, and achievable with technologies employed at the Facility.
- g. **Oil and Grease.** Oil and grease are not readily soluble in water and form a film on the water surface. Oily films can coat birds and aquatic organisms, impacting respiration and thermal regulation, and causing death. Oil and grease can also cause nuisance conditions (odors and taste), are aesthetically unpleasant, and can restrict a wide variety of beneficial uses. The Basin Plan requires that, “Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.” This narrative objective has been translated into a numeric effluent limitation, based on U.S EPA’s *Quality Criteria for Water* (commonly known as the “Gold Book”). This Order includes the monthly average (10 mg/L) and maximum daily (15 mg/L) limitations for oil and grease.

6. Bacteria.

The Bacteria Provisions include bacteria water quality objectives 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. These objectives are: a six-week rolling geometric mean of

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Enterococci not to exceed 30 colony forming units (cfu) or MPN (most probable number (MPN) per 100 milliliters (mL), calculated weekly, with 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. Monitoring data submitted during the first quarter 2019 indicates that the effluent limitations for *enterococci* (104 MPN/100mL) were exceeded. The maximum reported value for enterococci was 220 MPN/100mL and the maximum reported value for fecal coliform was 930 MPN/100mL Therefore, this Order includes bacteria limitations based on the Bacteria Provisions for *Enterococcus*.

7. Whole Effluent Toxicity (WET)

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

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

Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01 included chronic toxicity monitoring requirements at Discharge Point 001. The chronic toxicity in-stream waste concentration (IWC) for this discharge is 100 percent effluent. The discharge is subject to determination of “Pass” or “Fail” and “Percent Effect” from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (H_0) for the TST approach is:

$$H_0: \text{Mean response (In-stream Waste Concentration (IWC) in \% \text{ effluent})} \leq (0.75 \times \text{mean response (Control)}).$$

A test result that does not reject this null hypothesis is reported as “Fail”. Monitoring data from February 22, 2017 through February 4, 2019, indicates “Pass” for chronic toxicity.

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

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D. Final Effluent Limitation Considerations

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. The effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01 with the exception of the removal of the ammonia, selenium, fecal coliform, and total coliform bacteria effluent limitations. The removal of the WQBELs for these constituents satisfies one or more of the foregoing exceptions to anti-backsliding as described below.

a. Selenium and Ammonia

Section 402(o)(2)(B) states that effluent limitations may be less stringent in instances when information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance. Effluent monitoring data collected from February 2017 through March 2019 indicated a maximum effluent concentration for selenium of 0.58 µg/L that was less than the applicable water quality criteria (71 µg/L) and was less than the maximum effluent concentration (0.71 µg/L) during the previous permit cycle (December 2008 through November 2013). The effluent monitoring data collected from February 2017 through March 2019 was evaluated for reasonable potential in accordance with SIP procedures. The results based on this recent data indicated there was no reasonable potential for detected concentrations of selenium to cause or contribute to an exceedance of a water quality objective and that there was a decrease in the amount of selenium discharged to the receiving water from the Facility. Ammonia was detected but not quantified (DNQ) at concentrations of 0.17 mg/L, which is less than the maximum effluent limitations of 0.233 mg/L. These results based on the recent data indicate there was no reasonable potential for detected concentrations of ammonia to exceed the water quality criteria.

In addition, removal of the effluent limitations for ammonia and selenium is allowed pursuant to CWA Section 303(d)(4)(B). The receiving water into which the effluent discharges is an attainment water for ammonia and selenium. Stated another way, the quality of the water equals or exceeds levels necessary to protect the designated uses, and it meets water quality standards for ammonia and selenium. Further, the revision is consistent with antidegradation policies, as set forth below. Relaxation of the effluent limitations will not result in a violation of any applicable criteria or water quality objective. Thus, the revision is justified under both CWA section 402(o) and section 303(d)(4)(B). Nonetheless, this Order retains effluent monitoring for these pollutants, in accordance with the SIP.

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b. Fecal Coliform and Total Coliform

Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01 included maximum daily effluent limitations for fecal coliform and total coliform based on the Basin Plan. Monitoring results for total coliform from February 2017 through March 2019 were all in compliance with the effluent limitations. Therefore, reasonable potential has not been demonstrated and the effluent limitations for total coliform are not retained in this Order pursuant to CWA section 402(o)(2)(B)(i) and section 303(d)(4)(B).

