CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

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ORDER NO. R4-2016-XXXX
NPDES NO. CA0058343

WASTE DISCHARGE REQUIREMENTS FOR TESORO LOGISTICS OPERATIONS, LLC, HATHAWAY TANK FARM DISCHARGE TO THE LOS CERRITOS CHANNEL

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

Table 1. Discharger Information

Discharger	Tesoro Logistics Operations, LLC
Name of Facility	Hathaway Tank Farm
Facility Address	2350 Obispo Avenue
	Signal Hill, CA 90806
	Los Angeles County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude(North)	Discharge Point Longitude (West)	Receiving Water
001	Treated storm water	33.8015º	-118.1525º	Los Cerritos Channel

Table 3. Administrative Information

This Order was adopted on:	June 9, 2016
This Order shall become effective on:	August 1, 2016
This Order shall expire on:	July 31, 2021
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	180 days prior to the Order expiration date
The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as follows:	Minor

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on **June 9, 2016**.

_____
Samuel Unger, P.E., Executive Officer

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I. FACILITY INFORMATION

Information describing the Tesoro Logistics Operations, LLC, Hathaway Tank Farm (Facility) is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

II. FINDINGS

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

A. Legal Authorities. This Order serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the 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 for point source discharges from this Facility to surface waters.

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 Parties. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet.

D. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED that this Order supersedes Order No. R4-2011-0037 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 outfalls 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 past violations of the previous Order.

III. DISCHARGE PROHIBITIONS

A. Wastes discharged at Discharge Point 001 shall be limited to a maximum of 0.7 million gallons per day (MGD) of treated storm water as described in the Fact Sheet (Attachment F). The discharge of wastes from accidental spills or other sources is prohibited.

B. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, Los Cerritos Channel, or other waters of the State, are prohibited.

C. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or a nuisance as defined by section 13050 of the Water Code.

D. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.

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E. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board (State Water Board) as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal CWA, and amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

F. The discharge of any radiological, chemical, or biological warfare agent into the waters of the state is prohibited under Water Code section 13375.

G. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

H. 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.

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IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations

1. Final Effluent Limitations –Discharge Point 001

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

Table 4. Effluent Limitations at Discharge Point 001

Parameter	Units	Effluent Limitations		
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants				
Biochemical Oxygen Demand (BOD) (5-day @ 20°C)	mg/L	30	--	--
	lbs/day[1]	175	--	--
Oil and Grease	mg/L	15	--	--
	lbs/day[1]	88	--	--
pH	standard units	--	6.5	8.5
Total Suspended Solids (TSS)	mg/L	75	--	--
	lbs/day[1]	438	--	--
Non-conventional Pollutants				
Chronic Toxicity	Pass or Fail, % Effect (for TST statistical approach)	Pass and % Effect <50[2]	--	--
Phenols, Total	mg/L	1.0	--	--
	lbs/day[1]	5.8	--	--
Settleable Solids	ml/L	0.3	--	--
Sulfide, Total	mg/L	0.1	--	--
	lbs/day[1]	0.58	--	--

Parameter	Units	Effluent Limitations		
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Temperature	ºF	--	--	86
Total Petroleum Hydrocarbons (TPHs) [3]	µg/L	100	--	--
	lbs/day[1]	0.58	--	--
Turbidity	NTU	75	--	--
Priority Pollutants				
Copper, Total Recoverable, Dry Weather[5]	µg/L	31	--	--
	lbs/day[1]	0.18	--	--
Copper, Total Recoverable, Wet Weather[4]	µg/L	9.8	--	--
	lbs/day[1]	0.057	--	--
Lead, Total Recoverable, Dry Weather[5]	µg/L	18	--	--
	lbs/day[2]	0.11	--	--
Lead, Total Recoverable, Wet Weather[4]	µg/L	56	--	--
	lbs/day[1]	0.33	--	--
Mercury, Total Recoverable	µg/L	0.10	--	--
	lbs/day[1]	0.00058	--	--
Zinc, Total Recoverable, Wet Weather[4]	µg/L	96	--	--
	lbs/day[1]	0.56	--	--
TCDD Equivalents[6]	µg/L	2.8×10^{-8}	--	--
	lbs/day[1]	1.6×10^{-10}	--	--

[1] Mass based effluent limitation are based on a maximum flow of 0.7 MGD, and are calculated as follows:
Flow (MGD) x concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

[2] The maximum daily effluent limitation (MDEL) shall be reported as "Pass" or "Fail" and "% Effect."

[3] Total Petroleum Hydrocarbons (TPH) equals the sum of TPH as gasoline (C4-C12), TPH as diesel (C13-C22), and TPH waste oil (C23+).

[4] Wet weather applies when the maximum daily flow is equal to or greater than 23 cubic feet per second (cfs) as measured at Stearns Street monitoring station in the Los Cerritos Channel.

[5] Dry weather applies when the maximum daily flow is less than 23 cfs as measured at Stearns Street monitoring station in the Los Cerritos Channel.

[6] TCDD equivalents shall be calculated using the following formula, where the MLs and the toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the MLs to zero. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.

Dioxin-TEQ (TCDD equivalents) = $\Sigma(C_x \times TEF_x)$
where: C_x = concentration of dioxin or furan congener x
TEF_x= TEF for congener x

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

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Congeners	Minimum Levels (pg/L)	Toxicity Equivalence Factor (TEF)
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

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

The discharge shall not cause the following in Los Cerritos Channel:

1. The normal ambient pH to fall below 6.5 nor exceed 8.5 units nor vary from normal ambient pH levels by more than 0.5 units.
2. Surface water temperature to rise greater than 5º F above the natural temperature of the receiving waters at any time or place. At no time shall the temperature be raised above 80º F as a result of waste discharged.
3. Water Contact Standards

   In fresh water designated for water contact recreation (REC-I) the waste discharged shall not cause the following bacterial standards to be exceeded in the receiving water:

   a. Geometric Mean Limits

      E. coli density shall not exceed 126/100 ml.

   b. Single Sample Limits

      E. coli density shall not exceed 235/100 ml.
4. Depress the concentration of dissolved oxygen to fall below 5.0 mg/L at any time, and the median dissolved oxygen concentration for any 3 consecutive months to be less than 80 percent of the dissolved oxygen content at saturation.
5. Exceed total ammonia (as N) concentrations specified in the 1994 Basin Plan and its amendments. The Regional Water Board revised the water quality objectives for ammonia to be consistent with the "1999 Update of ambient Water Quality Criteria for Ammonia" through the adoption of Resolution No. 2002-011 on April 25, 2002. This amendment was approved by the State Water Board, OAL and U.S. EPA on April 30, 2003, June 5, 203, and June 19, 2003 respectively. The amendment became effective on July 15, 2003. On December 1, 2005, Resolution No. 2005-014, Amendment to the Water Quality Control Plan for the Los Angeles Region to Revise the Early Life Stage Implementation Provision of the Freshwater Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) for Protection of Aquatic Life,

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was adopted by the Regional Water Board. Resolution No. 2005-014 was approved by the State Water Board, OAL, and U.S. EPA on July 19, 2006, August 31, 2006, and April 5, 2007, respectively; it became effective on April 5, 2007. On June 7, 2007, the Regional Water Board adopted Resolution No. 2007-005 to incorporate site-specific 30-day average objectives for ammonia along with corresponding site-specific early life stage implementation provisions for select water body reaches and tributaries in the Santa Clara, Los Angeles, and San Gabriel River watersheds. The State Water Board, OAL, and U.S. EPA approved this Basin Plan amendment on January 15, 2008, May 12, 2008, and March 30, 2009, respectively. The amendment became effective on April 23, 2009.

6. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
7. Where natural turbidity is between 0 to 50 NTU, increases in turbidity shall not exceed 20%. Where natural turbidity is greater than 50 NTU, increases in turbidity shall not exceed 10%.
8. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.
9. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
10. Toxic or other deleterious substances in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
11. Accumulation of bottom deposits or aquatic growths.
12. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
13. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
14. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.
15. Alteration of turbidity, or apparent color beyond present natural background levels.
16. Damage, discolor, or formation of sludge deposits on flood control structures or facilities, or overloading of the design capacity.
17. Degradation of surface water communities and populations including vertebrate, invertebrate, and plant species.
18. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
19. Nuisance, or adversely affect beneficial uses of the receiving water.
20. Violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or State Water Board. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

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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. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 C.F.R., sections 122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
   b. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management programs developed to comply with NPDES permits issued by the Regional Water Board to local agencies.
   c. A discharge of waste to any point other than specifically described in this Order is prohibited and constitutes a violation thereof.
   d. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 318, 405, and 423 of the Federal CWA and amendments thereto.
   e. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.
   f. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
   g. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.
   h. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
      i. Violation of any term or condition contained in this Order;
      ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;

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iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

i. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.

j. The Discharger shall notify the Regional Water Board not later than 120 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge and the appropriate filing fee.

k. The Discharger shall file with the Regional Water Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.

l. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Water Board as soon as they know or have reason to believe that they have begun or expect to begin to use or manufacture intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.

m. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Regional Water Board.

n. The Water Code provides that any person who violates a waste discharge requirement or a provision of the Water Code is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day or $25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

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

p. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to waters of the United States, is prohibited unless specifically authorized elsewhere in this permit or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.

q. 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.

r. 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,

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ii. Frequency of use,

iii. Quantities to be used,

iv. Proposed discharge concentrations, and

v. U.S. EPA registration number, if applicable.

s. 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.

t. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (213) 576-6600 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

u. 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.)

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Special Provisions

1. Reopener Provisions

a. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal CWA, and amendments thereto, the Regional Water Board may revise and modify this Order in accordance with such more stringent standards.

b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.

c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 C.F.R., parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new MLs.

d. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for the Los Cerritos Channel.

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

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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 C.F.R. sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order, and endangerment to human health or the environment resulting from the permitted activity.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

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

The Discharger shall submit to the Regional Water Board an Initial Investigation TRE workplan (1-2 pages) **within 90 days** of the effective date of this permit. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected. See section V of the Monitoring and Reporting Program (Attachment E) for an overview of TRE requirements.

3. Best Management Practices and Storm Water Pollution Prevention

a. **Storm Water Pollution Prevention, Best Management Practices, and Spill Contingency Plans.**

The Discharger shall submit, **within 90 days** of the effective date of this Order:

i. An updated **Storm Water Pollution Prevention Plan (SWPPP)** that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff 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 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.

ii. 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 the nuisance in the receiving water, and that unauthorized discharges (i.e. spills) to the receiving water have been effectively prohibited. In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material and trash discharge to surface waters. The BMPP can be included and submitted with the SWPPP.

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iii. A **Spill Control Plan (SCP)**, that describes the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events.

Each plan shall cover all areas of the Facility and shall include an updated drainage map for the Facility. The Discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge point; describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material; and address the feasibility of containment and/or treatment of storm water.

The Discharger shall implement the updated SWPPP, BMPP, and SCP (or SPCC) 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, BMPP, or SCP until an updated SWPPP, BMPP, or SCP is approved by the Executive Officer, or until the stipulated 90-day period after the updated SWPPP, BMPP, or SCP submittal has occurred. The plans shall be reviewed annually and at the same time. Updated information shall be submitted to the Regional Water Board within 30 days of revisions.

4. Construction, Operation and Maintenance Specifications

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

5. Other Special Provisions – Not Applicable

6. Compliance Schedules – Not Applicable

VII. COMPLIANCE DETERMINATION

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

A. Single Constituent Effluent Limitation

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

B. Effluent Limitations Expressed as a Sum of Several Constituents

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

C. Effluent Limitations Expressed as a Median

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

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

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D. Multiple Sample Data

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

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

E. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsection 2 above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation; though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

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

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

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

   When one or more sample results are reported as "Not-Detected (ND)" or "Detected, but Not Quantified (DNQ)" (see Reporting Requirement I.G. of the MRP), the median value of these four samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median shall be the lower of the two middle values.
3. In the event of noncompliance with an AMEL, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.

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4. If only one sample was obtained for the month or more than a monthly period and the result exceeds the AMEL; then the Discharger is in violation of the AMEL.

F. Maximum Daily Effluent Limitations (MDEL)

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

G. Instantaneous Minimum Effluent Limitation

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

H. Instantaneous Maximum Effluent Limitation

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

I. Chronic Toxicity

The discharge is subject to determination of “Pass” or “Fail” and “Percent Effect” from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) statistical approach described in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (Ho) for the TST statistical approach is: Mean discharge IWC response ≤ (0.75 × 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 ((Mean control response - Mean discharge IWC response)/(Mean control response)) × 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 ≥ 50%.

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. Bacterial Standards and Analyses

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

$$\text{Geometric Mean} = (C1 \times C2 \times \ldots \times Cn)^{1/n}$$

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

Detection methods used for coliforms (total, fecal, and *E. coli*) and *Enterococcus* shall be those presented in Table 1A of 40 C.F.R. part 136 (revised May 18, 2012), unless alternate methods have been approved by U.S. EPA pursuant to 40 C.F.R. part 136 or improved methods have been determined by the Executive Officer and/or U.S. EPA.

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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:

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

Average Monthly Effluent Limitation (AMEL)
The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

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.

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 1 day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

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

Detected, but Not Quantified (DNQ)
DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dilution Credit
Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the

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dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Dry Weather Event
Any day when the maximum daily flow of the Los Cerritos Channel as measured at the City of Long Beach Monitoring Station at Stearns Street is less than 23 cubic feet per second (cfs).

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 the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

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

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

Existing Discharger
Any Discharger that is not a new discharger. An existing discharger includes an "increasing discharger" (i.e., any existing facility with treatment systems in places for its current discharge that is or will be expanding, upgrading, or modifying its permitted discharge after the effective date of this Order.)

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

Inland Surface Waters
All surface waters of the state that do not include the ocean, enclosed bays, or estuaries.

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

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

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

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

Method Detection Limit (MDL)
MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 C.F.R. part 136, Attachment B, revised as of July 3, 1999.

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

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

Not Detected (ND)
Sample results which are less than the laboratory's MDL.

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

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

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

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

Significant Storm Event
A continuous discharge of storm water for a minimum of one hour, or the intermittent discharge of storm water for a minimum of 3 hours in a 12-hour period.

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

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

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

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

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

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

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Wet Weather Event
Any day when the maximum daily flow of the Los Cerritos Channel as measured at the City of Long Beach Monitoring Station at Stearns Street is equal to or greater than 23 cubic feet per second (cfs).

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ACRONYMS AND ABBREVIATIONS

AMEL.....Average Monthly Effluent Limitation
B.....Background Concentration
BAT .....Best Available Technology Economically Achievable
Basin Plan .....Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties
BCT .....Best Conventional Pollutant Control Technology
BMP.....Best Management Practices
BMPP .....Best Management Practices Plan
BPJ .....Best Professional Judgment
BOD.....Biochemical Oxygen Demand 5-day @ 20 °C
BPT .....Best Practicable Treatment Control Technology
C.....Water Quality Objective
CCR .....California Code of Regulations
CEQA .....California Environmental Quality Act
C.F.R. .....Code of Federal Regulations
CTR.....California Toxics Rule
CV .....Coefficient of Variation
CWA.....Clean Water Act
CWC .....California Water Code
Discharger .....Tesoro Logistics Operations, LLC
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 .....Hathaway Tank Farm
g/kg.....grams per kilogram
gpd .....gallons per day
IC.....Inhibition Coefficient
IC_{15} .....Concentration at which the organism is 15% inhibited
IC_{25}.....Concentration at which the organism is 25% inhibited
IC_{40}.....Concentration at which the organism is 40% inhibited
IC_{50} .....Concentration at which the organism is 50% inhibited
LA.....Load Allocations
LOEC.....Lowest Observed Effect Concentration
µg/L .....micrograms per Liter
LACDPW .....County of Los Angeles, Department of Public Works
mg/L .....milligrams per Liter
MDEL .....Maximum Daily Effluent Limitation
MEC .....Maximum Effluent Concentration
MGD.....Million Gallons per Day
ML .....Minimum Level
MMEL.....Monthly Median Effluent Limitation
MRP .....Monitoring and Reporting Program
ND .....Not Detected
ng/L .....nanograms per liter
NOEC.....No Observable Effect Concentration
NPDES .....National Pollutant Discharge Elimination System
NSPS.....New Source Performance Standards

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NTR ..... National Toxics Rule
OAL ..... Office of Administrative Law
PAHs ..... Polynuclear Aromatic Hydrocarbons
pg/L ..... picograms per liter
PMEL ..... Proposed Maximum Daily Effluent Limitation
PMP ..... Pollutant Minimization Plan
POTW ..... Publicly Owned Treatment Works
ppm ..... parts per million
ppb ..... parts per billion
QA ..... Quality Assurance
QA/QC ..... Quality Assurance/Quality Control
Ocean Plan ..... Water Quality Control Plan for Ocean Waters of California
Regional Water Board ..... California Regional Water Quality Control Board, Los Angeles Region
RPA ..... Reasonable Potential Analysis
SCP ..... Spill Contingency Plan
Sediment Quality Plan ..... *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality*
SIP ..... State Implementation Policy (Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California)
SMR ..... Self-Monitoring Reports
State Water Board ..... California State Water Resources Control Board
SWPPP ..... Storm Water Pollution Prevention Plan
TAC ..... Test Acceptability Criteria
TBEL ..... Technology-Based Effluent Limitation
Thermal Plan ..... Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California
TIE ..... Toxicity Identification Evaluation
TMDL ..... Total Maximum Daily Load
TOC ..... Total Organic Carbon
TRE ..... Toxicity Reduction Evaluation
TSD ..... Technical Support Document
TSS ..... Total Suspended Solid
TST ..... Test of Significant Toxicity Statistical Approach
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 – MAPS

Tesoro Logistics Operations, LLC, Hathaway Tank Farm
(NPDES CA0058343)

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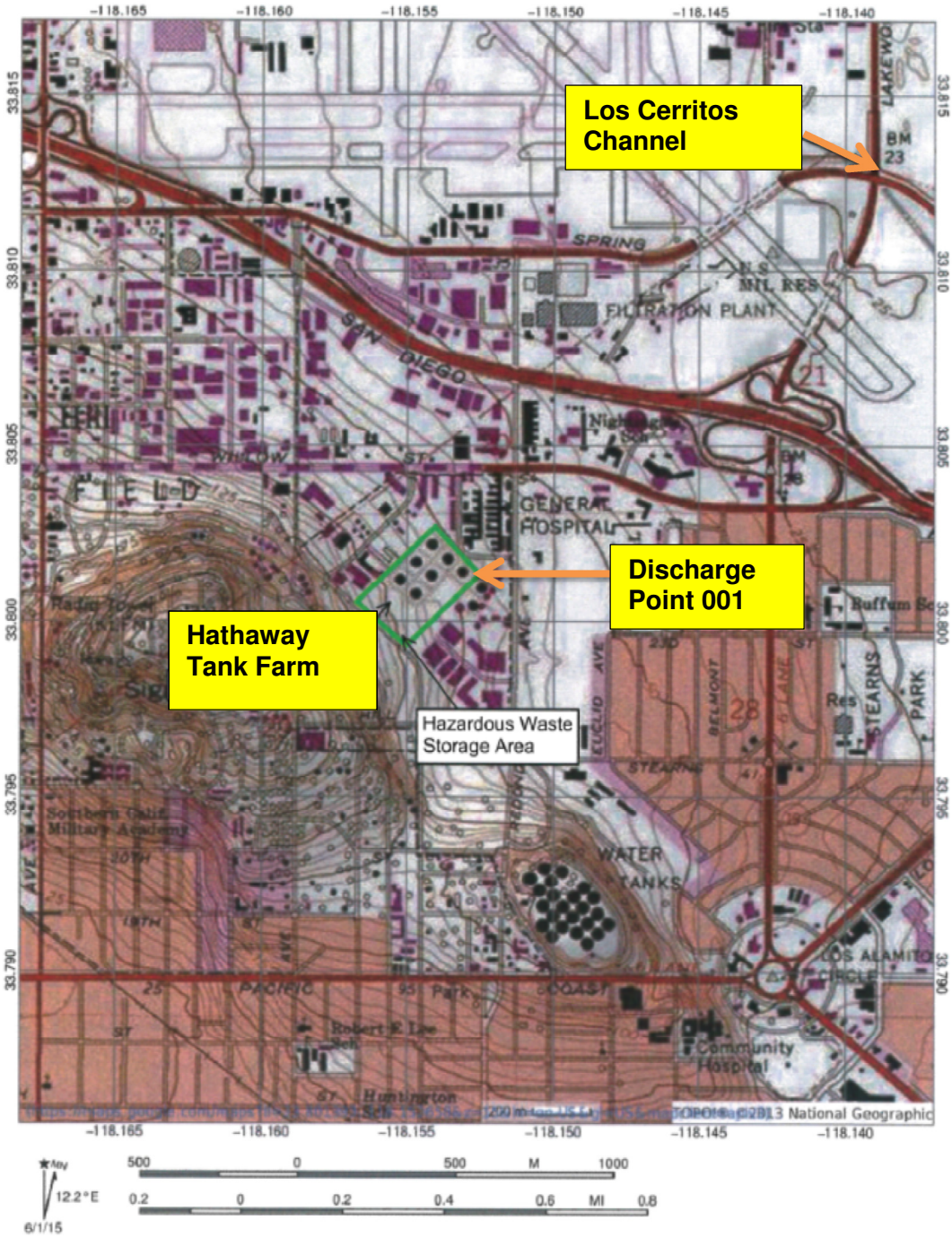

FIGURE 1. Tesoro Logistics Operations LLC Site Location Map
Hathaway Tank Farm, 2350 Obispo Avenue
Signal Hill, California

Facility Boundary

TESORO LOGISTICS

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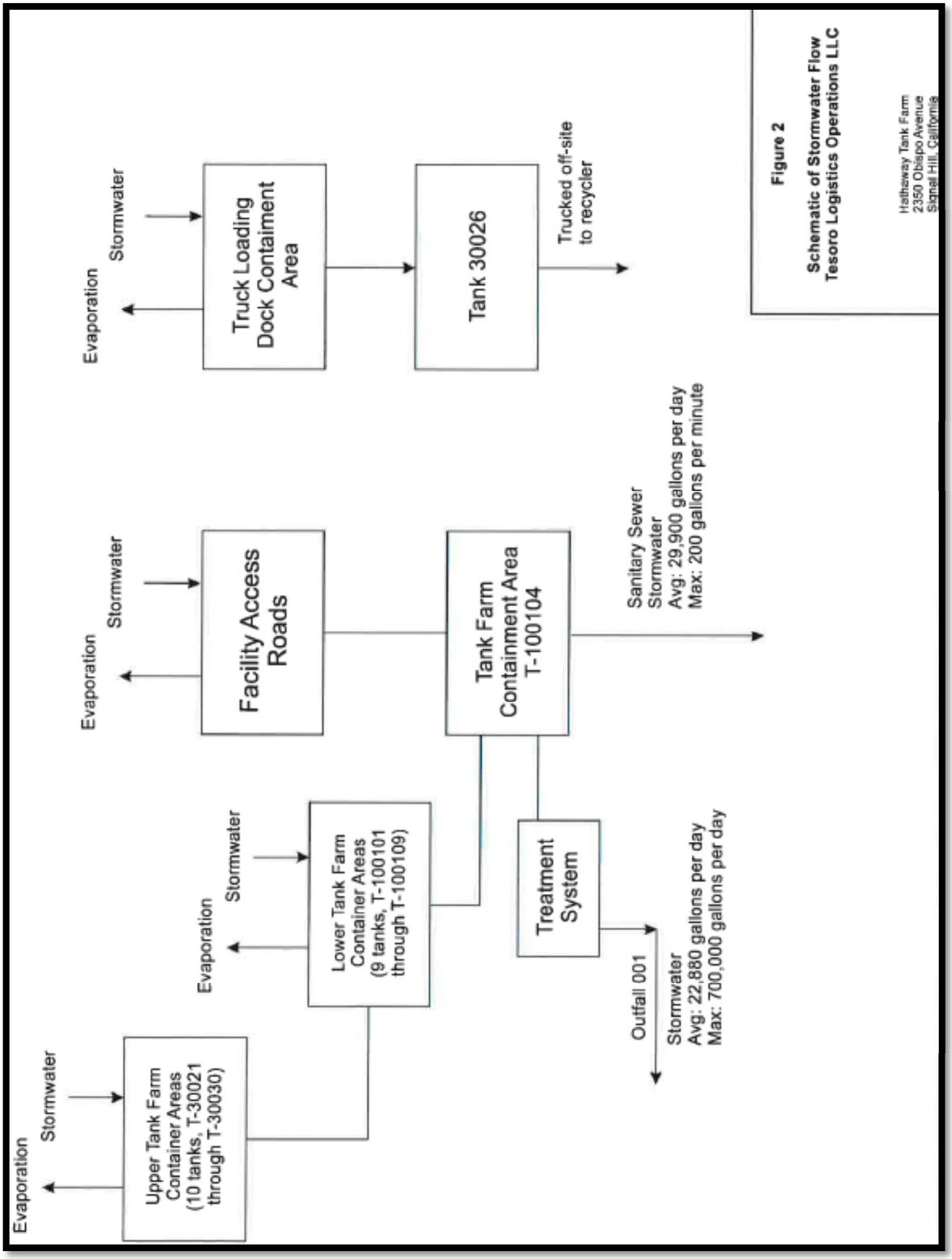
ATTACHMENT C-1 – FLOW SCHEMATIC



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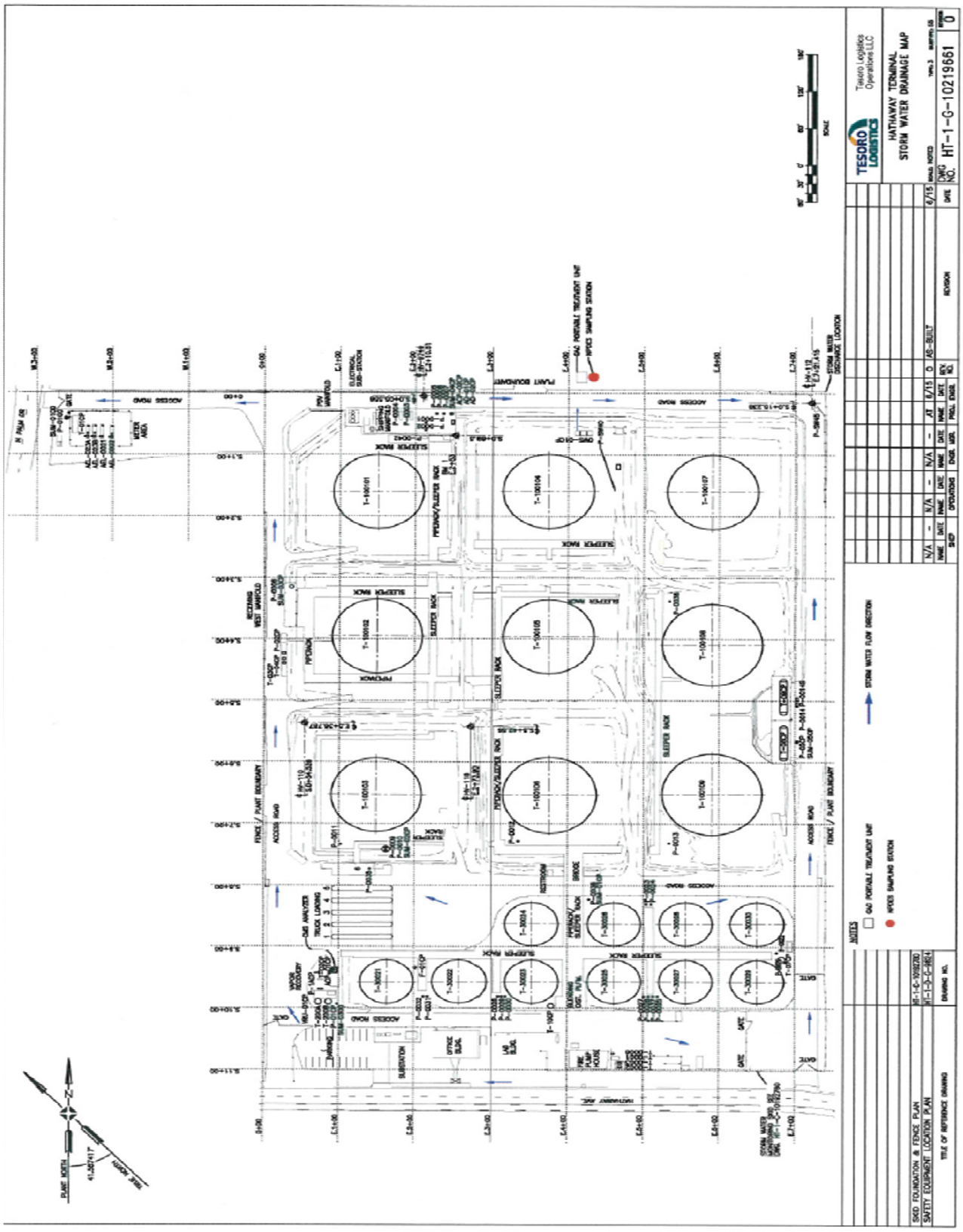
ATTACHMENT C-2 – SITE DRAINAGE MAP



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 C.F.R. § 122.41(a); Wat. Code, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)

2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

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

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, 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 C.F.R. § 122.41(i); Wat. Code, §§ 13267, 13383):

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

G. Bypass

1. Definitions
   a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
   b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
   b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
   c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

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5. Notice

   a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. As of December 21, 2020 all notices must be submitted electronically by the Discharger to the initial recipient, as defined in 40 C.F.R. section 127.2(b), in compliance with this section and 40 C.F.R. part 3 (including, in all cases, subpart D of part 3), section 122.22, and 40 C.F.R. part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Discharger may be required to report electronically if specified by a particular permit or if required to do so by state law. (40 C.F.R. § 122.41(m)(3)(i).)

   b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). As of December 21, 2020 all notices must be submitted electronically by the Discharger to the initial recipient, as defined in 40 C.F.R. section 127.2(b), in compliance with this section and 40 C.F.R. part 3 (including, in all cases, subpart D of part 3), section 122.22, and 40 C.F.R. part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Discharger may be required to report electronically if specified by a particular permit or if required to do so by state law. (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

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

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

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):

   a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

   b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));

   c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and

   d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)

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

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II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

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

III. STANDARD PROVISIONS – MONITORING

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

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

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

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

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 C.F.R. part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip

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

B. Records of monitoring information shall include:

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

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

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

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or 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 C.F.R. § 122.41(h); Wat. Code, §§ 13267, 13383.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or 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 C.F.R. § 122.41(k).)
2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been

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assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or 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 C.F.R. § 122.22(b)(1));

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

   c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

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

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

6. If documents described in Standard Provisions – V.B.1, V.B.2, or V.B.3 are submitted electronically by or on behalf of the NPDES-regulated facility, any person providing the electronic signature for such documents shall meet all relevant requirements of Standard Provisions – Reporting V.B, and shall ensure that all of the relevant requirements of 40 C.F.R. part 3 (including, in all cases, subpart D of part 3) (Cross-Media Electronic Reporting) and 40 C.F.R. part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R § 122.22(e).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting the results of monitoring, sludge use, or disposal practices. As of

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December 21, 2016 all reports and forms must be submitted electronically by the Discharger to the initial recipient, as defined in Standard Provisions – Reporting V.J, in compliance with this section and 40 C.F.R. part 3 (including, in all cases, subpart D of part 3), section 122.22, and 40 C.F.R. part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Discharger may be required to report electronically if specified by the permit or if required to do so by state law. (40 C.F.R. § 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

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

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically by the Discharger to the initial recipient, as defined in Standard Provisions – Reporting V.J, in compliance with this section and 40 C.F.R. part 3 (including in all cases, subpart D of part 3), section 122.22, and 40 C.F.R. part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Discharger may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(6)(i).)

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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 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 C.F.R. § 122.41(l)(1)(ii).)
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R.§ 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

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

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting V.E and the applicable required data in appendix A to 40 C.F.R. part 127. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically by the Discharger to the initial recipient, as defined in Standard Provisions – Reporting V.J, in compliance with this section and 40 C.F.R. part 3 (including, in all cases, subpart D of part 3), section122.22, and 40 C.F.R. part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the Discharger may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(7).)

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 C.F.R. § 122.41(l)(8).)

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J. Identification of the Initial Recipient for NPDES Electronic Reporting Data

The owner, operator, or the duly authorized representative of an NPDES-regulated entity is required to electronically submit the required NPDES information (as specified in appendix A to 40 C.F.R. part 127) to the appropriate initial recipient, as determined by U.S. EPA, and as defined in 40 C.F.R. 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 C.F.R. section 127.2(c)]. U.S. EPA will update and maintain this listing. (40 C.F.R. § 122.41(l)(9).)

VI. STANDARD PROVISIONS – ENFORCEMENT

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

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 C.F.R. section 122.41(a)(3)].

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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 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 C.F.R. 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 C.F.R. 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 C.F.R. § 122.42(a)):

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

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP NO. 6297)

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP No. 6297)

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

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I. GENERAL MONITORING PROVISIONS

A. An effluent sampling station shall be established for the point of discharge (Discharge Point 001 [Latitude 33.8015°, Longitude -118.1525°]) and shall be located where representative samples of that effluent can be obtained.

B. Laboratory Certification. Laboratories analyzing monitoring samples shall be certified by the State Water Board, Drinking Water Division, Environmental Laboratory Accreditation Program (ELAP) in accordance with the provision of Water Code section 13176, 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.

C. Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.

D. The Regional Water Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.

E. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. sections 136.3, 136.4, and 136.5 (revised May 18, 2012); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

F. For any analyses performed for which no procedure is specified in the 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 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,
3. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

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

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

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 sufficiently sensitive regulations at 40 C.F.R. section 122.44(i)(1)(iv). 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 sufficiently sensitive regulations at 40 C.F.R. section 122.44(i)(1)(iv). Water quality objectives for parameters may be found in Chapter 3 of the Basin Plan and the CTR (40 C.F.R. section 131.38). If the ML value is not below the water quality objective, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test, the associated laboratory QA/QC procedures, reporting levels (RLs), and method detection limits (MDLs).

Where no U.S. EPA-approved method exists, the Regional Water Board, in consultation with the State Water Board Quality Assurance Program, shall establish a ML that is not contained in Attachment H to be included in the Discharger's permit in any of the following situations:

1. When the pollutant under consideration is not included in Attachment H;
2. When the Discharger and Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in 40 C.F.R. part 136 (revised May 19, 2012);
3. When the Discharger agrees to use an ML that is lower than that listed in Attachment H;
4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment H, and proposes an appropriate ML for their matrix; or,
5. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the U.S. EPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, the Regional Water Board, and the State Water Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

K. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 C.F.R. section 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.