Monitoring data during the first quarter 2019 indicated fecal coliform exceeded the bacteria limitations as discussed in section II.D. "Compliance Summary" of this Fact Sheet. Removal of the effluent limitations for fecal coliform is allowed pursuant to CWA Section 303(d)(4)(A) which allows revision of effluent limits in non-attainment waters if "the cumulative effect of all such revised effluent limitations based on such total maximum daily load or waste load allocation will assure the attainment of such water quality standard, or (ii) the designated use which is not being attained is removed in accordance with regulations" established under the CWA. Here, the applicable water quality objective was adjusted. On August 7, 2018, the State Water Resources Control Board adopted Resolution No. 2018-0038, *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries in California – Part 3 Bacteria Provisions* (Bacteria Provisions). The new Bacteria Provisions supersede numeric bacteria criteria for the Rec-1 beneficial use included in the Basin Plan. The Bacteria Provisions do not affect TMDLs established before February 4, 2019. However, as previously discussed, the Los Angeles Harbor TMDL does not include WLAs for indicator bacteria in the Dominguez Channel Estuary. Therefore, this Order implements the Bacteria Provisions to address bacteria impairments in the Dominguez Channel Estuary. The Bacteria Provisions establish *enterococcus* as the sole indicator of pathogens in saline inland surface waters, enclosed bays and estuaries. Effluent and receiving water monitoring for *enterococcus* are therefore established in this Order consistent with the requirements included in the Bacteria Provisions. Compliance with the enterococcus limitations are expected to ensure attainment of Rec-1 beneficial uses in the Dominguez Channel Estuary.

c. Pyrene

There is an error in the existing Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01 for the Maximum Daily Effluent Limitation for pyrene (22068 µg/L and pounds per day (lbs/day) equal to 92.02), which was inadvertently miscalculated. The Maximum Daily Effluent Limitation was recalculated, and the limit should have been 22110 µg/L and lbs/day of 92.2. The Order includes the correct effluent limitations for pyrene of 22110 µg/L and lbs/day of 92.2. The relaxation of the effluent limitations for pyrene is allowed pursuant to CWA Section 303(d)(4)(B), which allows revision of effluent limitations in attainment waters provided the revision is consistent with antidegradation policies. The quality of the water in the Dominguez Channel Estuary meets water quality standards for pyrene. Receiving water monitoring data for pyrene during the term of the existing permit indicated pyrene levels

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were 0.13 µg/L. The revision of the Pyrene WQBEL is consistent with antidegradation policies, as set forth below and will not result in a violation of any applicable criteria or water quality objective. The effluent monitoring data indicates that pyrene was non-detected (ND) in the stormwater discharges. Further, pyrene is not expected to be in the discharge of stormwater commingled with hydrostatic test water because hydrostatic test water originated as potable water and pyrene is not expected from the new tanks. Thus, the revision is justified under CWA Section 303(d)(4)(B).

2. Antidegradation Policies

40 CFR section 131.12 requires that the state water quality standards include an anti-degradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. State Water Board Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge.

The final effluent limitations in this Order hold the discharger to performance levels that will not cause or contribute to water quality impairment or degradation. The permitted discharge is not a new discharge and this Order does not provide for an increase in the permitted design flow. This Order also does not 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 adversely impact the beneficial uses or degrade the water quality of the Dominguez Channel Estuary and are developed consistent with applicable effluent criteria, the protocol established to calculate effluent limitations and state regulations. To the extent this Order removes an effluent limitation, the removal of effluent limitations is not expected to result in degradation. As discussed in Section IV.D.1 above, the removal of the effluent limitations for ammonia, selenium, and total coliform will not allow degradation of the receiving water because the detected concentrations of ammonia, selenium, and total coliform did not demonstrate reasonable potential to cause or contribute to an excursion above water quality objectives. Removal of the effluent limitation for fecal coliform is also not expected to result in degradation. Although there were exceedances of the fecal coliform and enterococcus WQBELs under the prior permit, the discharge was terminated immediately upon receiving the analytical results that indicated there were exceedances thereby eliminating the ongoing risk of degradation. This Order retains effluent and receiving water monitoring for enterococcus consistent with the requirements included in the Bacteria Provisions. Compliance with the enterococcus limitations are expected to ensure attainment of Rec-1 beneficial uses in the Dominguez Channel Estuary." Even if there is an exceedance of the enterococcus WQBELs, the discharge is infrequent and only occurs when the outer pond reaches capacity. In addition, the Order includes mechanisms to ensure that the discharge is

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immediately discontinued upon discovery of an exceedance to prevent degradation.