L. Field analyses with short sample holding times such as pH, total residual chlorine, and temperature, may be performed using properly calibrated and maintained portable instruments by trained personnel acting on the Discharger's behalf, using methods in accordance with 40 C.F.R. part 136. All field instruments must be calibrated per

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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 date and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.

N. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to insure accuracy of measurements, or shall insure that both equipment activities will be conducted.

O. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. Unless otherwise specified in the analytical method, duplicate samples must be analyzed at a frequency of 5% (1 in 20 samples) with at least one if there is fewer than 20 samples in a batch. A batch is defined as a single analytical run encompassing no more than 24 hours from start to finish. A similar frequency shall be maintained for analyzing spiked samples.

P. When requested by the Regional Water Board or U.S. EPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.

Q. For parameters which have both average monthly and daily maximum limits are specified and the monitoring frequency is less than four times a month, the following shall apply. If an analytical result is greater than the average monthly limit, the Discharger shall collect four additional samples at approximately equal intervals during the month, until compliance with the average monthly limit has been demonstrated. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. In the event of noncompliance with an average monthly effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the average monthly effluent limitation has been demonstrated. The Discharger shall provide for the approval of the Executive Officer a program to ensure future compliance with the average monthly limit.

R. In the event wastes are transported to a different disposal site during the reporting period, the following shall be reported in the monitoring report:

1. Types of wastes and quantity of each type;
2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and
3. Location of the final point(s) of disposal for each type of waste.

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

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

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II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Effluent Monitoring		
001	EFF-001	The effluent sampling station shall be located where representative samples of Discharge Point 001 can be obtained prior to discharge into the storm drain that conveys to the Los Cerritos Channel (Latitude 33.8015º, Longitude -118.1525º).
Receiving Water Monitoring		
--	RSW-001	A location in the receiving water (Los Cerritos Channel) at least 50 feet upstream of the discharge point of the storm drain into the receiving water.
--	RSW-002	A safe location where a representative sample of the receiving water (Los Cerritos Channel) can be obtained downstream of the public storm drain outfall to the Los Cerritos Channel.
--	RSW-003	The City of Long Beach monitoring station at Stearns Street for the Los Cerritos Channel. The stream flow data may be obtained by contacting Mr. Patrick Kinney at pkinney@kinneticlabs.com or at (562)595-8700.

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

III. INFLUENT MONITORING REQUIREMENTS –NOT APPLICABLE

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

1. The Discharger shall monitor treated storm water discharges from Discharge Point 001 at Monitoring Location EFF-001 as follows, during the actual discharge events. 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 at Monitoring Location EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Rainfall	Inches/day	Rain gauge[1]	1/Day	--
Total Waste Flow	GPD	Meter	1/Day[3]	[4]
Conventional Pollutants				
pH	SU	Grab	1/Discharge Event[2]	[4]
Temperature	ºF	Grab	1/Discharge Event[2]	[4]
Biochemical Oxygen Demand (BOD) 5-day @ 20°C[5]	mg/L	Grab	1/Discharge Event[2]	[4]
Total Suspended Solids (TSS)[5]	mg/L	Grab	1/Discharge Event[2]	[4]
Oil and Grease[5]	mg/L	Grab	1/Discharge Event[2]	[4]
E.coli	MPN/100 ml	Grab	1/Quarter[6,7]	[4]

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Ammonia Nitrogen (as N), Total[5]	mg/L	Grab	1/ Discharge Event[2]	[4]
Oxygen, Dissolved	mg/L	Grab	1/Quarter[7]	[4]
Settleable Solids	mL/L	Grab	1/Discharge Event[2]	[4]
Total Petroleum Hydrocarbons (TPH) as Gasoline (C_4-C_{12})	µg/L	Grab	1/Discharge Event[2]	EPA Method 503.1 or 8015B
TPH as Diesel (C_{13}-C_{22})	µg/L	Grab	1/Discharge Event[2]	EPA method 503.1, 8015b, or 8270
TPH as Waste Oil (C_{23+})	µg/L	Grab	1/Discharge Event[2]	EPA method 503.1, 8015b, or 8270
Chronic Toxicity[9]	Pass or Fail and % Effect (for TST Statistical Approach)	Grab	1/Year[8]	[4]
Turbidity	NTU	Grab	1/Discharge Event[2]	[4]
Phenols[5]	mg/L	Grab	1/Discharge Event[2]	[4]
Sulfides, Total[5]	mg/L	Grab	1/Discharge Event[2]	[4]
Tertiary Butyl Alcohol (TBA)[5]	µg/L	Grab	1/Quarter[7]	[4]
Methyl Tertiary Butyl Ether (MTBE)[5]	µg/L	Grab	1/Quarter[7]	[4]
Priority Pollutants				
Xylenes, Total[5]	µg/L	Grab	1/Quarter[7]	[4]
Antimony, Total Recoverable[5]	µg/L	Grab	1/Quarter[7]	[4]
Arsenic, Total Recoverable[5]	µg/L	Grab	1/Quarter[7]	[4]
Chromium(VI)[5]	µg/L	Grab	1/Quarter[7]	[4]
Copper, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[2]	[4]
Selenium, Total Recoverable[5]	µg/L	Grab	1/Quarter[7]	[4]
Nickel, Total Recoverable[5]	µg/L	Grab	1/Quarter[7]	[4]
Lead, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[2]	[4]
Mercury, Total Recoverable	µg/L	Grab	1/Discharge Event[2]	[4]
Zinc, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[2]	[4]
TCDD Equivalients[5,10]	µg/L	Grab	1/Discharge Event[2]	[4]
Remaining Priority Pollutants[11]	µg/L	Grab	1/Year[8]	[4]

[1] If a rain gauge cannot be installed, then the data obtained from the nearest rain gauge station owned and operated by the National Oceanic and Atmospheric Administration (NOAA) Center located at Long Beach Daugherty Airport will be included in each monitoring report.

[2] During periods of extended rainfall, no more than one sample per week (or 7-day period) is required to be collected. Sampling shall be conducted 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.

[3] Flow shall be recorded daily during each period of discharge. Periods of no flow shall also be reported in the corresponding monitoring report.

[4] Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; for priority pollutants, the methods must meet the lowest MLs specified in Attachment 4 of the SIP (Attachment H of this Order). Where no methods are specified for a given pollutant, the methods must be approved by the Regional Water Board or the State Water Board and the U.S. EPA. If more than one analytical test method is listed for

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a given parameter, the Discharger must select from the listed methods and corresponding ML necessary to demonstrate compliance with applicable effluent limitations.

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

$M = 8.34 \times Ce \times Q$

where: M = mass discharge for a pollutant (in lbs/day)
Ce = Reported concentration for a pollutant (in mg/L)
Q = actual discharge flow rate (MGD).

[6] During each quarterly monitoring event, at least 5 equally-spaced samples shall be collected over a 30-day period to evaluate the geometric mean.

[7] Sampling shall be conducted during the first discharge event for each quarter (October 1- December 31, January 1-March 31, April 1-June 30, July 1- September 30). If there is no discharge to surface waters, the Discharger will indicate in the corresponding monitoring report, under penalty of perjury, that no effluent was discharged to surface water during the reporting period.

[8] 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 penalty of perjury, that no effluent was discharged to surface water during the reporting period.

[9] Refer to section V, Whole Effluent Toxicity Testing Requirements.

[10] TCDD equivalents shall be calculated using the following formula, where the MLs and the toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the MLs to zero. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.

Dioxin-TEQ (TCDD equivalents) = $\Sigma(C_x \times TEF_x)$
where: C_x = concentration of dioxin or furan congener x
TEF_x= TEF for congener x

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

[11] Priority Pollutants as defined by the California Toxics Tule (CTR) defined in Attachment I to this Order.

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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 this discharge 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 both the required toxicity tests and Toxicity Identification Evaluation (TIE) studies. 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 Freshwater Species and Test Methods**

   If effluent samples are collected from outfalls discharging to receiving waters with salinity <1 ppt, the Discharger shall conduct the following chronic toxicity tests on effluent samples — at the in-stream waste concentration for the discharge — in accordance with species and test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002). In no case shall these species and methods be substituted with another test species unless written authorization from the Regional Water Board Executive Officer is received.

   a. A static renewal toxicity test with the fathead minnow, *Pimephals promelas* (Larval Survival and Growth Test Method 1000.0).

   b. A static renewal toxicity test with the daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.0)

   c. A static renewal toxicity test with the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).

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 previously referenced in this section. This sample shall also be analyzed for the parameters required for the discharge. The species that exhibits the highest "Percent Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit cycle.

5. **Quality Assurance and Additional Requirements**

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

   a. The discharge is subject to a determination of "Pass" or "Fail" and "Percent Effect" from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) statistical approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity/Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (H_o) for the TST statistical approach is: Mean discharge IWC response ≤ (0.75 x Mean control response). A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent Effect" at the discharge

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IWC is defined and reported as: ((Mean control response-Mean discharge IWC response) ÷ Mean control response)) x 100%.

b. Dilution water and control water, including brine controls, shall be 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.

c. Monthly reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported.

d. 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. **Preparation of Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan**

The Discharger shall prepare and submit a generic Initial Investigation TRE Work Plan within 90 days of the permit effective date to be ready to respond to toxicity events. The Discharger shall review and update this work plan as necessary so it remains current and applicable to the discharge. At a minimum, the work plan shall include:

a. 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.

b. 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.

c. 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).

7. **Toxicity Identification Evaluation and Toxicity Reduction Evaluation Process**

a. Toxicity Identification Evaluation (TIE). 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 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.

b. Toxicity Reduction Evaluation (TRE). When a toxicant or class of toxicants is identified, a TRE shall be performed for that toxicant. The TRE shall include all reasonable steps to identify the source(s) of toxicity and discuss appropriate BMPs to eliminate the causes of toxicity. No later than 30 days after the source of toxicity and appropriate BMPs and/or treatment are identified, the Discharger shall submit a TRE Corrective Action Plan to the Executive Officer for approval. At minimum, the plan shall include:

i. The potential sources of pollutant(s) causing toxicity.

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ii. Recommended BMPs and/or treatment to reduce the pollutant(s) causing toxicity.

iii. Follow-up monitoring to demonstrate that toxicity has been removed.

iv. Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.

v. A schedule for these actions, progress reports, and the final report.

c. 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.

d. The Discharger shall conduct routine effluent monitoring for the duration of the TIE/TRE process.

e. 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.

8. **Reporting**

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

a. The toxicity test results for the TST statistical approach, reported as “Pass” or “Fail” and “Percent Effect” at the chronic toxicity IWC for the discharge.

b. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).

c. 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.

d. Statistical program (e.g., TST calculator, CETIS, etc.) output results for each toxicity test.

9. **Ammonia Removal**

Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Discharger must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.

a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.

b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.

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c. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.

d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent, after submitting a written request to the Regional Water Board, and receiving written permission expressing approval from the Executive Officer of the Regional Water Board.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Location RSW-001

1. The Discharger shall monitor the receiving water at Monitoring Location RSW-001 as follows:

Table E-3. Receiving Water Monitoring Requirements (Monitoring Location RSW-001)

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	standard units	Grab	1/Year[1]	[2,3]
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Year[1]	[2,3]
Dissolved Oxygen	mg/L	Grab	1/Year[1]	[2,3]
Temperature	°F	Grab	1/Year	[2,3]
Hardness (as mg/L $CaCO_3$)	mg/L	Grab	1/Year[1]	[2,3,4]
TCDD Equivalents[6]	µg/L	Grab	1/Year[1]	[2]
Remaining priority pollutants[5]	µg/L	Grab	1/Year[1]	[2]

1. 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. Receiving water monitoring at RSW-001 is only required during years of discharge. If there is no discharge to surface waters, the Discharger shall state so in the corresponding monitoring report under penalty of perjury.
2. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; for priority pollutants, the methods must meet the lowest MLs specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board and U.S. EPA. 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.
3. Receiving water pH, temperature, dissolved oxygen, and hardness shall be collected at the same time the effluent samples (Monitoring Location EFF-001) are collected for ammonia and priority pollutant analyses. A hand-held field meter may be used for pH and temperature, provided the meter utilizes an U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.
4. Hardness shall be collected at the same time as priority pollutant analyses.
5. Priority pollutants as defined by the California Toxics Rule (CTR) and included as Attachment I.
6. TCDD equivalents shall be calculated using the following formula, where the MLs and the toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the

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Discharger shall set congener concentrations below the MLs to zero. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.

Dioxin-TEQ (TCDD equivalents) = $\Sigma(C_x \times TEF_x)$

where: C_x = concentration of dioxin or furan congener x

TEF_x= TEF for congener x

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

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B. Monitoring Location RSW-002

1. The Discharger shall monitor the Los Cerritos Channel at Monitoring Location RSW-002 as prescribed in Table E-4.

Table E-4. Receiving Water Monitoring Requirements (RSW-002)

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	standard units	Grab	1/Permit Term[1]	[2,3,6]
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Permit Term[1]	[2,3]
Dissolved Oxygen	mg/L	Grab	1/Permit Term[1]	[2,6]
Hardness, Total (as CaCO3)[4]	mg/L	Grab	1/Permit Term[1]	[2]
Temperature	°F	Grab	1/Permit Term[1]	[2,3,6]
Priority Pollutants[5]	µg/L	Grab	1/Permit Term[1]	[2]
TCDD Equivalents[7]	µg/L	Grab	1/Permit Term[1]	[2]

[1] Receiving water monitoring at RSW-002 is required at least once during the term of the permit, and shall be conducted during a year of discharge. Samples shall be collected during the first hour of discharge from the first storm 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. The results shall be reported in the quarterly self-monitoring report of the corresponding quarter.

[2] Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; for priority pollutants, the methods must meet the lowest MLs specified in Attachment 4 of the SIP, provided as Attachment H. Where no methods are specified for a given pollutant, the methods must be approved by this

Regional Water Board or the State Water Board and the U.S. EPA. 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.

[3] Receiving water pH, and temperature must be collected at the same time as ammonia samples.

[4] Hardness shall be collected at the same time as priority pollutant analyses.

[5] Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Attachment I.

[6] Receiving water pH, temperature, and dissolved oxygen must be analyzed at the same time the samples are collected for Priority Pollutants analysis. A hand-held field meter may be used for pH and temperature, provided the meter utilizes an EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

[7] TCDD equivalents shall be calculated using the following formula, where the MLs and the toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the MLs to zero. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.

Dioxin-TEQ (TCDD equivalents) = $\Sigma(C_x \times TEF_x)$
where: C_x = concentration of dioxin or furan congener x
TEF_x= TEF for congener x

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

C. Monitoring Location RSW-003

The Discharger shall report the maximum daily flow in the Los Cerritos Channel, at the City of Long Beach's monitoring station at Stearns Street. This station is designated as RSW-003 in this Order. The stream flow data can be obtained by contacting City of Long Beach through Mr. Patrick Kinney at pkinney@kinneticlabs.com or at (562)595-8700. This information is necessary to determine the wet weather and dry weather condition of the channel, as defined in the Los Cerritos Channel Metals TMDL.

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IX. OTHER MONITORING REQUIREMENTS

A. 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. This information shall be included in the monitoring report for that month.

B. Visual Observation

The Discharger shall make visual observations of all storm water discharges at the discharge point locations on at least one storm event per quarter that produces a significant storm water discharge to observe the presence of trash, floating and suspended materials, oil and grease, discoloration, turbidity, and odor. A "significant storm water discharge" is a continuous discharge of storm water for a minimum of one hour, or the intermittent discharge of storm water for a minimum of 3 hours in a 12-hour period.

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 conducts monitoring 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.
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 (http://www.waterboards.ca.gov/water_issues/programs/ciwqs/). The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit quarterly SMRs including the results of all required monitoring using 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

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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
1/Day	August 1, 2016	January 1 – March 31 April 1 – June 30 July 1 – September 30 October 1 – December 31	May 1 August 1 November 1 February 1
1/Discharge Event	August 1, 2016	January 1 – March 31 April 1 – June 30 July 1 – September 30 October 1 – December 31	May 1 August 1 November 1 February 1
1/Quarter	August 1, 2016	January 1 – March 31 April 1 – June 30 July 1 – September 30 October 1 – December 31	May 1 August 1 November 1 February 1
1/Year	August 1, 2016	January 1 through December 31	February 1
1/Permit Term	August 1, 2016	January 1 through December 31	February 1

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

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

   a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

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

      For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± 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 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. The Discharger shall submit SMRs in accordance with the following requirements:

   a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

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

C. Discharge Monitoring Reports (DMRs)

DMRs are U.S. EPA reporting requirements. As of the effective date of this Order, if the Discharger operates a "minor" facility as designated on page 1 of this Order, electronic submittal of DMRs is not required. However, by December 2016, the Discharger will be required to electronically submit DMRs. The State Water Board will provide notification of this requirement prior to December 2016. 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.

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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. Investigation TRE workplan

   b. Updated SWPPP

   c. Updated BMPP

   d. Spill Contingency Plan (SCP)

   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 in wastewater and storm water discharged from the facility are addressed. All changes or revisions to the SWPPP, BMPP, and Spill Contingency Plan shall be submitted to the Regional Water Board within 30 days of revisions.

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ATTACHMENT F – FACT SHEET

As described in section II.B of this Order, the 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.

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I. PERMIT INFORMATION

The following table summarizes administrative information related to the Facility.

Table F-1. Facility Information

WDID	4B192187001
Discharger	Tesoro Logistics Operations, LLC
Name of Facility	Hathaway Tank Farm
Facility Address	2350 Obispo Avenue
	Signal Hill, CA 90806
	Los Angeles County
Facility Contact, Title and Phone	Stephen Comley, Senior Environmental Specialist, (562)728-2265
Authorized Person to Sign and Submit Reports	Timothy Hayes, Director – Pipeline and Terminal Operations, (310)847-5812
Mailing Address	5905 Paramount Boulevard, Long Beach, CA 90805
Billing Address	5905 Paramount Boulevard, Long Beach, CA 90805
Type of Facility	Industrial (*SIC 5171:Petroleum Bulk Stations and Terminals*)
Major or Minor Facility	Minor
Threat to Water Quality	3
Complexity	B
Pretreatment Program	Not Applicable
Recycling Requirements	None
Facility Permitted Flow	0.7 million gallons per day (MGD)
Facility Design Flow	0.7 MGD
Watershed	Los Cerritos Channel and Alamitos Bay Watershed Management Area
Receiving Water	Los Cerritos Channel
Receiving Water Type	Inland surface water

A. Tesoro Logistics Operations, LLC (hereinafter Discharger) is the owner and operator of the Hathaway Tank Farm (hereinafter Facility), a petroleum products transfer and storage terminal. The Facility was previously owned and operated by ARCO Terminal Services Corporation and BP Pipelines (North America), Inc. The transfer of ownership and operation was completed in 2013.

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

B. The Facility discharges treated storm water to the Los Cerritos Channel, a water of the United States, within the Los Cerritos Channel Watershed. The Discharger was previously regulated by Order No. R4-2011-0037 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0058343, adopted on February 3, 2011, and scheduled to expire on January 10, 2016. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

C. The Discharger filed a report of waste discharge and submitted an application for reissuance of its WDRs and NPDES permit on July 7, 2015, and August 6, 2015. The application was deemed complete on August 19, 2015. A site visit was conducted on December 9, 2015, to observe operations and collect additional data to develop permit limitations and requirements for waste discharge.

D. The Discharger is authorized to discharge subject to waste discharge requirements in this Order at the discharge location described in Table 2 of this Order.

E. Regulations at 40 C.F.R. section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, Table 3 of this Order limits the duration of the discharge authorization. However, pursuant to 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. Order No. R4-2011-0037 has been administratively extended until a new order is adopted.

II. FACILITY DESCRIPTION

The Facility is a petroleum products storage and transfer terminal (SIC 5171). The operations at the Facility include receiving, storage, and distribution of unfinished petroleum products such as unrefined diesel fuel and blending components. The Facility consists of a truck rack with six dispensers used for the loading and delivery of petroleum products, and two separate tank farms (Upper Tank Farm and Lower Tank Farm). The Upper Tank Farm houses ten aboveground storage tanks (ASTs) with a capacity of 30,000-nominal barrels each. The ASTs in the Upper Tank Farm are located within a single, contiguous concrete containment wall to capture any leakage from the tanks. The Lower Tank Farm houses nine ASTs with a capacity of 110,000-nominal barrels each. Each tank has its own dedicated asphalt-coated or gunnite containment area to capture any leakage from the tank. The truck rack is equipped with secondary containment to capture spillage during transfer of the products.

The Facility is designed for remote operations. Remote operations for product transfer and management can be conducted via the Tesoro Logistics Operations Control center located at 5905 Paramount Boulevard in Long Beach, California. Storm water discharge is manually controlled at the Facility, which is manned 24 hours per day, 7 days per week. The Facility receives and distributes gasoline and diesel components via pipeline; products may also be loaded and unloaded via a truck rack on the western side of the Facility.

A. Description of Wastewater Treatment and Controls

The Facility has two general tank farm areas, the Upper Tank Farm (with higher ground elevation) and the Lower Tank Farm (with lower ground elevation). The tank farms are unpaved with impervious dirt bottom and some gravel cover. Storm water contained in the bermed tank farm storage areas will be left for evaporation or percolation into the soil. Storm water from access roads within the Facility is directed into the tank farms. Storm water is conveyed via a series of sumps and manually operated valves from the Upper Tank Farm to the Lower Tank Farm, and is collected in a sump at the Tank 104 containment area within the Lower Tank Farm (lowest elevation point). The collected storm water is pumped through a bag filter (25 micron pore size) and then normally discharged to the sanitary sewer under a

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Los Angeles County Sanitation Districts (LACSD) Industrial Waste (IW) Permit No. 21302. The Facility is permitted to discharge up to 29,900 gallons per day (gpd) of storm water to the sanitary sewer. When necessary, the Discharger has the option to route the effluent from the bag filter to a portable treatment system, consisting of two trains of mixed bed deionization filters (two filter cartridges in series within each train), and to discharge up to 0.7 MGD of the treated storm water using flexible hoses through Discharge Point 001 into a drainage pipe located at the northeast corner of the Facility. This drainage pipe is connected to a municipal storm drain located on Redondo Avenue, from which the discharge will subsequently flow into the storm drain on E. Spring Street and into the Los Cerritos Channel, a water of the United States.

Prior to discharge to Discharge Point 001, the portable treatment system is activated for a short duration, and water samples after treatment are obtained. The samples are tested for required parameters to affirm compliance with discharge requirements as contained in the NPDES permit No. CA0058343. During this operation, effluent from the treatment system is discharged back to the Tank 104 containment area. When the analytical results of the water samples indicate that the effluent will comply with all NPDES requirements, storm water from the Tank 104 containment area is then pumped through the treatment system and the treated water is discharged through Discharge Point 001 under supervision of a Team Lead. An effluent monitoring sample will then be collected after treatment to satisfy the effluent monitoring requirement of this NPDES permit.

Storm water collected within the secondary containment of the truck rack loading area, product transfer manifold, and pump stations operations is pumped via level control to either Tank No. 30026 or Tank No. 30024 and subsequently transferred to the Tesoro Logistics Operations LLC, Carson Refinery (NPDES Permit No. CA0000680) for treatment. During light rain, storm water from these areas is contained on the property and allowed to evaporate.

The Facility periodically tests the integrity of the tanks, resulting in the production of hydrostatic test water. The hydrostatic test water discharge is regulated under the General NPDES Permit and Waste Discharge Requirements for Discharges of Hydrostatic Test Water to Surface Waters (NPDES No. CAG674001). The Discharger curtails the discharge of hydrostatic test water during storm water releases such that no hydrostatic test water will be commingled with storm water during a discharge event. Routine fire test water generated within the Facility will be contained within the Facility and will not be commingled with storm water discharged through Discharge Point 001.

B. Discharge Points and Receiving Waters

Consistent with the prior Order No. R4-2011-0037, the submitted ROWD, and subsequent correspondence with the Discharger, the Facility proposes to discharge up to 0.7 MGD of treated storm water through Discharge Point 001 (Latitude 33.8015°, Longitude -118.1525°) to a drainage channel located at the northeast corner of the Facility. The discharge flows via the channel to municipal storm drains located at Redondo Avenue, then flows to a storm drain located at E. Spring Street and into the Los Cerritos Channel, a water of the United States, within the Los Cerritos Channel and Alamitos Bay Watershed Management Area.

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

Effluent limitations contained in Order No. R4-2011-0037 for discharges from Discharge Point 001 (Monitoring Location EFF-001) and representative monitoring data from the term of Order No. R4-2011-0037 are as follows:

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Table F-2. Historic Effluent Limitations and Monitoring Data for Final Discharge Locations

Parameter	Units	Effluent Limitation	Monitoring Data (From March 2011 – To December 2015)
		Maximum Daily	Highest Daily Discharge
Conventional Pollutants			
pH	Standard Units	6.5 – 8.5[2]	6.7-8.3[2]
Biochemical oxygen demand (5-day@20ºC) (BOD_5)	mg/L	30	1.6[6]
	lbs/day[1]	175	NR
Total Suspended Solids	mg/L	75	7.8
	lbs/day[1]	438	NR
Oil and Grease	mg/L	15	ND
	lbs/day[1]	88	NR
Non-Conventional Pollutants			
Acute Toxicity	% Survival	[3]	100[4]
Ammonia as Nitrogen	Mg/L	--	0.4[6]
Temperature	°F	86[5]	75[5]
Turbidity	NTU	75	23
E. Coli	MPN/100 mL	--	49
Phenols, Total	mg/L	1.0	ND
	lbs/day[1]	6.0	NR
Sulfide, Total	mg/L	0.1	ND
	lbs/day[1]	0.6	NR
Settleable Solids	mL/L	0.3	ND
Methyl Tert-Butyl Ether (MTBE)	µg/L	--	3.4
Tert-Butyl Alcohol	µg/L	--	52
Priority Pollutants			
Antimony, Total Recoverable	µg/L	--	1.7[6]
	lbs/day[1]	--	NR
Arsenic, Total Recoverable	µg/L	--	5.2
	lbs/day[1]	--	NR
Chromium VI	µg/L	16.3	1.7
	lbs/day[1]	0.10	NR
Copper, Total Recoverable	µg/L	9.8	9.4
	lbs/day[1]	0.06	NR
Lead, Total Recoverable	µg/L	55.8	2.1
	lbs/day[1]	0.33	NR
Mercury, Total Recoverable	µg/L	--	0.35
	lbs/day[1]	--	NR
Selenium, Total Recoverable	µg/L	--	0.63[6]
	lbs/day[1]	--	NR

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Parameter	Units	Effluent Limitation	Monitoring Data (From March 2011 – To December 2015)
		Maximum Daily	Highest Daily Discharge
Nickel, Total Recoverable	µg/L	--	1.6[6]
	lbs/day[1]	--	NR
Zinc, Total Recoverable	µg/L	95.6	46
	lbs/day[1]	0.56	NR
TCDD-Equivalents	µg/L	2.8×10^{-8}	1.6×10^{-6} ([7])
	lbs/day[1]	1.64×10^{-10}	NR

NR = Not Reported; ND = non-detected.

1. Mass-based effluent limitations for pollutants are based on a maximum flow rate of 700,000 GPD.
2. Instantaneous minimum and maximum.
3. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay test shall be at least 90%, and no single test shall produce less than 70% survival.
4. Lowest percentage survival.
5. Instantaneous maximum.
6. DNQ values (detected, but less than the minimum level).
7. Calculations of the TCDD equivalents values as shown in this table included estimated ("j") values; the calculations for TCDD equivalents for compliance purposes do not include these estimated values.

D. Compliance History

Data submitted to the Regional Water Board during the period of February 2011 through December 2015 indicated that the Discharger is in compliance with numerical effluent limitations as specified in Order No. R4-2011-0037. During the same period, the Discharger was cited for five counts of deficient or late reporting violations, including violations such as analyses conducted past holding time. The Discharger was last cited of a reporting violation on July 22, 2015. Instances of non-compliance are currently being evaluated by the Regional Water Board for appropriate action.

E. Planned Changes

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

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 for point source discharges from this facility to surface waters.

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

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

1. **Water Quality Control Plan.** The Regional Water Board adopted a *Water Quality Control Plan for the Los Angeles Region* (hereinafter Basin Plan) on June 13, 1994, that

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designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan. In addition, the Basin Plan implements State Water 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). Municipal and domestic supply is a potential, not existing, use for the Los Cerritos Channel. The Regional Water Board is expected to identify those waters in the Region that should be excepted from the MUN designation. Such exceptions will be proposed under a special Basin Plan Amendment. Until such time, page 2-4 of the Basin Plan specifies that "*no new effluent limitations will be placed in Waste Discharge Requirements as a result of these designations until the Regional Water Board adopts this amendment*." Beneficial uses applicable to the Los Cerritos Channel are as follows:

Table F-3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Los Cerritos Channel to Estuary	Existing: Wildlife habitat (WILD) Intermittent: Warm freshwater habitat (WARM); non-contact water recreation (REC-2) Potential: Municipal and domestic supply (MUN*)[1]; water contact recreation (REC-1)

[1] MUN designations are designated under State Water Board Resolution 88-63 and Regional Water Board Resolution 89-03. Some designations may be considered for exemption at a later date (See pages 2-3, 4 of the Basin Plan for more details

2. **Thermal Plan.** The State Water Board adopted the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan) on January 7, 1971, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. Requirements of this Order implement the Thermal Plan. Additionally, 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 steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. A maximum effluent temperature limitation of 86°F was determined to be appropriate for protection of aquatic life and it is consistent with the maximum temperature limitation of 86°F for thermal waste discharges to the estuaries in the Thermal Plan. Therefore, a maximum temperature effluent limitation of 86°F is included in this Order.

3. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** U.S. EPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, U.S. EPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain federal water quality criteria for priority pollutants.

4. **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,*

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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.

5. **Antidegradation Policy.** Federal regulation 40 C.F.R. section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16 ("Statement of Policy with Respect to Maintaining High Quality of Waters in California"). Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.

6. **Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

7. **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. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

8. **Part 1 Trash Provisions Requirements.** The State Water Board adopted "Amendment to the Ocean Plan and Part I Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California" (Trash Amendments) through Resolution 2015-0019, which was approved by OAL on December 2, 2015 and became effective upon U.S. EPA approval on January 12, 2016. The Trash Amendments apply to all surface waters of the State, with the exception of those waters within the jurisdiction of the Los Angeles Regional Water Board where trash or debris TMDLs are in effect prior to the effective date of the Trash Amendments. The discharge described in this Order may be subjected to the Trash Provisions as there are currently no Trash TMDLs for the San Gabriel River Reach 3. The Trash Amendments established a narrative water quality objective for trash and a prohibition on the discharge of trash, with specific implementation provisions for Dischargers permitted pursuant to CWA section 402(p), including the MS4, Caltrans, Industrial General Permit, and the Construction General Permit; no specific implementation provisions were prescribed for individual industrial permittees. In addition, the Trash Provisions prescribed specific monitoring and reporting requirements for MS4 and Caltrans permittees only; it stated that Dischargers under the Industrial General Permit and the Construction General Permit are required to

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report the measures used to comply with the Trash Provisions, with no detail monitoring and reporting provisions. No references were made to the monitoring and reporting requirements for individual industrial permits.

This Order implements the requirements of the Trash Provisions through the prohibition of trash discharges to the NPDES discharge points. The Trash Provisions did not prescribed specific monitoring and reporting requirements applicable to the Discharger; as such, consistent with the monitoring and reporting requirements for dischargers under the Industrial General Permit (due to similarity of the type of discharge, as the Facility's discharge consists of storm water only from an industrial site), this Order requires the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP), which shall include specific BMPs used as storm water control measures that the Discharger will undertake to prevent the discharge of trash from the Facility to the San Gabriel River Watershed. The Discharger is required to detail and submit to the Regional Water Board annually (through their annual SWPPP submittal) specific BMPs (storm water control measures) employed to control and prohibit the discharge of trash and other pollutants from the Facility through the NPDES discharge points to satisfy the monitoring and reporting requirement of the Trash Provisions. ~~The Trash Amendments establishes a narrative water quality objective for trash and a prohibition on the discharge of trash, with a framework for monitoring and reporting requirements for MS4, Caltrans, Industrial General Permit, and the Construction General Permit. The Trash Amendments apply to all surface waters of the State, with the exception of those waters within the jurisdiction of the Los Angeles Regional Water Board where trash or debris TMDLs are in effect prior to the effective date of the Trash Amendments. The discharge described in this Order may be subjected to the Trash Provisions as there are currently no Trash TMDLs for the Los Cerritos Channel. This Order incorporates the requirements of the Trash Provisions through the prohibition of trash discharges and the requirement for the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP), which shall include specific procedures the Discharger will undertake to prevent the discharge of trash from the Facility to the Los Cerritos Channel Watershed~~.

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

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

The U.S. EPA approved the State's 2012 303(d) list of impaired water bodies on June 26, 2015. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2012 CWA section 303(d) list and have been scheduled for TMDL development.

The Facility discharges into Los Cerritos Channel. The 2012 State Water Board's California 303(d) List classifies Los Cerritos Channel (above and within the estuary) as impaired. The pollutants of concern in the channel include ammonia, bis(2-ethylhexyl)phthalate, chlordane (sediment), coliform bacteria, copper, lead, pH, trash, and zinc. The inclusion of Los Cerritos Channel on the 2012 303(d) list documents the waterbody's lack of assimilative capacity for the pollutants of concern. Total Maximum Daily Loads (TMDLs) are developed for these pollutants of concern to facilitate the waterbody's recovery of its ability to fully support its beneficial uses.

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1. **Los Cerritos Metals TMDL.** U.S. EPA established the *Los Cerritos Channel Total Maximum Daily Loads for Metals* (Los Cerritos Channel Metals TMDL) on March 17, 2010. The Regional Water Board adopted the *Implementation Plan for the Total Maximum Daily Loads for Metals in Los Cerritos Channel* (Los Cerritos Channel Metals TMDL Implementation Plan) on June 6, 2013, through Resolution No. R13-004, which was approved by the State Water Board and the OAL on March 4, 2014, and October 13, 2014, respectively, and became effective on October 13, 2014. The TMDL and its Implementation Plan include dry weather waste load allocations (WLAs) for copper and wet weather WLAs for copper, lead, and zinc for minor NPDES discharges to the Los Cerritos Channel. This permit includes effluent limitations for copper during wet and dry weather, and lead and zinc during wet weather based on the Los Cerritos Channel Metals TMDL and consistent with the Los Cerritos Channel Metals TMDL Implementation Plan.