This Order is also not expected to result in degradation of groundwater since the water used for the hydrostatic testing is potable water and the compacted earth design of the outer pond minimizes any infiltration losses. Even if the discharge infiltrated to groundwater, this degradation would be consistent with the state antidegradation policies because the degradation would be minimal and of short duration because the use of the outer pond for storing the hydrostatic test water will be discontinued after the testing is complete for the 6 new tanks. Additionally, the reuse of this water is consistent with the maximum benefit to the people of the state because it helps reduce local water scarcity by minimizing the amount of potable water needed for hydrostatic testing. To verify that the hydrostatic test water does not impact the groundwater quality, this Order includes monitoring requirements for the hydrostatic test water prior to discharging to the outer pond or transferring the hydrostatic test water from the inner pond to the outer pond for MCL and Basin Plan groundwater constituents. If monitoring results indicate that the discharge has the potential to degrade groundwater, the Order may be modified as necessary.

In light of the foregoing, the cumulative effect of all effluent limitations and other requirements included in this Order is to ensure that applicable water quality objectives of the receiving water will be attained, thereby protecting the beneficial uses of the receiving water. Therefore, the permitted discharge is consistent with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution 68-16.

3. Mass-based Effluent Limitations

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

Mass based effluent limitations are established using the following formula:

$$\text{mass} \left(\frac{\text{lbs}}{\text{day}} \right) = \text{Flow (MGD)} \times \text{Concentration} \left(\frac{\text{mg}}{\text{L}} \right) \times 8.34 \text{ (conversion factor)}$$

where: Mass = mass limitation for a pollutant (pounds per day)

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

Flow rate = discharge flow rate (MGD)

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Mass-based effluent limitations applicable to Discharge Points 001 are based on a maximum flow of 0.5 MGD.

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, oil and grease, TSS, turbidity, phenols, sulfides, and TPH at Discharge Point No. 001. Restrictions on these parameters are discussed in section IV.B.2 of this Fact Sheet. This Order’s technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

WQBELs 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 USEPA on May 18, 2000. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

5. Summary of Final Effluent Limitations

Table F-10 below summarizes the final effluent limitations at Discharge Point 001.

Table F-10. Summary Final Effluent Limitations for Discharge at Discharge Point 001

Parameter	Units (Note a)	Average Monthly (Hydrotest commingled with storm water only)	Maximum Daily	Basis (Note b)
pH	Standard units	---	Note c	BP
BOD ₅ @ 20 °C	mg/L	20	30	BPJ
BOD ₅ @ 20 °C	lbs/day	83	125	BPJ
Oil and Grease	mg/L	10	15	BPJ, GB
Oil and Grease	lbs/day	42	63	BPJ, GB
Total Suspended Solids (TSS)	mg/L	50	75	BPJ, GB
TSS	lbs/day	209	313	BPJ, GB
Temperature (Note d)	°F	---	86	BP, TP, WP
Turbidity	NTU	50	75	BPJ

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Parameter	Units (Note a)	Average Monthly (Hydrotest commingled with storm water only)	Maximum Daily	Basis (Note b)
Phenolics, Total	mg/L	---	1.0	BPJ
Phenolics, Total	lbs/day	---	4.2	BPJ
Sulfides	mg/L	---	1.0	BPJ
Sulfides	lbs/day	---	4.2	BPJ
Total Residual Chlorine	µg/L	---	100	Basin Plan,
Total Residual Chlorine	lbs/day	---	0.42	Basin Plan
Chronic Toxicity	Pass or Fail, % Effect (TST)	Pass	Pass or % Effect <50	BP, BPJ
<i>Enterococcus</i>	CFU or MPN/100 ml	(Note e)	(Note e)	Bacteria Provisions
Cadmium, TR	µg/L	8	15	CTR, SIP
Cadmium, TR	lbs/day	0.033	0.063	CTR, SIP
Copper, TR	µg/L	3.1	6.14	TMDL
Copper, TR	lbs/day	0.013	0.026	TMDL
Lead, TR	µg/L	7	14	TMDL
Lead, TR	lbs/day	0.03	0.06	TMDL
Zinc, TR	µg/L	70	141	TMDL
Zinc, TR	lbs/day	0.29	0.59	TMDL
Chlordane	µg/L	0.00059	0.0012	TMDL
Chlordane	lbs/day	2.5E-6	5.0E-6	TMDL
4,4'-DDT	µg/L	0.00059	0.0012	TMDL
4,4'-DDT	lbs/day	2.5E-6	5.0E-6	TMDL
Dieldrin	µg/L	0.00014	0.00028	TMDL
Dieldrin	lbs/day	5.8E-7	1.2E-6	TMDL
PCBs, Total	µg/L	0.00017	0.00034	TMDL
PCBs, Total	lbs/day	7.1E-7	1.4E-6	TMDL
TCDD-Equivalents	µg/L	1.4E-8	2.8E-8	CTR, SIP
TCDD-Equivalents	lbs/day	5.8E-11	1.2E-10	CTR, SIP
Benzo(a)anthracene	µg/L	0.049	0.098	TMDL
Benzo(a)anthracene	lbs/day	0.0002	0.00041	TMDL
Benzo(a)pyrene	µg/L	0.049	0.098	TMDL
Benzo(a)pyrene	lbs/day	0.0002	0.00041	TMDL
Chrysene	µg/L	0.049	0.098	TMDL
Chrysene	lbs/day	0.0002	0.00041	TMDL
Pyrene (Note f)	µg/L	11000	22110	TMDL
Pyrene (Note f)	lbs/day	45.87	92.2	TMDL

R E V I S E D T E N T A T I V E

Notes to Table F-10:

- a. The mass(lbs/day) limitations are based on a maximum flow of 0.500 MGD and is calculated as follows:

$$\text{mass} \left(\frac{\text{lbs}}{\text{day}} \right) = \text{Flow(MGD)} \times \text{Concentration} \left(\frac{\text{mg}}{\text{L}} \right) \times 8.34 \text{ (conversion factor)}$$

- b. Abbreviations of Basis for Effluent Limitations:

BP = Basin Plan;
BPJ = Best Professional Judgment;
GB = U.S. EPA Gold Book
TP= Thermal Plan
WP = White Paper;
CTR = California Toxic Rule;
SIP = State Implementation Policy;
TMDL = Total Maximum Daily Load (Based on the Harbors Toxics TMDL and calculated using the CTR-SIP Procedures);

- c. The pH shall be within an instantaneous minimum of 6.5 standard unit and an instantaneous maximum of 8.5 standard unit at all times.
- d. 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.
- e. ***Enterococcus***: 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 six-week rolling geometric mean (GM) of enterococci not to exceed 30 colony forming units (cfu) per 100 milliliters (mL), calculated weekly, with 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. Only the geometric mean values shall be applied based on a statistically sufficient number of samples, which is generally not less than five samples distributed over a six-week period. However, if a statistically sufficient number of samples is not available to calculate the geometric mean, then attainment of the water quality standard shall be determined based only on the STV.
- f. There is an error in the existing Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01 for the Maximum Daily effluent limitation for pyrene (22068 µg/L and pounds per day (lbs/day) equal to 92.02) which was inadvertently miscalculated. The Maximum Daily effluent limitation was recalculated and the limit should have been 22110 µg/L and lbs/day of 92.2. This Order includes the correct effluent limitations for pyrene of 22110 µg/L and lbs/day of 92.2.