E. Other Plans, Polices and Regulations – Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

The Discharger operates a petroleum products storage and transfer Facility. Discharges from the Facility consist of treated storm water from containment areas within the Upper and Lower Tank Farms and adjacent access roads. Order No. R4-2011-0037 established effluent limitations for a number of pollutants believed to be present in the discharge of treated storm water from the Facility. Effluent limitations in Order No. R4-2011-0037 were established for pH, temperature, acute toxicity, BOD_5, total suspended solids, turbidity, oil and grease, settleable solids, phenols, sulfides, chromium VI, copper, lead, zinc, and TCDD equivalents. Due to the nature of products that are handled at the Facility, these constituents can be indicators of spills within the Facility. In addition, total petroleum hydrocarbons are pollutants of concern as these constituents were identified based on a review of pollutants commonly found in discharges from similar facilities and/or they were historically detected in the effluent. Pollutants of concerns were also identified based on the Facility's past monitoring history, impairments of the receiving water as identified by the State's 2012 303(d) list, and waste load allocations as established in applicable TMDLs for the receiving water.

Pursuant to 40 CFR §122.45(d), permit limitations for continuous discharges shall be expressed, unless impracticable, as both average monthly effluent limitations (AMELs) and maximum daily effluent limitations (MDELs). As previously stated, discharges from the Facility are intermittent and comprised of treated storm water only. Therefore, AMELs are not applicable for the discharge and only MDELs have been established in this Order.

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

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pollutant cannot be related to a measure of production. The limitations, however, must ensure that dilution will not be used as a substitute for treatment.

A. Discharge Prohibitions

The discharge prohibitions are based on the requirements of the Basin Plan, State Water Board's plans and policies, the CWA, the Water Code, previous permit provisions, and are consistent with the requirements set for other discharges to Los Cerritos Channel that are regulated by NPDES permits.

B. Technology-Based Effluent Limitations

1. Scope and Authority

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

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

a. Best practicable treatment control technology (BPT) represents the average of the best existing performance by well-operated facilities within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

a. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering a two-part reasonableness test. The first test compares the relationship between the costs of attaining a reduction in effluent discharge and the resulting benefits. The second test examines the cost and level of reduction of pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources. Effluent limitations must be reasonable under both tests.

c. 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 C.F.R. section 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the Regional Water Board must consider specific factors outlined in 40 C.F.R. section 125.3.

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2. Applicable Technology-Based Effluent Limitations

Federal ELGs have not been developed for storm water from petroleum bulk stations, terminals, and tank farm facilities. Pursuant to section 122.44(k), the prior Order required the Discharger to develop and implement Best Management Practices (BMPs) and submit a Storm Water Pollution Prevention Plan (SWPPP). This Order will continue to require the Discharger to update and implement a SWPPP to outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff and trash from being discharged directly into the storm drain or receiving water. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water in the undiked areas, that all storm water is contained within the dike at all times, and unauthorized non-storm water discharges do not occur at the Facility. The SWPPP shall also outline management practices to eliminate the discharge of trash entrained in storm water discharged from the Facility, which may enter the surface water of the State and U.S. This Order also requires the Discharger to update and implement a Best Management Practices Plan (BMPP) to establish site-specific procedures that will ensure proper operation and maintenance of transfer and storage areas, and to ensure that unauthorized non-storm water discharges (i.e. spills) do not occur at the Facility.

This order will also require the Discharger to implement a Spill Contingency Plan (SCP). The SCP should be site-specific and shall cover all areas of the Facility. 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, BMPP, SCP, and permit limitations based on past performance and 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 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. Effluent limitations were established in Order No. R4-2011-0037 for biochemical oxygen demand (BOD), oil and grease, TSS, phenols, settleable solids, total sulfides, and turbidity at Discharge Point 001. Pursuant to federal antibacksliding requirements, this Order retains effluent limitations for the above. The limitations for these pollutants are consistent with technology-based effluent limitations (TBEL) included in other Orders within the State for similar types of discharges and are not expected to require additional equipment as these limitations are retained from the prior Order. The Regional Water Board considered other relevant factors pursuant to 40 C.F.R. section 125.3, and for the reasons described below with respect to the TBEL for TPH, concluded that the limitations are appropriate.

The Regional Water Board has included a new BPJ technology-based effluent limitation for total petroleum hydrocarbons (TPH) equal to 100 µg/L, as authorized by section 402(a)(1) of the CWA and 40 C.F.R. section 125.3. The Facility handles and transfer petroleum products as part of its operations; discharges from the Facility may include a multitude of petroleum hydrocarbons that may become entrained in storm water. Rather than establishing individual effluent limitations on numerous petroleum hydrocarbon parameters, this Order includes a new BPJ technology-based effluent limitation for TPH to serve as an indicator pollutant. The technology-based effluent limitation represents the level achievable through BPT and BAT. In setting these limitations, the Regional Water Board considered the factors listed in 40 C.F.R. section 125.3, subdivisions (d)(1) and (d)(3), respectively. The proposed new limit is consistent with industry standards for fuel storage and transfer facilities. Effluent monitoring data collected during the term of Order

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No. R4-2011-0037 show the following results: (1) non-detect for TPH as Motor Oil; (2) 4 out of 5 non-detect values for gasoline, the detected value being 34 µg/L (below the reporting limit); and (3) 5 detected values (all below reporting limits) with a highest detected value of 210 µg/L for diesel oil. As it is uncertain whether the Discharger has the capability of meeting the new limitation, changes to equipment, facilities, processes, or controls may be necessary.

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

Table F-4. Summary of Technology-based Effluent Limitations

Parameter	Units	Effluent Limitations
		Maximum Daily
BOD	mg/L	30
	lbs/day[1]	175
Oil and Grease	mg/L	15
	lbs/day[1]	88
Total Petroleum Hydrocarbons (TPH)[2]	µg/L	100
	lbs/day[1]	0.58
TSS	mg/L	75
	lbs/day[1]	438
Phenols, Total	mg/L	1.0
	lbs/day[1]	6
Settleable Solids	ml/L	0.3
Sulfide, Total	mg/L	0.1
	lbs/day[1]	0.6
Turbidity	NTU	75

[1] The mass emission rates are based on the Facility's maximum flow rate of 700,000 GPD (0.70 MGD) at Discharge Point 001, and are calculated as follows:
Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

[2] TPH equals the sum of TPH gasoline (C_4-C_{12}), TPH diesel (C_{13}-C_{22}), and TPH waste oil (C_{23+}).

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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

40 C.F.R. Section 122.44(d)(1)(i) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi). WQBELs must also be consistent with the assumption and requirements of TMDL WLAs approved by U.S. EPA.

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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. Hence, for this Order, the Regional Water Board has used the SIP methodology to evaluate reasonable potential for discharges through Discharge Point 001.

2. Applicable Beneficial Uses, Water Quality Criteria, and Objectives

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

Priority pollutant water quality criteria in the CTR are applicable to Los Cerritos Channel. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with section 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time. The CTR criteria for freshwater, or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations to protect the beneficial uses of Los Cerritos Channel, a water of the United States.

The table below summarizes applicable water quality criteria and objectives for priority pollutants reported in detectable concentrations in the effluent at EFF-001 or receiving water RSW-001. These criteria were used in conducting the RPA used in this Order. For parameters not associated with a TMDL WLAs, a median hardness value of 260 mg/L as $CaCO_3$ was used based on available receiving water monitoring data collected by the Discharger during the term of Order No. R4-2011-0037.

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Table F-5. Applicable Water Quality Criteria

CTR No.	Constituent	Selected Criteria	CTR Water Quality Criteria		
			Freshwater		Human Health for Consumption of:
			Acute	Chronic	Organisms only
		µg/L	µg/L	µg/L	µg/L
1	Antimony	4300	--	--	4300
2	Arsenic	150	340	150	--
4	Cadmium	5.21	13.3	5.21	Narrative
5-a	Chromium, Trivalent	453	3798	453	Narrative
5-b	Chromium, Hexavalent	11	16	11	Narrative
6	Copper	21	34	21	--
7	Lead	10.7	276	10.7	Narrative
8	Mercury	0.051	--	--	0.051
9	Nickel	117.07	1052.94	117.07	4,600
10	Selenium	5	20	5	Narrative
13	Zinc	269	269	269	--
16	TCDD-Equivalents	$1.4x10^{-8}$	--	--	$1.4x10^{-8}$
58	Anthracene	110000	--	--	110000
61	Benzo(a)Pyrene	0.049	--	--	0.049

Los Cerritos Channel Metals TMDL. The TMDL establishes concentration-based dry weather WLAs in Los Cerritos Channel for copper and concentration based wet weather WLAs for copper, lead, and zinc for minor NPDES discharges. The numeric target portion of the TMDL specifies when the wet weather and dry weather targets are applicable. Wet weather targets are applicable when the flow measured in the Los Cerritos Channel at the City of Long Beach Stearns Street monitoring station is greater than or equal to 23 cubic feet per second (cfs). Dry weather targets are applicable when flow in the Los Cerritos Channel at the Stearns Street monitoring station is less than 23 cfs. The Los Cerritos Channel Metals TMDL Implementation Plan states that permit writers may translate applicable WLAs into effluent limitations for the major, minor, and general NPDES permits by applying the effluent limitation procedures in Section 1.4 of the SIP or other applicable engineering practices authorized under federal regulations. This Order includes dry-weather effluent limitations for copper, and wet weather effluent limitations for copper, lead, and zinc based on the WLAs contained in the Los Cerritos Channel Metals TMDL and applying the procedures in Section 1.4 of the SIP.

Table F-6 summarizes the applicable dry and wet weather WLAs for copper, lead, and zinc contained in the Los Cerritos Channel Metals TMDL. These WLAs are converted into effluent limitations by applying CTR-SIP procedures.

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Table F-6. Los Cerritos Channel Metals TMDL WLAs Applicable to Discharge Point 001

Constituents	Units	WLA	
		Dry Weather[1]	Wet Weather[1]
Copper, Total Recoverable	µg/L	19.1	9.8
Lead, Total Recoverable	µg/L	--	55.8
Zinc, Total Recoverable	µg/L	--	95.6

1. Copper, lead, and zinc targets are dependent on water hardness; these WLAs were developed based on median hardness values collected at Stearns Street gauge station during wet (27 mg/L) and dry weather (170 mg/L).

3. Determining the Need for WQBELs

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

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

a. Trigger 1 – If the MEC ≥ C, a limit is needed.

b. Trigger 2 – If the background concentration (B) > C and the pollutant is detected in the effluent, a limit is needed.

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

Sufficient effluent and receiving water data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. 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. Effluent monitoring data (during three discharge events in 2014) and receiving water monitoring data (two sets of data collected in 2014) collected by the Discharger during the term of Order No. R4-2011-0037 were considered in the RPA.

The Regional Water Board developed WQBELs for copper (wet and dry weather), lead (wet weather), and zinc (wet weather) based on applicable waste load allocations included in the Los Cerritos Channel Metals TMDL. The effluent limitations for these pollutants were established regardless of whether or not there is reasonable potential for the pollutants to be present in the discharge at levels that would cause or contribute to a violation of water quality standards. 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 a reasonable potential analysis for effluent limitations consistent with the assumption and requirements of a TMDL WLA.

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Similarly, the SIP at Section 1.3 recognizes that reasonable potential analysis is not appropriate if a TMDL has been developed.

Table F-6. Summary of Reasonable Potential Analysis

CTR No.	Constituent	Applicable Water Quality Criteria (µg/L)	Maximum Effluent Concentration (µg/L)	Maximum Detected Receiving Water Concentration (µg/L)	RPA Result – Need Limitation?	Reason
1	Antimony, Total Recoverable	4300	1.7	3.9	No	MEC<C; B<C
2	Arsenic, Total Recoverable	150	5.2	6.9	No	MEC<C; B<C
4	Cadmium, Total Recoverable	5.21	ND	0.5	No	MEC<C; B<C
5-a	Chromium, Trivalent	453	1.7	9.4	No	MEC<C; B<C
5-b	Chromium, Hexavalent	11	1.7	ND	No	MEC<C; B<C
6	Copper, Total Recoverable (wet weather)[1]	9.8	9.4	39	Yes[1]	TMDL
	Copper, Total Recoverable (dry weather)	19.1	9.4	39	Yes[1]	TMDL
7	Lead, Total Recoverable (wet weather)	55.8	2.1	19	Yes[1]	TMDL
	Lead, Total Recoverable (dry weather)	10.74	2.1	19	Yes	B>C; detected in effluent
8	Mercury	0.05	0.35	<0.1	Yes	MEC≥C
9	Nickel, Total Recoverable	117	1.6	23	No	MEC<C; B<C
10	Selenium, Total Recoverable	5	0.63	0.66	No	MEC<C; B<C
13	Zinc, Total Recoverable (wet weather)	95.6	46	230	Yes[1]	B>C; detected in effluent; TMDL
	Zinc, Total Recoverable (dry weather)	269	46	230	No	MEC<C; B<C
16	TCDD-Equivalents	1.40E-8	1.63E-6[2]	4.33E-6	Yes	MEC≥C; B>C, detected in effluent

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CTR No.	Constituent	Applicable Water Quality Criteria (µg/L)	Maximum Effluent Concentration (µg/L)	Maximum Detected Receiving Water Concentration (µg/L)	RPA Result – Need Limitation?	Reason
58	Anthracene	110,000	ND	0.047	No	MEC<C; B<C
61	Benzo(a)Pyrene	0.049	ND	0.03	No	MEC<C; B<C

ND = Non-detected

[1] Dry or wet weather limitations are required for this constituent to implement the Los Cerritos Channel Metals TMDL.

[2] Calculations of the TCDD equivalents values as shown in this table included estimated ("j") values; the calculations for TCDD equivalents for compliance purposes do not include these estimated values.

4. WQBEL Calculations

a. If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one or more of the three procedures contained in section 1.4 of the SIP. These procedures include:

i. If applicable and available, use the WLA established as part of a TMDL.

ii. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).

iii. Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Water Board.

b. WQBELs for copper (dry and wet weather), lead (wet weather), and zinc (wet weather) are based on the Los Cerritos Channel Metals TMDL.

c. Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. No dilution credit is included in this Order.

WQBELs Calculation Example

Using total recoverable copper (wet and dry weather) and TCDD equivalents as examples, the following demonstrates how WQBELs were established for this Order. The table in Attachment J summarizes the development and calculation of all WQBELs for this Order using the process described below.

Concentration-Based Effluent Limitations

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

Calculation of aquatic life AMEL and MDEL:

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

$ECA = C + D(C-B)$ when $C>B$, and

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$ECA = C$ when $C \leq B$,

Where C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order, a hardness value of 260 mg/L (as $CaCO_3$) was used for development of hardness-dependent criteria for Discharge Point 001, and a pH of 6.5 was used for pH-dependent criteria, except for wet weather total recoverable lead, copper, and zinc, and dry weather total recoverable copper. For these parameters, WLAs were established in the Los Cerritos Channel Metals TMDL, and the WLAs are used as criteria for these parameters in the RPA, independent of hardness and pH adjustments.

D = The dilution credit, and

B = The ambient background concentration.

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

$ECA = C$

When a WLA has been established through a TMDL for a parameter, the WLA is set equal to the ECA. Note that for copper (wet and dry weather), lead (wet weather), and zinc (wet weather), the acute criterion was used to develop the wet weather WLA and therefore wet weather WLA for these constituents will become the ECA_{acute}. Chronic criterion was used to develop dry weather WLA and therefore dry weather WLA will become the $ECA_{chronic}$.

For total recoverable copper the applicable water quality criteria are (reference Table F-6):

ECA_{acute} = 9.80 µg/L (TMDL wet weather WLA)

$ECA_{chronic}$ = 19.1 µg/L (TMDL dry weather WLA)

For TCDD equivalents, there are no applicable TMDL WLAs or aquatic life criteria for freshwater specified in the CTR.

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

$LTA_{acute} = ECA_{acute} \times Multiplier_{acute\ 99}$

$LTA_{chronic} = ECA_{chronic} \times Multiplier_{chronic\ 99}$

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

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The following values were used to develop the acute and chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides these values up to three decimals):

No. of Samples	CV	ECA Multiplier$_{acute\ 99}$	ECA Multiplier$_{chronic\ 99}$
Copper (dry weather)			
3	0.6	0.321	0.527
Copper (wet weather)			
3	0.6	0.321	0.527

Total recoverable copper (dry weather):

LTA_{acute} = Not applicable

$LTA_{chronic}$ = 19.1 µg/L x 0.527 = 10.1 µg/L

Total recoverable copper (wet weather):

LTA_{acute} = 9.8 µg/L x 0.321 = 3.15 µg/L

$LTA_{chronic}$ = Not applicable

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

For copper, since the acute criteria will be used to develop the wet weather effluent limitations and chronic criteria will be used to develop the dry weather effluent limitations, we only have one criterion for each condition for the parameters listed in the Los Cerritos Channel Metals TMDL; thus, both LTAs (wet and dry) will be used.

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

$AMEL_{aquatic\ life}$ = LTA x $AMEL_{multiplier95}$

$MDEL_{aquatic\ life}$ = LTA x $MDEL_{multiplier99}$

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

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

No. of Samples Per Month	CV	Multiplier$_{MDEL99}$	Multiplier$_{AMEL95}$
4	0.6	3.11	1.55

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Total recoverable copper (dry weather):

$AMEL_{aquatic\ life}$ = 10.1 x 1.55 = 15.6 µg/L

$MDEL_{aquatic\ life}$ = 10.1 x 3.11 = 31.4 µg/L

Total recoverable copper (wet weather):

$AMEL_{aquatic\ life}$ = 3.15 x 1.55 = 4.9 µg/L

$MDEL_{aquatic\ life}$ = 3.15 x 3.11 = 9.8 µg/L

Calculation of human health AMEL and MDEL:

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

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

For copper, this is not necessary since the WLAs were based on a TMDL. Therefore, AMELs based on human health criteria for copper are not appropriate.