End of Notes to Table F-10

- E. Interim Effluent Limitations – Not Applicable**
- F. Land Discharge Specifications – Not Applicable**
- G. Recycling Specifications - Not Applicable**

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V. RATIONALE FOR RECEIVING WATER LIMITATIONS

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

A. Surface Water

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. These water quality objectives include the requirement to maintain high-quality waters pursuant to federal regulations (40 CFR section 131.12) and State Water Board Resolution Number 68-16. Numeric and narrative water quality objectives applicable to surface waters within the Los Angeles Region and the Dominguez Channel Estuary are also included in the Thermal Plan and Enclosed Bays and Estuaries Plan, including the provisions related to Bacteria, Sediment Quality, Trash Control and Mercury. If there is reasonable potential or a U.S. EPA-approved TMDL WLA, then WQBELs are included in this Order to ensure protection of those water quality standards.

B. Groundwater – Not Applicable

VI. RATIONALE FOR PROVISIONS

A. 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) 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).

A. Special Provisions

1. Reopener Provisions

The reopener provisions included in section VI.C.1 of the Waste Discharge Requirements of this Order were based on 40 CFR part 123 and the previous Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications can include, but are not limited to, the promulgation of new federal regulations, modification in toxicity requirements,

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or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan or adoption of applicable TMDLs associated with the receiving water.

2. Special Studies and Additional Monitoring Requirements

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

This provision is based on section 4 of the SIP, Toxicity Control Provisions, which establishes minimum toxicity control requirements for implementing the narrative toxicity objective for aquatic life protection established in the basin plans of the State of California.

b. Harbor Toxics TMDL Water Column, Sediment, and Fish Tissue Monitoring for Dominguez Channel, Torrance, 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, start a new collaborating group, or develop a site-specific plan to comply with this requirement.

To comply with the requirements in Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01, Tesoro developed a site-specific plan and submitted it to the Regional Water Board on May 26, 2016. Tesoro submitted annual reports for the years (2017 and 2019) that storm water discharges occurred. The effluent sediment monitoring program was not implemented because there were no exceedances of the total suspended solids (TSS) effluent limit or any of the CTR TMDL-based effluent limitations.

3. Best Management Practices and Pollution Prevention

a. Storm Water Pollution Prevention Plan (SWPPP)

This Order requires the Discharger to update, as necessary, and continue to implement the SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing trash and contaminated storm water runoff from being discharged directly into the receiving water. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water, and to prevent the entrainment of trash in storm water that is discharged directly into surface waters. SWPPP requirements are included as Attachment G, based on 40 CFR section 122.44(k).

b. Best Management Practices Plan (BMPP)

This Order requires the Discharger to develop and implement a BMPP. The BMPP may be included as a component of the SWPPP. 40 CFR section 122.44(k) requires that permits include best management practices when reasonably necessary to achieve the effluent limitations

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and standards or to carry out the purpose and intent of the CWA. Consistent with 40 CFR section 122.44(k), this Order requires the Discharger to update and implement a BMPP. The purpose of the BMPP is to establish site-specific procedures that minimize the amount of pollutants entering wastewater discharges from materials being stored and activities being conducted throughout the entire facility. The BMPP shall incorporate the requirements contained in Attachment G. Attachment G requires a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges.

c. Spill Contingency Plan (SCP)

This Order requires the Discharger to develop and 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. A Spill Prevention, Control, and Countermeasure (SPCC) Plan may satisfy this requirement.

4. Construction, Operation, and Maintenance Specifications

This provision included in Section VI.C.4. of the Waste Discharge Requirements of this Order is based on the requirements of 40 CFR section 122.41(e).

In addition, the Discharger is required to address potential climate change impacts through the development and implementation of a Climate Change Effects Vulnerability Assessment and Management Plan (Climate Change Plan), which is due 12 months after the effective date of the Order. This requirement is based on State Water Board's Resolution No. 2017-0012 and the Regional Water Board's Resolution No. R18-004.

5. Other Special Provisions – Not Applicable

6. Compliance Schedules – Not Applicable

VII. 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 sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this Facility.

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A Influent Monitoring – Not Applicable

B. Effluent Monitoring – Discharge Point 001

Effluent monitoring for pollutants expected to be present in the discharge will be required at Monitoring Location EFF-001 as prescribed in Table E-2 in the MRP (Attachment E). To demonstrate compliance with established effluent limitations, the Order retains the monitoring requirements from Order No. R4-2014-0189 as amended by Order No. R4-2014-0189-A01 with the exception of fecal coliform, total coliform, selenium, and ammonia (see section IV.D.1. of this Fact Sheet). Effluent monitoring is required for ammonia once per year and selenium once per discharge event to determine reasonable potential.

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

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. A chronic toxicity test measures mortality, reproduction, and growth. A chemical at a low concentration can have chronic effects but no acute effects. For this Order, chronic toxicity monitoring in the discharge is required. The chronic toxicity testing results are analyzed using U.S. EPA’s 2010 TST statistical approach.

D. Receiving Water Monitoring

1. Surface Water

The SIP requires monitoring of the upstream receiving water for the CTR priority pollutants, including TCDD equivalents, to determine reasonable potential. This Order requires the Discharger to conduct annual receiving water monitoring of the CTR priority pollutants, including TCDD equivalents, at the upstream Receiving Water Monitoring Location RSW-001 during years in which a discharge occurs from the Facility. Additionally, the Discharger must sample and analyze within applicable holding times for pH, temperature, salinity, and dissolved oxygen in the receiving water at the same time samples are collected for priority pollutant (including TCDD equivalents) analyses.

2. Groundwater – Not Applicable

3. Other Monitoring Requirements

a. Rainfall Monitoring and Visual Monitoring Requirements

Daily rainfall information will provide the weather condition in the vicinity of the discharge. The Discharger is required to conduct visual observations of all discharges from the facility to observe the presence

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of floating and suspended materials, oil and grease, discoloration, turbidity, and odor. These requirements are consistent with requirements of other dischargers in the Region.

b. Regional Monitoring

Regional monitoring is required to determine compliance with the assigned wasteload and load allocations specified in the Harbor Toxics TMDL. The Discharger may develop a site- specific plan or join a group of stakeholders in the development of Regional Monitoring program(s) to address pollutants as specified in the Harbor Toxics TMDL. If the Discharger intends to address the Plan requirements in combination with another facility or by joining a group already formed, the Plan must address monitoring requirements for all water bodies to which discharges occur.

c. Land Discharge Monitoring

Land discharge monitoring is required when hydrostatic testing water from the newly constructed tanks is discharged to the outer pond or from the inner pond to the outer pond for MCL and Basin Plan groundwater constituents to protect the groundwater underlying the site.

VIII. PUBLIC PARTICIPATION

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

A. Notification of Interested Persons

The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through email and relevant documents to the tentative permit were also available on the Regional Water Board website.

The public had 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>.

B. Written Comments

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

To be included in the record and provided to the Regional Water Board for its consideration, the written comments were due at the Regional Water Board office by 5:00 p.m. on September 11, 2020.

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C. Public Hearing

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

Date: October 8, 2020
Time: 9:00 a.m.
Location: Remote meeting, no physical location

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

D. Reconsideration of Waste Discharge Requirements

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

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

Or by email at waterqualitypetitions@waterboards.ca.gov

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

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

E. Information and Copying

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

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

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

F. Register of Interested Persons

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

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G. Additional Information

Requests for additional information or questions regarding this order should be directed to Rosario Aston at Rosario.Aston@waterboards.ca.gov or at (213) 576-6653.

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ATTACHMENT G – STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

I. IMPLEMENTATION SCHEDULE

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

II. OBJECTIVES

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

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

The SWPPP shall be revised whenever appropriate and shall be readily available for review by facility employees or Regional Water Board inspectors.

III. PLANNING AND ORGANIZATION

A. Pollution Prevention Team

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

B. Review Other Requirements and Existing Facility Plans

The SWPPP may incorporate or reference the appropriate elements of other regulatory requirements. Facility operators should review all local, state, and federal requirements that impact, complement, or are consistent with the requirements of this permit. Facility operators should identify any existing facility plans that contain storm

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

IV. SITE MAP

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

TABLE A

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

<p>PLANNING AND ORGANIZATION Form Pollution Prevention Team Review other plans</p> <p>ASSESSMENT PHASE Develop a site map Identify potential pollutant sources Inventory of materials and chemicals List significant spills and leaks Identify non-storm water discharges Assess pollutant risks</p> <p>BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE Non-structural BMPs Structural BMPs Select activity and site-specific BMPs</p> <p>IMPLEMENTATION PHASE Train employees Implement BMPs Conduct recordkeeping and reporting</p> <p>EVALUATION / MONITORING Conduct annual site evaluation Review monitoring information Evaluate BMPs Review and revise SWPPP</p>