For TCDD Equivalents,

$AMEL_{human\ health} = ECA_{human\ health} = 1.4 \times 10^{-8}$ µg/L

Step 6: Calculate the MDEL for human health by multiplying the AMEL by the ratio of $Multipler_{MDEL}$ to the $Multiplier_{AMEL}$. Table 2 of the SIP provides calculated ratios to be used in this calculation based on the CV and the number of samples. The data set for TCDD equivalents is less than 10, and a CV of 0.6 were used.

$MDEL_{human\ health} = AMEL_{human\ health} \times (Multiplier_{MDEL} / Multiplier_{AMEL})$

For TCDD Equivalents, the following values were used to develop the $MDEL_{human\ health}$:

No. of Samples Per Month	CV	MDEL/AMEL Ratio
4	0.6	2.01

$MDEL_{human\ health} = 1.4 \times 10^{-8}$ µg/L x 2.01 = 2.8×10^{-8} µg/L

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

Final WQBELs:

Parameters	**AMEL (ug/L)**	**MDEL (ug/L)**
Total Recoverable Copper (dry weather)	15.6	31.4
Total Recoverable Copper (wet weather)	4.9	9.8
TCDD equivalents	1.4×10^{-8}	2.8×10^{-8}

For copper (wet and dry weather), lead (wet weather), and zinc (wet weather), WLAs have been established based on the Los Cerritos Channel Metals TMDL; therefore, effluent limitations are established based on the Los Cerritos Channel Metals TMDL WLAs.

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The priority pollutants that were not addressed by TMDLs were evaluated as follows. Human health criteria was used for mercury and TCDD equivalents (human health criteria in the CTR for 2,3,7,8-TCDD were used for TCDD equivalents; the calculation of TCDD equivalents includes the quantification of the amount of 2,3,7,8-TCDD present in the discharge). Aquatic life criteria was used for lead (dry weather). These limitations are expected to be protective of the beneficial uses. Final WQBELs are summarized in Table F-7 of this Fact Sheet. Since the Facility discharges storm water runoff only, only MDELs are prescribed in this Order.

5. WQBELs based on Basin Plan Objectives

a. **pH.** The pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of waste discharge. This Order includes effluent and receiving water limitations for pH to ensure compliance with Basin Plan Objectives for pH.

b. **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 technology-based effluent limitation and monitoring requirement.

c. **Temperature.** The Basin Plan lists temperature requirements for the receiving waters and references the Thermal Plan. Consistent with the Thermal Plan and a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*, a maximum temperature effluent limitation of 86°F was included in Order No. R4-2011-0037 and will be retained in this Order.

d. **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 limit, 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. As such, the Regional Water Board implemented a technology-based MDEL of 75 mg/L for the implementation of the narrative water quality objective for solids. These limitations are consistent with the limitations in Order No. R4-2011-0037 and are retained as effluent limitations.

e. **Dissolved Oxygen.** The discharge shall not depress the concentration of dissolved oxygen to fall below 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation. This Order addresses dissolved oxygen through receiving water monitoring and receiving water limitations.

6. Whole Effluent Toxicity (WET)

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

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

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses by aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. Order No. R4-2011-0037 contains acute toxicity limitations and monitoring requirements in accordance with the Basin Plan, in which the acute toxicity objective for discharges dictates that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. During the term of Order No. R4-2011-0037, effluent acute toxicity monitoring results were 100% survival for all four sample events.

Chronic toxicity is a more stringent requirement than acute toxicity. A chemical at a low concentration can have chronic effects but no acute effects. Because discharge from the Facility may include a number of chemicals, which individually may not be present in toxic concentrations while exhibiting aggregated toxic effects as a whole, this Order prescribes a chronic toxicity effluent limitation and requires chronic toxicity monitoring for the effluent at Discharge Point 001. The whole effluent toxicity testing requirements are based on U.S. EPA's 2010 Test of Significant Toxicity (TST) statistical testing approach. In 2010, U.S. EPA endorsed the peer-reviewed TST statistical approach in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010) as an improved statistical tool to evaluate data from U.S. EPA's toxicity test methods. The TST statistical approach more reliably identifies toxicity than the current no observed effect concentration (NOEC) statistical approach. TST statistical results are also more transparent than the point estimate model approach used for acute toxicity that is not designed to address the question of statistical uncertainty around the modeled toxicity test result in relation to the effect level of concern. The TST statistical approach is the superior statistical approach for addressing statistical uncertainty when used in combination with U.S. EPA's toxicity test methods and is implemented in federal permits issued by U.S. EPA Region 9.

The TST's null hypothesis for chronic toxicity is:

H_0: Mean response (In-stream Waste Concentration (IWC) in % effluent) ≤ (0.75 x mean response (Control)).

Results obtained from a single-concentration chronic toxicity test are analyzed using the TST statistical approach and an acceptable level of chronic toxicity is demonstrated by rejecting the null hypothesis and reporting "Pass" or "P". Chronic toxicity results are expressed as "Pass" or "Fail" and "% Effect. The chronic toxicity IWCs for Discharge Points 001 is 100 percent effluent. The MDEL for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed using the TST statistical approach, results in "Fail" and the "Percent Effect" is ≥0.50.

Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. The Regional Water Board has determined that chronic toxicity demonstrates reasonable potential based on Step 7 of the RPA procedure described in the SIP which states that other information may be considered to determine whether a WQBEL is needed. Such information includes, among other aspects, the facility type, the discharge type, and the potential toxic impacts of the

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discharge. The Facility has the potential to discharge a number of petroleum product-related pollutants and metals which together may cause chronic toxicity effluent violations. Therefore, a chronic toxicity effluent limitation is included in this Order.

7. Final WQBELs

Table F-7. Summary of Water Quality-based Effluent Limitations – EFF-001

Parameter	Units	Effluent Limitations		
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	standard units	--	6.5	8.5
Chronic Toxicity	Pass or Fail, % Effect (for TST Statistical Approach)	Pass and % Effect < 50[2]	--	--
Temperature	Degrees F	--	--	86
Copper, Total Recoverable, Wet Weather[3,5]	µg/L	9.8	--	--
	lbs/day[1]	0.057	--	--
Copper, Total Recoverable, Dry Weather[4,5]	µg/L	31	--	--
	lbs/day[1]	0.18	--	--
Lead, Total Recoverable, Wet Weather[3,5]	µg/L	56	--	--
	lbs/day[1]	0.33	--	--
Lead, Total Recoverable, Dry Weather[4,5]	µg/L	18	--	--
	lbs/day[1]	0.11	--	--
Mercury, Total Recoverable	µg/L	0.10	--	--
	lbs/day[1]	0.00058	--	--
Zinc, Total Recoverable, Wet Weather[3,5]	µg/L	96	--	--
	lbs/day[1]	0.56	--	--
TCDD Equivalents	µg/L	2.8e-8	--	--
	lbs/day[1]	1.6 e-10	--	--

1. Mass loading limitations are based on the maximum flow at Discharge Point 001 (0.7 MGD) and are calculated as follows:
   Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.
2. The maximum daily effluent limitation (MDEL) shall be reported "Pass" or "Fail" and "% Effect".
3. Wet weather applies when the flow is equal to or greater than 23 cubic feet per second (cfs) as measured at Stearns Street monitoring station in the Los Cerritos Channel.
4. Dry weather applies when the flow is less than 23 cfs as measured at Stearns Street monitoring station in the Los Cerritos Channel.
5. Limitations derived based on WLAs as included in the Los Cerritos Channel Metals TMDL.

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D. Final Effluent Limitation Considerations

Effluent limitations for BOD, oil and grease, pH, TSS, phenols, sulfides, settleable solids, temperature, and turbidity from Order No. R4-2011-0037, and consistent with the Basin Plan water quality objectives, are included in this Order. A chronic toxicity effluent limitation (evaluated using the TST statistical approach), which is a more stringent requirement than acute toxicity is included in this Order in lieu of acute toxicity. An effluent limitation for TPH is established in this Order based on BPJ and a review of effluent monitoring data during the term of the existing permit.

The Los Cerritos Channel Metals TMDL contains dry weather WLAs for copper, and wet weather WLAs for lead, copper, and zinc that are applicable to the discharge. Order No. R4-2011-0037 prescribed effluent limitations for these parameters based on their wet weather WLAs in the TMDL; no dry weather effluent limitations were prescribed. This Order prescribes separate wet and dry weather effluent limitations for parameters associated with the Los Cerritos Channel Metals TMDL, using the receiving water hardness of 260 mg/L to evaluate reasonable potential and develop effluent limitations for the hardness dependent parameters, including dry weather conditions for lead and zinc. Effluent limitations for dry weather copper, and wet weather lead, copper, and zinc were developed based on their respective WLAs included in the TMDL. As such, effluent limitations for wet weather copper, lead, and zinc in this Order remain the same as those in Order No. R4-2011-0037. Order No. R4-2011-0037 did not include dry weather copper effluent limitations; this Order includes dry weather copper effluent limitations based on its WLA in the TMDL.

In addition, effluent limitations for lead during dry weather (i.e. wet weather is addressed by the TMDL), mercury, and TCDD equivalents are established in this Order based on CTR and SIP procedures for pollutants that exhibit reasonable potential and available receiving and effluent monitoring data collected during the term of Order No. R4-2011-0037. Refer to Attachment J for a summary of the RPA and associated effluent limitation calculations.

1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations established in this Order are at least as stringent as the effluent limitations in Order No. R4-2011-0037 with the exception of effluent limitations for chromium(VI).

CWA section 402(o)(2) provides several exceptions to the anti-backsliding regulations. CWA 402(o)(2)(B)(i) allows a renewed, reissued, or modified permit to contain a less stringent effluent limitation for a pollutant if 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. As described further in section IV.C.3.of this Fact Sheet, updated information that was not available at the time Order No. R4-2011-0037 was issued (e.g. monitoring data collected during the term of Order No. R4-2011-0037) indicates that chromium VI in the effluent does not exhibit reasonable potential to cause or contribute to an exceedance of its water quality objectives in the receiving water. Thus, removal of the effluent limitations for chromium(VI) is in accordance with CWA section 402(o)(2)(B)(i), which allows for the removal of effluent limitations based on information that was not available at the time of permit issuance.

2. Antidegradation Policies

40 C.F.R. 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. 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.

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The permitted discharge is not a new discharge. This Order does not provide for an increase in the permitted design flow or allow for a reduction in the level of treatment. The final limitations in this Order, which include concentration based and mass based limitations, hold the discharger to performance levels that will not adversely impact the beneficial uses of the Los Cerritos Channel or degrade water quality. The inclusion of the effluent limitations and prohibitions in the NPDES permit, which ensure that any discharge would not result in the lowering of water quality, support the conclusion that no degradation will arise as a result of reissuing this Order.

Removal of the effluent limitations for chromium(VI) will not result in the degradation of high quality waters, because monitoring results for discharges from the Facility during the term of Order No. R4-2011-0037 does not show evidence that the discharge contains levels of chromium(VI) that have reasonable potential to cause or contribute to an exceedance of its water quality objectives in the receiving water.

The effluent limitations in this Order hold the Discharger to performance levels that will not cause or contribute to water quality impairments or water quality degradation. The effluent limitations, receiving water limitations, and effluent and receiving water monitoring requirements ensure that excursions above water quality objectives of the Los Cerritos Channel will be apparent and can be addressed immediately. Further, compliance with these requirements will result in the use of best practicable treatment or control of the discharge. Therefore, the permitted discharge is consistent with the state's antidegradation policy.

3. Mass-based Effluent Limitations

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

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

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

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

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

Flow rate = discharge flow rate (MGD)

Mass-based effluent limitations applicable to Discharge Point 001 are calculated based on a discharge flow of 0.7 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, TSS, oil and grease, settleable solids, turbidity, TPHs, phenols, and total sulfides. Restrictions on these pollutants are discussed in section IV.B of the Fact Sheet.

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This Order's technology-based pollutant restrictions implement the minimum applicable federal technology-based requirements.

Water quality-based effluent limitations have been derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 C.F.R. section 131.38. The procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR implemented by the SIP, which was approved by U.S. EPA on May 18, 2000. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by U.S. EPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to U.S. EPA prior to May 30, 2000, but not approved by U.S. EPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 C.F.R. section 131.21(c)(1). The remaining water quality objectives and beneficial uses implemented by this Order were approved by U.S. EPA and are applicable water quality standards pursuant to section 131.21(c)(2). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

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5. Summary of Final Effluent Limitations

Table F-8. Summary of Final Effluent Limitations at Discharge Point 001

Parameter	Units	Effluent Limitations			Basis[1]
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Conventional Pollutants					
BOD	mg/L	30	--	--	E, BPJ
	lbs/day[2]	175	--	--	
Oil and Grease	mg/L	15	--	--	E, BPJ
	lbs/day[2]	88	--	--	
pH	standard units	--	6.5	8.5	E, BP
TSS	mg/L	75	--	--	E, BPJ
	lbs/day[2]	438	--	--	
Non-Conventional Pollutants					
Chronic Toxicity	Pass or Fail, % Effect (for TST statistical approach)	Pass and % Effect < 50[3]	--	--	BP
Phenols, Total	mg/L	1.0	--	--	E, BPJ
	lbs/day[2]	5.8	--	--	
Settleable Solids	ml/L	0.3	--	--	E, BPJ
Sulfide, Total	mg/L	0.1	--	--	E, BPJ
	lbs/day[2]	0.58	--	--	
Temperature	ºF	--	--	86	E, BP, TP, WP

Parameter	Units	Effluent Limitations			Basis[1]
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Total Petroleum Hydrocarbons[4]	µg/L	100	--	--	BPJ
	lbs/day[2]	0.58	--	--	
Turbidity	NTU	75	--	--	E, BPJ
Priority Pollutants					
Copper, Total Recoverable, Dry Weather[6]	µg/L	31	--	--	TMDL
	lbs/day[2]	0.18	--	--	
Copper, Total Recoverable, Wet Weather[5]	µg/L	9.8	--	--	E, TMDL
	lbs/day[2]	0.057	--	--	
Lead, Total Recoverable, Wet Weather[5]	µg/L	56	--	--	E, TMDL
	lbs/day[2]	0.33	--	--	
Lead, Total Recoverable, Dry Weather[6]	µg/L	18	--	--	CTR, SIP
	lbs/day[2]	0.11	--	--	
Mercury, Total Recoverable	µg/L	0.10	--	--	CTR, SIP
	lbs/day[2]	0.00058	--	--	
Zinc, Total Recoverable, Wet Weather[5]	µg/L	96	--	--	E, TMDL
	lbs/day[2]	0.56	--	--	
TCDD Equivalents[7]	µg/L	2.8×10^{-8}	--	--	E, CTR, SIP
	lbs/day[2]	1.6×10^{-10}	--	--	

[1] E = Order No. R4-2011-0037; BPJ = Best Professional Judgment; BP = Basin Plan; TMDL = Total Maximum Daily Load; CTR = California Toxic Rule; Thermal Plan; SIP = State Implementation Policy; WP = White Paper; TP=Thermal Plan.

[2] Mass loading limitations are based on a maximum flow of 0.7 MGD and are calculated as follows:
Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

[3] The maximum daily effluent limitation (MDEL) shall be reported as "Pass" or "Fail" and "% Effect."

[4] Total Petroleum Hydrocarbons (TPH) equals the sum of TPH as gasoline (C4-C12), TPH as diesel (C13-C22), and TPH waste oil (C23+).

[5] Wet weather applies when the maximum daily flow is equal to or greater than 23 cubic feet per second (cfs) as measured at Stearns Street monitoring station in the Los Cerritos Channel.

[6] Dry weather applies when the maximum daily flow is less than 23 cfs as measured at Stearns Street monitoring station in the Los Cerritos Channel.

[7] TCDD equivalents shall be calculated using the following formula, where the MLs and the toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the MLs to zero. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.

Dioxin-TEQ (TCDD equivalents) = $\Sigma(C_x \times TEF_x)$

where: C_x = concentration of dioxin or furan congener x

TEF_x= TEF for congener x

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

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Congeners	Minimum Levels (pg/L)	Toxicity Equivalence Factor (TEF)
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

E. Interim Effluent Limitations – Not Applicable

F. Land Discharge Specifications – Not Applicable

G. Recycling Specifications – Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 C.F.R. section 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this Order are included to ensure protection of the beneficial uses of the receiving water. If there is reasonable potential or a U.S. EPA-approved TMDL WLA, then WQBELs are included in this Order to ensure protection of the beneficial uses.

B. Groundwater – Not Applicable

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

Sections 122.41(a)(1) and (b) through (n) of 40 C.F.R. establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) of 40 C.F.R. allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 C.F.R. section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 C.F.R. sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

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B. Special Provisions

1. Reopener Provisions

These provisions are based on 40 C.F.R part 123 and Order No. R4-2011-0037. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new federal regulations, modification in toxicity requirements, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan or revisions to TMDLs associated with Los Cerritos Channel Watershed.

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.