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The following information shall be included on the site map:

- A. The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, and ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.
- B. The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.
- C. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.
- D. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in section VI.A.4 below have occurred.
- E. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

V. LIST OF SIGNIFICANT MATERIALS

The SWPPP shall include a list of significant materials¹ handled and stored at the site. For each material on the list, describe the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

VI. DESCRIPTION OF POTENTIAL POLLUTANT SOURCES

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

- 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,

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

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disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

2. **Material Handling and Storage Areas.** Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.
3. **Dust and Particulate Generating Activities.** Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.
4. **Significant Spills and Leaks.** Describe materials that have spilled or leaked in significant quantities in storm water discharges or authorized non-storm water discharges since April 17, 1994. Include toxic chemicals (listed in 40 Code of Federal Regulations (CFR) part 302) that have been discharged to storm water 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 storm water or non-storm water discharges, and the preventative measures taken to ensure spill or leaks do not reoccur. Such list shall be updated as appropriate during the term of this Permit.

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

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

Non-storm water discharges that are not authorized by this Permit, other waste discharge requirements, or other NPDES permits are prohibited. The SWPPP must include BMPs to prevent or reduce contact of authorized non-storm water discharges with significant materials (as defined in Footnote 1 of section V above) or equipment.

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

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

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

VII. . ASSESSMENT OF POTENTIAL POLLUTANT SOURCES

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

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

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

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

VIII. STORM WATER BEST MANAGEMENT PRACTICES

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

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

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

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

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

A. Non-Structural BMPs

Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low technology, cost-effective measures. Facility operators should consider all possible non- structural BMPs options before considering additional structural BMPs (see section VIII.B. below). Below is a list of non-structural BMPs that should be considered:

1. **Good Housekeeping.** Good housekeeping generally consists of practical procedures to maintain a clean and orderly facility.

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

B. Structural BMPs

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

1. **Overhead Coverage.** This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.

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

IX. ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION

The facility operator shall conduct one comprehensive site compliance evaluation (evaluation) in each reporting period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 10 days of the approval by the Executive Officer or no later than 90 days after submission to the Regional Water Board, whichever comes first. Evaluations shall include the following:

- A. A review of all visual observation records, inspection records, and sampling and analysis results.
- B. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
- C. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.
- D. An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in section X.E., for implementing SWPPP revisions, (v) any incidents of non-compliance and the corrective actions taken, and (vi) a certification that the facility operator is in compliance with this Permit. If the above certification cannot be provided, explain in the evaluation report why the facility operator is not in compliance with this Permit. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Standard Provisions V.B.5 of Attachment D.

X. SWPPP GENERAL REQUIREMENTS

- A. The SWPPP shall be retained on site and made available upon request of a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.
- B. The Regional Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this section. As requested by the Regional Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the

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minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.

- C.** The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (i) may significantly increase the quantities of pollutants in storm water discharge, (ii) cause a new area of industrial activity at the facility to be exposed to storm water, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.
- D.** The SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a facility operator determines that the SWPPP is in violation of any requirement(s) of this Permit.
- E.** When any part of the SWPPP is infeasible to implement due to proposed significant structural changes, the facility operator shall submit a report to the Regional Water Board prior to the applicable deadline that (i) describes the portion of the SWPPP that is infeasible to implement by the deadline, (ii) provides justification for a time extension, (iii) provides a schedule for completing and implementing that portion of the SWPPP, and (iv) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or modifications. Facility operators shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.
- F.** The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under section 308(b) of the Clean Water Act.