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 a 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 through Discharge Point 001. SWPPP requirements are included as Attachment G, based on 40 CFR 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. The purpose of the BMPP is to establish site-specific procedures that ensure proper operation and maintenance of equipment, to ensure that unauthorized non-storm water discharges (i.e., spills) do not occur at the Facility. The BMPP shall incorporate the requirements contained in Attachment G. Attachment G requires a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.

c. **Spill 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 is based on the requirements of 40 C.F.R. section 122.41(e) and Order No. R4-2011-0037.

5. Other Special Provisions – Not Applicable

6. Compliance Schedules – Not Applicable

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VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this Facility.

A. Influent Monitoring–Not Applicable

B. Effluent Monitoring

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 includes monitoring requirements of at least once per discharge event for parameters with effluent limitations. Monitoring for additional pollutants is required based on considerations of pollutants commonly associated with similar operations, and is consistent with the monitoring requirements included in the MRP of Order No. R4-2011-0037. For parameters that were detected in the monitoring events during the term of Order No. R4-2011-0037 and were not associated with any effluent limitations, monitoring frequencies of at least once per quarter are prescribed. This Order did not retain monitoring requirements as prescribed in the previous Orders for fecal coliform, total organic carbon, specific conductance, or acute toxicity, as these pollutants no longer possess effluent or receiving water limitations, or are replaced by a more stringent and comprehensive method (with associated monitoring requirements) to assess their individual effects to the receiving water quality. (A monitoring requirement of once per year for chronic toxicity using the TST statistical approach for analysis is included in lieu of the acute toxicity monitoring requirements).

The SIP states that the Regional Water Board will require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established. This Order requires the Discharger to conduct annual monitoring for the remaining CTR priority pollutants at Discharge Point 001. 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. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth. A chemical at a low concentration can have chronic effects but no acute effects. Chronic toxicity is a more stringent requirement that acute toxicity. For this Order, chronic toxicity monitoring in the discharge is required. The chronic toxicity testing requirements are based on U.S. EPA's 2010 TST statistical approach.

D. Receiving Water Monitoring

1. Surface Water Monitoring

Monitoring requirements from Order No. R4-2011-0037 at the upstream receiving water station RSW-001 are retained for this Order. The SIP requires monitoring of the upstream receiving water for the CTR priority pollutants, including TCDD equivalents, to

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determine reasonable potential. This Order requires the Discharger conduct receiving water monitoring of the CTR priority pollutants, including TCDD equivalents, at Monitoring Location RSW-001. Additionally, the Discharger must analyze pH, temperature, hardness, dissolved oxygen, and ammonia of the receiving water at the same time as the samples are collected for priority pollutants (including TCDD equivalents) analyses. The Discharger is required to perform upstream receiving monitoring at RSW-001 at least once per year.

Downstream receiving water monitoring requirements at Monitoring Location RSW-002 are established in this Order to determine compliance with the receiving water limitations established in the Order. The Discharger is required to monitor pH, ammonia, dissolved oxygen, hardness, temperature, and all CTR priority pollutant including TCDD equivalents at least once during the term of this Order.

The Discharger is also required to report the maximum daily flow in the Los Cerritos Channel at the City of Long Beach's monitoring station at Stearns Street. This station is designated as RSW-003 in this Order. This data shall be used to determine wet weather and dry weather conditions for compliance with the effluent limitations set forth in this Order.

2. Groundwater – Not Applicable

E. Other Monitoring Requirements

1. Rainfall Monitoring and Visual Observation. Because the discharge is comprised of storm water, the Discharger is required to measure and record the rainfall each day of the month. The Discharger is also required to conduct visual observations of all storm water discharges in the vicinity of the discharge to observe the presence of trash, floating and suspended materials, oil and grease, discoloration, turbidity, and odor. These requirements are retained from Order No. R4-2011-0037.

VIII. PUBLIC PARTICIPATION

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

A. Notification of Interested Parties

The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through email and publication in the local newspaper; 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 Regional Water Board's website at:

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

F. Written Comments

Interested persons were invited to submit written comments concerning the tentative WDRs as provided through the notification process. Comments were required to be submitted either in person or by mail to the Executive Office at the Regional Water Board at 320 West 4th Street, Suite 200, Los Angeles, CA 90013, or by email to losangeles@waterboards.ca.gov with a copy to Ching-Yin.To@waterboards.ca.gov.

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To be fully responded to by staff and considered by the Regional Water Board, written comments were due at the Regional Water Board office by 5:00 p.m. on May 9, 2016.

G. 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: June 9, 2016
Time: 9:00 a.m.
Location: Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, California

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

H. Reconsideration of Waste Discharge Requirements

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

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

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

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

I. Information and Copying

The Report of Waste Discharge (ROWD), tentative WDRs, comments received, and other supporting documents are on file and may be inspected at the Regional Water Board's office at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Viewing and copying of documents may be arranged through the Regional Water Board by calling (213) 576 – 6600.

J. Register of Interested Persons

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

K. Additional Information

Requests for additional information or questions regarding this order should be directed to Ching-Yin To at Ching-Yin.To@waterboards.ca.gov or at (213) 576-6696.

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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 ~~6 months~~no later than 90 days from the date of the submittal of the SWPPP to the Regional Water Board (whichever comes first).

II. OBJECTIVES

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

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

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

III. PLANNING AND ORGANIZATION

A. Pollution Prevention Team

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

B. Review Other Requirements and Existing Facility Plans

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

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

IV. SITE MAP

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

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

PLANNING AND ORGANIZATION Form Pollution Prevention Team Review other plans

ASSESSMENT PHASE Develop a site map Identify potential pollutant sources Inventory of materials and chemicals List significant spills and leaks Identify non-storm water discharges Assess pollutant risks

BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE Non-structural BMPs Structural BMPs Select activity and site-specific BMPs

IMPLEMENTATION PHASE Train employees Implement BMPs Conduct recordkeeping and reporting

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

The following information shall be included on the site map:

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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 materials[1] 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, 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

[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 (CERLCA); 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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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 (C.F.R.), 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 Code of Federal Regulations [C.F.R.], parts 110, 117, and 302).

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

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

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.

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The last column of Table B, "Control Practices", should be completed in accordance with section VIII. 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:

2. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and

3. 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 off fuel oil, and rainfall running onto and off fueling area.	fuel oil	Use spill and overflow protection. Minimize run-on of storm water into the fueling area. Cover fueling area. Use dry cleanup methods rather than hosing down area. Implement proper spill prevention control program. Implement adequate preventative maintenance program to preventive tank and line leaks. Inspect fueling areas regularly to detect problems before they occur. Train employees on proper fueling, cleanup, and spill response techniques.

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

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

A. Non-Structural BMPs

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

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

5. **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.

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6. **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.

7. **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.

8. **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.

9. **Waste Handling/Recycling.** This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.

10. **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.

11. **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.

12. **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.

13. **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:

14. **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.

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

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

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

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18. **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. ~~90 days of the evaluation.~~ Evaluations shall include the following:

A. A review of all visual observation records, inspection records, and sampling and analysis results.

B. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.

C. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.

D. An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in section 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 ~~General~~ Permit. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Standard Provisions V.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 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.

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

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

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

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

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

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

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

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

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

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

Table 2d – PESTICIDES – PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
alpha-BHC	0.01
Aldrin	0.005
b-Endosulfan	0.01
Beta-BHC	0.005
Chlordane	0.1
Delta-BHC	0.005
Dieldrin	0.01

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Table 2d – PESTICIDES – PCBs*	GC
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Gamma-BHC (Lindane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

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

Techniques:

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

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ATTACHMENT I – LIST OF PRIORITY POLLUTANTS

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

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CTR Number	Parameter	CAS Number	Analytical Methods
47	2,4-Dimethylphenol	115679	[1]
48	2-Methyl-4,6-Dinitrophenol	534521	[1]
49	2,4-Dinitrophenol	51285	[1]
50	2-Nitrophenol	88755	[1]
51	4-Nitrophenol	110027	[1]
52	3-Methyl-4-Chlorophenol	59507	[1]
53	Pentachlorophenol	87865	[1]
54	Phenol	118952	[1]
55	2,4,6-Trichlorophenol	88062	[1]
56	Acenaphthene	83329	[1]
57	Acenaphthylene	208968	[1]
58	Anthracene	120127	[1]
59	Benzidine	92875	[1]
60	Benzo(a)Anthracene	56553	[1]
61	Benzo(a)Pyrene	50328	[1]
62	Benzo(b)Fluoranthene	205992	[1]
63	Benzo(ghi)Perylene	191242	[1]
64	Benzo(k)Fluoranthene	207089	[1]
65	Bis(2-Chloroethoxy)Methane	111911	[1]
66	Bis(2-Chloroethyl)Ether	111444	[1]
67	Bis(2-Chloroisopropyl)Ether	118601	[1]
68	Bis(2-Ethylhexyl)Phthalate	117817	[1]
69	4-Bromophenyl Phenyl Ether	111553	[1]
70	Butylbenzyl Phthalate	85687	[1]
71	2-Chloronaphthalene	91587	[1]
72	4-Chlorophenyl Phenyl Ether	7005723	[1]
73	Chrysene	218019	[1]
74	Dibenzo(a,h)Anthracene	53703	[1]
75	1,2-Dichlorobenzene	95501	[1]
76	1,3-Dichlorobenzene	541731	[1]
77	1,4-Dichlorobenzene	116467	[1]
78	3,3'-Dichlorobenzidine	91941	[1]
79	Diethyl Phthalate	84662	[1]
80	Dimethyl Phthalate	131113	[1]
81	Di-n-Butyl Phthalate	84742	[1]
82	2,4-Dinitrotoluene	121142	[1]
83	2,6-Dinitrotoluene	606202	[1]
84	Di-n-Octyl Phthalate	117840	[1]
85	1,2-Diphenylhydrazine	122667	[1]
86	Fluoranthene	206440	[1]
87	Fluorene	86737	[1]
88	Hexachlorobenzene	118741	[1]
89	Hexachlorobutadiene	87863	[1]
90	Hexachlorocyclopentadiene	77474	[1]
91	Hexachloroethane	67721	[1]
92	Indeno(1,2,3-cd)Pyrene	193395	[1]
93	Isophorone	78591	[1]
94	Naphthalene	91203	[1]
95	Nitrobenzene	98953	[1]
96	N-Nitrosodimethylamine	62759	[1]
97	N-Nitrosodi-n-Propylamine	621647	[1]
98	N-Nitrosodiphenylamine	86306	[1]
99	Phenanthrene	85018	[1]

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

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

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ATTACHMENT J – SUMMARY OF REASONABLE POTENTIAL ANALYSIS (RPA)

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CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)						Lowest C or WLAs	REASONABLE POTENTIAL ANALYSIS (RPA)										
					Freshwater		Saltwater		Human Health for consumption of:													
					C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only		MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL)	Enter the pollutant B detected max conc (ug/L)	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?	Reason
1	Antimony	ug/L		1.7						4300.00	4300.00	No	No	Y	N		3.9		B<=C, Step 7		No	MEC<C & B<=C
2	Arsenic	ug/L		5.2	340.00	150.00					150.00	No	No	Y	N		6.9		B<=C, Step 7		No	MEC<C & B<=C
3	Beryllium	ug/L		No Criteria						Narrative	No Criteria	No Criteria	No Criteria	Y	Y	0.25		N	No Criteria	0.00	Uc	No Criteria
4	Cadmium	ug/L		0.25	13.27	5.21				Narrative	5.21	No	No	Y	N		0.5		B<=C, Step 7		No	MEC<C & B<=C
5a	Chromium (III)			1.7	3797.88	452.69				Narrative	452.69	No	No	Y	N		9.4		B<=C, Step 7		No	MEC<C & B<=C
5b	Chromium (VI)	ug/L		1.7	16.00	11.00				Narrative	11.00	No	No	Y	Y	5		N	No detected value of B, Step 7		No	MEC<C & B is ND
6	Copper, Dry Weather WLA	ug/L	0.6	9.4		19.10					19.10	No	No	Y	N		39		Limit required, B>C & pollutant dete		Yes	B>C & pollutant detected in e
6	Copper, Wet Weather WLA	ug/L	0.6	9.4	9.80						9.80	No	No	Y	N		39		Limit required, B>C & pollutant dete	0.00	Yes	B>C & pollutant detected in e
7	Lead	ug/L	0.6	2.1	275.54	10.74				Narrative	10.74	No	No	Y	N		19		Limit required, B>C & pollutant dete		Yes	B>C & pollutant detected in e
7	Lead, Wet Weather WLA	ug/L	0.6	2.1	55.80						55.80	No	No	Y	N		19		B<=C, Step 7	0.00	No	MEC<C & B<=C
8	Mercury	ug/L	0.6	0.35	Reserved	Reserved				0.05	0.05	Yes	Yes	Y	Y	0.1		Y	No detected value of B, Step 7		Yes	MEC>=C
9	Nickel	ug/L		1.6	1052.93	117.07				4600.00	117.07	No	No	Y	N		23		B<=C, Step 7		No	MEC<C & B<=C
10	Selenium	ug/L		0.63	20.00	5.00				Narrative	5.00	No	No	Y	N		0.66		B<=C, Step 7		No	MEC<C & B<=C
11	Silver	ug/L		0.5	21.00						21.00	No	No	Y	Y	0.5		N	No detected value of B, Step 7		No	MEC<C & B is ND
12	Thallium	ug/L		0.5						6.30	6.30	No	No	Y	Y	0.5		N	No detected value of B, Step 7		No	MEC<C & B is ND
13	Zinc	ug/L		46	269.23	269.23					269.2	No	No	Y	N		230		B<=C, Step 7		No	MEC<C & B<=C
	Zinc, Wet Weather WLA	ug/L	0.6	46	95.60						95.6	No	No	Y	N		230		Limit required, B>C & pollutant dete	0.00	Yes	B>C & pollutant detected in e
14	Cyanide	ug/L			22.00	5.20				220000.0	5.20			Y	Y	13		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, an
15	Asbestos	MFL		No Criteria							No Criteria	No Criteria	No Criteria	N					No Criteria	0.00	Uc	No Criteria
16	2,3,7,8 TCDD	ug/L								1.4E-08	1.40E-08			Y	Y	1.1		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, an
	TCDD Equivalents	ug/L	0.6	2.6E-08						1.4E-08	1.40E-08	Yes	Yes	Y	N		4.325E-06		Limit required, B>C & pollutant dete		Yes	MEC>=C
17	Acrolein	ug/L		2.5						780.0	780	No	No	Y	Y	2.5		N	No detected value of B, Step 7		No	MEC<C & B is ND
18	Acrylonitrile	ug/L								0.66	0.660			Y	Y	1		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, an
19	Benzene	ug/L		0.25						71	71.0	No	No	Y	Y	0.25		N	No detected value of B, Step 7		No	MEC<C & B is ND
20	Bromoform	ug/L		0.25						360	360.0	No	No	Y	Y	0.25		N	No detected value of B, Step 7		No	MEC<C & B is ND
21	Carbon Tetrachloride	ug/L		0.25						4.4	4.40	No	No	Y	Y	0.25		N	No detected value of B, Step 7		No	MEC<C & B is ND
22	Chlorobenzene	ug/L		0.25						21000	21000	No	No	Y	Y	0.25		N	No detected value of B, Step 7		No	MEC<C & B is ND
23	Chlorodibromomethane	ug/L		0.25						34	34.00	No	No	Y	Y	0.25		N	No detected value of B, Step 7		No	MEC<C & B is ND
24	Chloroethane	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.25		N	No Criteria	0.00	Uc	No Criteria
25	2-Chloroethylvinyl ether	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	1		N	No Criteria	0.00	Uc	No Criteria
26	Chloroform	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.25		N	No Criteria	0.00	Uc	No Criteria
27	Dichlorobromomethane	ug/L		0.25						46	46.00	No	No	Y	Y	0.25		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
28	1,1-Dichloroethane	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.25		N	No Criteria	0.00	Uc	No Criteria
29	1,2-Dichloroethane	ug/L		0.25						99	99.00	No	No	Y	Y	0.25		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
30	1,1-Dichloroethylene	ug/L		0.25						3.2	3.200	No	No	Y	Y	0.25		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
31	1,2-Dichloropropane	ug/L		0.25						39	39.00	No	No	Y	Y	0.25		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
32	1,3-Dichloropropylene	ug/L		0.25						1700	1700	No	No	Y	Y	0.25		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
33	Ethylbenzene	ug/L		0.25						29000	29000	No	No	Y	Y	0.25		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
34	Methyl Bromide	ug/L		0.25						4000	4000	No	No	Y	Y	0.25		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
35	Methyl Chloride	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.25		N	No Criteria	0.00	Uc	No Criteria
36	Methylene Chloride	ug/L		0.88						1600	1600.0	No	No	Y	Y	0.88		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
37	1,1,2,2-Tetrachloroethane	ug/L		0.25						11	11.00	No	No	Y	Y	0.25		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
38	Tetrachloroethylene	ug/L		0.25						8.85	8.9	No	No	Y	Y	0.25		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
39	Toluene	ug/L		0.25						200000	200000	No	No	Y	Y	0.25		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
40	1,2-Trans-Dichloroethylene	ug/L		0.25						140000	140000	No	No	Y	Y	0.25		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
41	1,1,1-Trichloroethane	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.25		N	No Criteria	0.00	Uc	No Criteria
42	1,1,2-Trichloroethane	ug/L		0.25						42	42.0	No	No	Y	Y	0.25		N	No detected value of B, Step 7		No	MEC<C & B is ND
43	Trichloroethylene	ug/L		0.25						81	81.0	No	No	Y	Y	0.25		N	No detected value of B, Step 7		No	MEC<C & B is ND
44	Vinyl Chloride	ug/L		0.25						525	525	No	No	Y	Y	0.25		N	No detected value of B, Step 7		No	MEC<C & B is ND
45	2-Chlorophenol	ug/L		0.48						400	400	No	No	Y	Y	0.53		N	No detected value of B, Step 7		No	MEC<C & B is ND
46	2,4-Dichlorophenol	ug/L		0.96						790	790	No	No	Y	Y	1.1		N	No detected value of B, Step 7		No	MEC<C & B is ND
47	2,4-Dimethylphenol	ug/L		0.96						2300	2300	No	No	Y	Y	1.1		N	No detected value of B, Step 7		No	MEC<C & B is ND
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L		1.9						765	765.0	No	No	Y	Y	2.1		N	No detected value of B, Step 7		No	MEC<C & B is ND
49	2,4-Dinitrophenol	ug/L		1.9						14000	14000	No	No	Y	Y	2.1		N	No detected value of B, Step 7		No	MEC<C & B is ND
50	2-Nitrophenol	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	1.1		N	No Criteria	0.00	Uc	No Criteria
51	4-Nitrophenol	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	2.1		N	No Criteria	0.00	Uc	No Criteria
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.21		N	No Criteria	0.00	Uc	No Criteria
53	Pentachlorophenol	ug/L		0.96	5.28	4.05				8.2	4.05	No	No	Y	Y	1.1		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
54	Phenol	ug/L		0.48						4600000	4600000	No	No	Y	Y	0.53		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
55	2,4,6-Trichlorophenol	ug/L		0.48						6.5	6.5	No	No	Y	Y	0.53		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
56	Acenaphthene	ug/L		0.19						2700	2700	No	No	Y	Y	0.21		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
57	Acenaphthylene	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.21		N	No Criteria	0.00	Uc	No Criteria
58	Anthracene	ug/L		0.032						110000	110000	No	No	Y	N		0.047		B<=C, Step 7	0.00	No	MEC<C & B<=C
59	Benzidine	ug/L								0.00054	0.00054			Y	Y	5.3		Y	No detected value of B, Step 7	0.00	No	UD; effluent ND, MDL>C, an
60	Benzo(a)Anthracene	ug/L		0.029						0.049	0.049	No	No	Y	Y	0.029		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND