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ATTACHMENT H – LIST OF PRIORITY POLLUTANTS

CTR Number	Parameter	CAS Number	Analytical Methods
1	Antimony	7440360	1
2	Arsenic	7440382	1
3	Beryllium	7440417	1
4	Cadmium	7440439	1
5a	Chromium (III)	16065831	1
5a	Chromium (VI)	18540299	1
6	Copper	7440508	1
7	Lead	7439921	1
8	Mercury	7439976	1631E
9	Nickel	7440020	1
10	Selenium	7782492	1
11	Silver	7440224	1
12	Thallium	7440280	1
13	Zinc	7440666	1
14	Cyanide	57125	1
15	Asbestos	1332214	1
16	2,3,7,8-TCDD	1746016	1
17	Acrolein	107028	1
18	Acrylonitrile	107131	1
19	Benzene	71432	1
20	Bromoform	75252	1
21	Carbon Tetrachloride	56235	1
22	Chlorobenzene	108907	1
23	Chlorodibromomethane	124481	1
24	Chloroethane	75003	1
25	2-Chloroethylvinyl Ether	110758	1
26	Chloroform	67663	1
27	Dichlorobromomethane	75274	1
28	1,1-Dichloroethane	75343	1

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CTR Number	Parameter	CAS Number	Analytical Methods
29	1,2-Dichloroethane	107062	1
30	1,1-Dichloroethylene	75354	1
31	1,2-Dichloropropane	78875	1
32	1,3-Dichloropropylene	542756	1
33	Ethylbenzene	100414	1
34	Methyl Bromide	74839	1
35	Methyl Chloride	74873	1
36	Methylene Chloride	75092	1
37	1,1,2,2-Tetrachloroethane	79345	1
38	Tetrachloroethylene	127184	1
39	Toluene	108883	1
40	1,2-Trans-Dichloroethylene	156605	1
41	1,1,1-Trichloroethane	71556	
42	1,1,2-Trichloroethane	79005	1
43	Trichloroethylene	79016	1
44	Vinyl Chloride	75014	1
45	2-Chlorophenol	95578	1
46	2,4-Dichlorophenol	120832	1
47	2,4-Dimethylphenol	105679	1
48	2-Methyl-4,6-Dinitrophenol	534521	1
49	2,4-Dinitrophenol	51285	1
50	2-Nitrophenol	88755	1
51	4-Nitrophenol	100027	1
52	3-Methyl-4-Chlorophenol	59507	1
53	Pentachlorophenol	87865	1
54	Phenol	108952	1
55	2,4,6-Trichlorophenol	88062	1
56	Acenaphthene	83329	1
57	Acenaphthylene	208968	1
58	Anthracene	120127	1
59	Benzidine	92875	1

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CTR Number	Parameter	CAS Number	Analytical Methods
60	Benzo(a)Anthracene	56553	1
61	Benzo(a)Pyrene	50328	1
62	Benzo(b)Fluoranthene	205992	1
63	Benzo(ghi)Perylene	191242	1
64	Benzo(k)Fluoranthene	207089	1
65	Bis(2-Chloroethoxy)Methane	111911	1
66	Bis(2-Chloroethyl)Ether	111444	1
67	Bis(2-Chloroisopropyl)Ether	108601	1
68	Bis(2-Ethylhexyl)Phthalate	117817	1
69	4-Bromophenyl Phenyl Ether	101553	1
70	Butylbenzyl Phthalate	85687	1
71	2-Chloronaphthalene	91587	1
72	4-Chlorophenyl Phenyl Ether	7005723	1
73	Chrysene	218019	1
74	Dibenzo(a,h)Anthracene	53703	1
75	1,2-Dichlorobenzene	95501	1
76	1,3-Dichlorobenzene	541731	1
77	1,4-Dichlorobenzene	106467	1
78	3,3'-Dichlorobenzidine	91941	1
79	Diethyl Phthalate	84662	1
80	Dimethyl Phthalate	131113	1
81	Di-n-Butyl Phthalate	84742	1
82	2,4-Dinitrotoluene	121142	1
83	2,6-Dinitrotoluene	606202	1
84	Di-n-Octyl Phthalate	117840	1
85	1,2-Diphenylhydrazine	122667	1
86	Fluoranthene	206440	
87	Fluorene	86737	1
88	Hexachlorobenzene	118741	1

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

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CTR Number	Parameter	CAS Number	Analytical Methods
120	PCB-1221	11104282	1
121	PCB-1232	11141165	1
122	PCB-1242	53469219	1
123	PCB-1248	12672296	1
124	PCB-1254	11097691	1
125	PCB-1260	11096825	1
126	Toxaphene	8001352	1

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

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