CTR#	Parameters	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS									LIMITS		Recommendation	Comment
		Organisms only			Saltwater / Freshwater / Basin Plan												
		AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life	Lowest AMEL	Lowest MDEL		
1	Antimony															No Limit	
2	Arsenic															No Limit	
3	Beryllium															No Limit	
4	Cadmium															No Limit	
5a	Chromium (III)															No Limit	
5b	Chromium (VI)															No Limit	
6	Copper, Dry Weather WLA				0.32		0.53	10.07	10.07	1.55	15.64	3.11	31.37	15.64	31.37		TMDL Dry Weather WLA
6	Copper, Wet Weather WLA				0.32	3.15			3.15	1.55	4.88	3.11	9.80	4.88	9.80		TMDL Wet Weather WLA
7	Lead				0.32	88.47	0.53	5.66	5.66	1.55	8.79	3.11	17.64	8.8	18		
7	Lead, Wet Weather WLA				0.32	17.92			17.92	1.55	27.81	3.11	55.80	27.81	55.8		TMDL Wet Weather WLA
8	Mercury	0.05100	2.00619	0.10232						1.55		3.11		0.05	0.10		
9	Nickel															No Limit	
10	Selenium															No Limit	
11	Silver															No Limit	
12	Thallium															No Limit	
13	Zinc															No Limit	
	Zinc, Wet Weather WLA				0.32	30.70			30.70	1.55	47.65	3.11	95.6	47.7	95.60		TMDL Wet Weather WLA
14	Cyanide															No Limit	
15	Asbestos															No Limit	
16	2,3,7,8 TCDD															No Limit	
	TCDD Equivalents	1.40E-08	2.01	2.81E-08						1.55		3.11		1.40E-08	2.81E-08		
17	Acrolein															No Limit	
18	Acrylonitrile															No Limit	
19	Benzene															No Limit	
20	Bromoform															No Limit	
21	Carbon Tetrachloride															No Limit	
22	Chlorobenzene															No Limit	
23	Chlorodibromomethane															No Limit	
24	Chloroethane															No Limit	
25	2-Chloroethylvinyl ether															No Limit	
26	Chloroform															No Limit	
27	Dichlorobromomethane															No Limit	
28	1,1-Dichloroethane															No Limit	
29	1,2-Dichloroethane															No Limit	
30	1,1-Dichloroethylene															No Limit	
31	1,2-Dichloropropane															No Limit	
32	1,3-Dichloropropylene															No Limit	
33	Ethylbenzene															No Limit	
34	Methyl Bromide															No Limit	
35	Methyl Chloride															No Limit	
36	Methylene Chloride															No Limit	
37	1,1,2,2-Tetrachloroethane															No Limit	
38	Tetrachloroethylene															No Limit	
39	Toluene															No Limit	
40	1,2-Trans-Dichloroethylene															No Limit	
41	1,1,1-Trichloroethane															No Limit	
42	1,1,2-Trichloroethane															No Limit	
43	Trichloroethylene															No Limit	
44	Vinyl Chloride															No Limit	
45	2-Chlorophenol															No Limit	
46	2,4-Dichlorophenol															No Limit	
47	2,4-Dimethylphenol															No Limit	
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)															No Limit	
49	2,4-Dinitrophenol															No Limit	
50	2-Nitrophenol															No Limit	
51	4-Nitrophenol															No Limit	
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)															No Limit	
53	Pentachlorophenol															No Limit	
54	Phenol															No Limit	
55	2,4,6-Trichlorophenol															No Limit	
56	Acenaphthene															No Limit	
57	Acenaphthylene															No Limit	
58	Anthracene															No Limit	
59	Benzidine															No Limit	
60	Benzo(a)Anthracene															No Limit	

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)						Lowest C or WLAs	REASONABLE POTENTIAL ANALYSIS (RPA)										
					Freshwater		Saltwater		Human Health for consumption of:													
					C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only		MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL)	Enter the pollutant B detected max conc (ug/L)	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?	Reason
61	Benzo(a)Pyrene	ug/L		0.016						0.049	0.049	No	No	Y	N		0.03		B<=C, Step 7	0.00	No	MEC<C & B<=C
62	Benzo(b)Fluoranthene	ug/L		0.026						0.049	0.0490	No	No	Y	Y	0.026		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
63	Benzo(ghi)Perylene	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.028		N	No Criteria	0.00	Uc	No Criteria
64	Benzo(k)Fluoranthene	ug/L		0.019						0.049	0.0490	No	No	Y	Y	0.019		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
65	Bis(2-Chloroethoxy)Methane	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.21		N	No Criteria	0.00	Uc	No Criteria
66	Bis(2-Chloroethyl)Ether	ug/L		0.19						1.4	1.400	No	No	Y	Y	0.21		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
67	Bis(2-Chloroisopropyl)Ether	ug/L		0.19						170000	170000	No	No	Y	Y	0.21		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
68	Bis(2-Ethylhexyl)Phthalate	ug/L		1.9						5.9	5.9	No	No	Y	Y	2.1		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
69	4-Bromophenyl Phenyl Ethe	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.53		N	No Criteria	0.00	Uc	No Criteria
70	Butylbenzyl Phthalate	ug/L		1.9						5200	5200	No	No	Y	Y	2.1		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
71	2-Chloronaphthalene	ug/L		0.19						4300	4300	No	No	Y	Y	0.21		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
72	4-Chlorophenyl Phenyl Ethe	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.21		N	No Criteria	0.00	Uc	No Criteria
73	Chrysene	ug/L		0.015						0.049	0.049	No	No	Y	Y	0.015		N	No detected value of B, Step 7		No	MEC<C & B is ND
74	Dibenzo(a,h)Anthracene	ug/L		0.039						0.049	0.0490	No	No	Y	Y	0.039		N	No detected value of B, Step 7		No	MEC<C & B is ND
75	1,2-Dichlorobenzene	ug/L		0.19						17000	17000	No	No	Y	Y	0.21		N	No detected value of B, Step 7		No	MEC<C & B is ND
76	1,3-Dichlorobenzene	ug/L		0.19						2600	2600	No	No	Y	Y	0.21		N	No detected value of B, Step 7		No	MEC<C & B is ND
77	1,4-Dichlorobenzene	ug/L		0.19						2600	2600	No	No	Y	Y	0.21		N	No detected value of B, Step 7		No	MEC<C & B is ND
78	3,3 Dichlorobenzidine	ug/L								0.077	0.08			Y	Y	2.1		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, an
79	Diethyl Phthalate	ug/L		0.48						120000	120000	No	No	Y	Y	0.53		N	No detected value of B, Step 7		No	MEC<C & B is ND
80	Dimethyl Phthalate	ug/L		0.24						2900000	2900000	No	No	Y	Y	0.27		N	No detected value of B, Step 7		No	MEC<C & B is ND
81	Di-n-Butyl Phthalate	ug/L		0.96						12000	12000	No	No	Y	Y	1.1		N	No detected value of B, Step 7		No	MEC<C & B is ND
82	2,4-Dinitrotoluene	ug/L		1.9						9.10	9.10	No	No	Y	Y	2.1		N	No detected value of B, Step 7		No	MEC<C & B is ND
83	2,6-Dinitrotoluene	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	2.1		N	No Criteria	0.00	Uc	No Criteria
84	Di-n-Octyl Phthalate	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	2.1		N	No Criteria	0.00	Uc	No Criteria
85	1,2-Diphenylhydrazine	ug/L		0.48						0.54	0.540	No	No	Y	Y	0.53		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
86	Fluoranthene	ug/L		0.078						370	370	No	No	Y	Y	0.078		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
87	Fluorene	ug/L		0.087						14000	14000	No	No	Y	Y	0.087		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
88	Hexachlorobenzene	ug/L								0.00077	0.00077			Y	Y	0.53		Y	No detected value of B, Step 7	0.00	No	UD; effluent ND, MDL>C, an
89	Hexachlorobutadiene	ug/L		0.25						50	50.00	No	No	Y	Y	0.25		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
90	Hexachlorocyclopentadiene	ug/L		1.9						17000	17000	No	No	Y	Y	2.1		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
91	Hexachloroethane	ug/L		0.48						8.9	8.9	No	No	Y	Y	0.53		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
92	Indeno(1,2,3-cd)Pyrene	ug/L		0.024						0.049	0.0490	No	No	Y	Y	0.024		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
93	Isophorone	ug/L		0.48						600	600.0	No	No	Y	Y	0.53		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
94	Naphthalene	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.4		N	No Criteria	0.00	Uc	No Criteria
95	Nitrobenzene	ug/L		0.48						1900	1900	No	No	Y	Y	0.53		N	No detected value of B, Step 7		No	MEC<C & B is ND
96	N-Nitrosodimethylamine	ug/L		0.96						8.10	8.10000	No	No	Y	Y	1.1		N	No detected value of B, Step 7		No	MEC<C & B is ND
97	N-Nitrosodi-n-Propylamine	ug/L		0.96						1.40	1.400	No	No	Y	Y	1.1		N	No detected value of B, Step 7		No	MEC<C & B is ND
98	N-Nitrosodiphenylamine	ug/L		0.48						16	16.0	No	No	Y	Y	0.53		N	No detected value of B, Step 7		No	MEC<C & B is ND
99	Phenanthrene	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.093		N	No Criteria	0.00	Uc	No Criteria
100	Pyrene	ug/L		0.045						11000	11000	No	No	Y	Y	0.045		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
101	1,2,4-Trichlorobenzene	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.4		N	No Criteria	0.00	Uc	No Criteria
102	Aldrin	ug/L			3.00					0.00014	0.00014			Y	Y	0.0014		Y	No detected value of B, Step 7	0.00	No	UD; effluent ND, MDL>C, an
103	alpha-BHC	ug/L		0.0024						0.013	0.0130	No	No	Y	Y	0.0024		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
104	beta-BHC	ug/L		0.0038						0.046	0.046	No	No	Y	Y	0.0038		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
105	gamma-BHC	ug/L		0.0028	0.95					0.063	0.063	No	No	Y	Y	0.0029		N	No detected value of B, Step 7	0.00	No	MEC<C & B is ND
106	delta-BHC	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y	0.0033		N	No Criteria	0.00	Uc	No Criteria
107	Chlordane	ug/L			2.40	0.00				0.00059	0.00059			Y	Y	0.077		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, an
108	4,4'-DDT	ug/L			1.10	0.00				0.00059	0.00059			Y	Y	0.0038		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, an
109	4,4'-DDE (linked to DDT)	ug/L								0.00059	0.00059			Y	Y	0.0029		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, an
110	4,4'-DDD	ug/L								0.00084	0.00084			Y	Y	0.0038		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, an
111	Dieldrin	ug/L			0.24	0.06				0.00014	0.00014			Y	Y	0.0019		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, an
112	alpha-Endosulfan	ug/L		0.0028	0.22	0.056				240	0.0560	No	No	Y	Y	0.0029		N	No detected value of B, Step 7		No	MEC<C & B is ND
113	beta-Endolsulfan	ug/L		0.0019	0.22	0.056				240	0.0560	No	No	Y	Y	0.0019		N	No detected value of B, Step 7		No	MEC<C & B is ND
114	Endosulfan Sulfate	ug/L		0.0028						240	240	No	No	Y	Y	0.0029		N	No detected value of B, Step 7		No	MEC<C & B is ND
115	Endrin	ug/L		0.0019	0.086	0.036				0.81	0.0360	No	No	Y	Y	0.0019		N	No detected value of B, Step 7		No	MEC<C & B is ND
116	Endrin Aldehyde	ug/L		0.0019						0.81	0.81	No	No	Y	Y	0.0019		N	No detected value of B, Step 7		No	MEC<C & B is ND
117	Heptachlor	ug/L			0.52	0.0038				0.00021	0.00021			Y	Y	0.0029		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, an
118	Heptachlor Epoxide	ug/L			0.52	0.0038				0.00011	0.00011			Y	Y	0.0024		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, an
119-125	PCBs sum (2)	ug/L				0.01				0.00017	0.00017			Y	Y	0.24		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, an
126	Toxaphene	ug/L			0.73	0.0002				0.00075	0.0002			Y	Y	0.24		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, an

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

CTR#	Parameters	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS									LIMITS		Recommendation	Comment
		Organisms only			Saltwater / Freshwater / Basin Plan												
		AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life	Lowest AMEL	Lowest MDEL		
61	Benzo(a)Pyrene															No Limit	
62	Benzo(b)Fluoranthene															No Limit	
63	Benzo(ghi)Perylene															No Limit	
64	Benzo(k)Fluoranthene															No Limit	
65	Bis(2-Chloroethoxy)Methane															No Limit	
66	Bis(2-Chloroethyl)Ether															No Limit	
67	Bis(2-Chloroisopropyl)Ether															No Limit	
68	Bis(2-Ethylhexyl)Phthalate															No Limit	
69	4-Bromophenyl Phenyl Ethe															No Limit	
70	Butylbenzyl Phthalate															No Limit	
71	2-Chloronaphthalene															No Limit	
72	4-Chlorophenyl Phenyl Ethe															No Limit	
73	Chrysene															No Limit	
74	Dibenzo(a,h)Anthracene															No Limit	
75	1,2-Dichlorobenzene															No Limit	
76	1,3-Dichlorobenzene															No Limit	
77	1,4-Dichlorobenzene															No Limit	
78	3,3 Dichlorobenzidine															No Limit	
79	Diethyl Phthalate															No Limit	
80	Dimethyl Phthalate															No Limit	
81	Di-n-Butyl Phthalate															No Limit	
82	2,4-Dinitrotoluene															No Limit	
83	2,6-Dinitrotoluene															No Limit	
84	Di-n-Octyl Phthalate															No Limit	
85	1,2-Diphenylhydrazine															No Limit	
86	Fluoranthene															No Limit	
87	Fluorene															No Limit	
88	Hexachlorobenzene															No Limit	
89	Hexachlorobutadiene															No Limit	
90	Hexachlorocyclopentadiene															No Limit	
91	Hexachloroethane															No Limit	
92	Indeno(1,2,3-cd)Pyrene															No Limit	
93	Isophorone															No Limit	
94	Naphthalene															No Limit	
95	Nitrobenzene															No Limit	
96	N-Nitrosodimethylamine															No Limit	
97	N-Nitrosodi-n-Propylamine															No Limit	
98	N-Nitrosodiphenylamine															No Limit	
99	Phenanthrene															No Limit	
100	Pyrene															No Limit	
101	1,2,4-Trichlorobenzene															No Limit	
102	Aldrin															No Limit	
103	alpha-BHC															No Limit	
104	beta-BHC															No Limit	
105	gamma-BHC															No Limit	
106	delta-BHC															No Limit	
107	Chlordane															No Limit	
108	4,4'-DDT															No Limit	
109	4,4'-DDE (linked to DDT)															No Limit	
110	4,4'-DDD															No Limit	
111	Dieldrin															No Limit	
112	alpha-Endosulfan															No Limit	
113	beta-Endolsulfan															No Limit	
114	Endosulfan Sulfate															No Limit	
115	Endrin															No Limit	
116	Endrin Aldehyde															No Limit	
117	Heptachlor															No Limit	
118	Heptachlor Epoxide															No Limit	
119-125	PCBs sum (2)															No Limit	
126	Toxaphene															No Limit	

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