



EDMUND G. BROWN, JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

February 19, 2015

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED
No. 7012 3460 0000 2166 2198

Mr. Howard Landon
Vice President of Logistics
Charta Group, Inc., DBA Permalite, Inc.
230 East Alondra Boulevard
Gardena, CA 90248

Dear Mr. Landon:

TRANSMITTAL OF THE WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FOR CHARTA GROUP, INC., DBA PERMALITE, INC., PERMALITE, INC. CA. (NPDES NO. CA0059871, CI NO. 6759)

Our letter dated December 9, 2014, transmitted the tentative waste discharge requirements (WDRs) for renewal of your permit to discharge wastewater to surface waters under the National Pollutant Discharge Elimination System (NPDES) Program.

Pursuant to Division 7 of the California Water Code, this Regional Water Board at a public hearing held on February 12, 2015, reviewed the tentative requirements, considered all factors in the case, and adopted Order No. R4-2015-0024. Order R4-2015-0024 serves as an NPDES permit, and it expires on March 31, 2020. Section 13376 of the California Water Code requires that an application/Report of Waste Discharge for a new permit must be filed at least 180 days before the expiration date.

You are required to implement the Monitoring and Reporting Program (MRP) on the effective date (April 1, 2015) of Order No. R4-2015-0024. Your first monitoring report for the period of April 1, 2015, through June 30, 2015, is due by August 1, 2015. Charta Group, Inc., DBA Permalite Inc. will electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) (<http://www.waterboards.ca.gov/ciwqs/index.html>).

When submitting monitoring or technical reports to the Regional Water Board per these requirements, please include a reference to Compliance File CI-6759 and NPDES No. CA0059871, which will assure that the reports, are directed to the appropriate file and staff.

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

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

If you have any questions, please contact Rosario Aston at (213) 576-6653.

Sincerely,



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

Enclosures: Order No. R4-2015-0024 - Waste Discharge Requirements
Attachment E - Monitoring and Reporting Program (MRP No. 6759)
Attachment F - Fact Sheet

cc: **(Via Email Only)**

Ms. Robyn Stuber, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Mr. Kenneth Wong, U.S. Army Corps of Engineers
Mr. Bryant Chesney, NOAA, National Marine Fisheries Service
Mr. Jeff Phillips, Department of Interior, U.S. Fish and Wildlife Service
NPDES Wastewater Unit, State water Resources Control Board, Division of Water Quality
Mr. William Paznokas, Department of Fish and Wildlife, Region 5
Ms. Leah Walker, State Water Resources Control Board, Drinking Water Division
Ms. Teresa, Henry, California Coastal Commission, South Coast Region
Mr. Theodore Johnson, Water Replenishment District of Southern California
Mr. Tim Smith, Los Angeles County, Department of Public Works, Waste Management
Division
Mr. Angelo Bellomo, Los Angeles County, Department of Public Health
City of Gardena
Mr. Peter Shellenbarger, Heal the Bay
Ms. Liz Crosson, Los Angeles WaterKeeper
Ms. Anna Kheyfets, Natural Resources Defense Council
Ms. Kristy Allen, Tetra Tech
Ms. Mary Welch, PG Environmental, LLC
Mr. Jae Kim, Tetra Tech

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

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

**ORDER NO. R4-2015-0024
NPDES NO. CA0059871**

**WASTE DISCHARGE REQUIREMENTS
FOR CHARTA GROUP, INC., DBA PERMALITE, INC.
(PERMALITE, INC.)**

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

Table 1. Discharger Information

Discharger	Charta Group, Inc., DBA Permalite, Inc.
Name of Facility	Permalite, Inc.
Facility Address	230 East Alondra Boulevard
	Gardena, CA 90248
	Los Angeles County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001 (North West of the Facility)	Storm water runoff commingled with small amounts of steam condensate and boiler condensate	33° 52' 12" N	118° 17' 22" W	Dominguez Channel
002 (North East of the Facility)	Storm water runoff	33° 53' 06" N	118° 16' 14" W	Dominguez Channel

Table 3. Administrative Information

This Order was adopted on:	February 12, 2015
This Order shall become effective on:	April 1, 2015
This Order shall expire on:	March 31, 2020
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 Discharge

I, Samuel Unger Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on February 12, 2015.



Samuel Unger, P.E.
Executive Officer

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I. FACILITY INFORMATION

Information describing the Permalite, Inc. (Facility) is summarized in Table 1 and in Sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

II. FINDINGS

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

- A. Legal Authorities.** This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. 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. R4-2008-0201 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger is authorized to discharge from the identified facility and outfall into waters of the United States and shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for past violations of Order No. R4-2008-0201.

III. DISCHARGE PROHIBITIONS

- A.** The discharge of wastewater at a location other than specifically described in this Order is prohibited, and constitutes a violation of the Order. Wastes discharged shall be limited to a maximum of 0.015 million gallons per day (MGD) of storm water runoff commingled with small amount of steam condensate and boiler condensate at Discharge Point 001 and 0.0075 MGD of storm water runoff at Discharge Point 002. 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, Dominguez Channel, or other waters of the state, are prohibited.
- C. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or create 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.
- 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 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 Regional Water 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 or high level radiological waste is prohibited.
- 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.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point No. 001 and Discharge Point No. 002

1. Final Effluent Limitations – Discharge Point No. 001 and Discharge Point No. 002

- a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program, Attachment E:

Table 4. Effluent Limitations for Discharge Point No. 001

Parameter	Units	Effluent Limitations		
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants				
pH	standard units	--	6.5	8.5
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅)	mg/L	30	--	--
	lbs/day ¹	3.8	--	--
Oil and Grease	mg/L	15	--	--
	lbs/day ¹	1.9	--	--
Total Suspended Solids (TSS)	mg/L	75	--	--
	lbs/day ¹	9.4	--	--
Non-Conventional Pollutants				
Phenols	mg/L	1.0	--	--
	lbs/day ¹	0.13	--	--
Settleable Solids	ml/L	0.3	--	--

Parameter	Units	Effluent Limitations		
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Sulfides	mg/L	1.0	--	--
	lbs/day ¹	0.13	--	--
Temperature	°F	86	--	--
Turbidity	NTU	75	--	--
Xylene	µg/L	1,750	--	--
	lbs/day ¹	0.22	--	--
Total Petroleum Hydrocarbon (TPH) ²	µg/L	100	--	--
	lbs/day ¹	0.125	--	--
Chronic Toxicity ³	Pass or Fail and % Effect for TST approach	Pass or % Effect <50	--	--
Priority Pollutants				
Copper, Total Recoverable, Dry Weather ⁴	µg/L	15	--	--
	lbs/day ¹	0.0019	--	--
Copper, Total Recoverable, Wet Weather ⁵	µg/L	10	--	--
	lbs/day ¹	0.0012	--	--
Lead, Total Recoverable, Wet Weather ⁵	µg/L	43	--	--
	lbs/day ¹	0.0054	--	--
Zinc, Total Recoverable, Dry Weather ⁴	µg/L	122	--	--
	lbs/day ¹	0.015	--	--
Zinc, Total Recoverable, Wet Weather ⁵	µg/L	70	--	--
	lbs/day ¹	0.0088	--	--
Toluene	µg/L	150	--	--
	lbs/day ¹	0.019	--	--

^{1.} The mass-based (lbs/day) effluent limitations are based on a maximum discharge flow rate of 0.015 MGD for Discharge Point No. 001. The lbs/day limitations are calculated as follows:

$$\text{Flow (MGD)} \times \text{Concentration (mg/L)} \times 8.34 \text{ (conversion factor)} = \text{lbs/day.}$$

- ^{2.} TPH equals the sum of TPH gasoline (C4-C12), TPH diesel (C13-C22), and TPH oil (C23+).
- ^{3.} Report "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitation (MDEL). During a calendar month, exactly three independent toxicity tests are required for routine monitoring when one toxicity test results in "Fail".
- ^{4.} Dry-weather effluent limits are applicable when the maximum daily flow in the Dominguez Channel is less than 63 cubic feet per second (cfs) as measured at Los Angeles County Department of Public Works' flow gage S-28. This gage is located in Dominguez Channel at Vermont Avenue.
- ^{5.} Wet-weather effluent limits are applicable when the maximum daily flow in the Dominguez Channel is equal to or greater than 63 cfs as measured at Los Angeles County Department of Public Works' flow gage S-28. This gage is located in Dominguez Channel at Vermont Avenue.

- b. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 002, with compliance measured at Monitoring Location EFF-002 as described in the Monitoring and Reporting Program, Attachment E:

Table 5. Effluent Limitations for Discharge Point No. 002

Parameter	Units	Effluent Limitations		
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants				
pH	standard units	--	6.5	8.5
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅)	mg/L	30	--	--
	lbs/day ¹	1.88	--	--
Oil and Grease	mg/L	15	--	--
	lbs/day ¹	0.94	--	--
Total Suspended Solids (TSS)	mg/L	75	--	--
	lbs/day ¹	4.69	--	--
Non-Conventional Pollutants				
Temperature	°F	86	--	--
Chronic Toxicity ³	Pass or Fail and % Effect for TST approach	Pass or % Effect <50	--	--
Priority Pollutants				
Copper, Total Recoverable, Wet Weather ⁴	µg/L	10	--	--
	lbs/day ¹	0.0006	--	--
Lead, Total Recoverable, Wet Weather ⁴	µg/L	43	--	--
	lbs/day ¹	0.0027	--	--
	lbs/day ¹	0.0076	--	--
Zinc, Total Recoverable, Wet Weather ⁴	µg/L	70	--	--
	lbs/day ¹	0.0044	--	--

^{1.} The lbs/day effluent limitations are based on a maximum discharge flow rate of 0.0075 MGD for Discharge Point 002.
^{2.} Report "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitation (MDEL). During a calendar month, exactly three independent toxicity tests are required for routine monitoring when one toxicity test results in "Fail".
^{3.} Wet-weather effluent limits are applicable when the maximum daily flow in the Dominguez Channel is equal to or greater than 63 cfs as measured at Los Angeles County Department of Public Works' flow gage S-28. This gage is located in Dominguez Channel at Vermont Avenue.

2. Interim Effluent Limitations – Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the Dominguez 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 5°F above the natural temperature of the receiving waters at any time or place. At no time shall the temperature be raised above 80°F as a result of waste discharged.
3. Water Contact Standards: In freshwaters designated for Water Contact Recreation (REC-1), the E. coli density shall not exceed a geometric mean of 126/100 ml and shall not exceed a single sample maximum limit of 235/100 ml.
4. Depress the concentration of dissolved oxygen below 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.
5. Exceed total ammonia (as N) concentrations specified in the Regional Water Board Resolution No. 2002-011. Resolution No. 2002-011 revised the ammonia water quality objectives for inland surface waters characteristic of freshwater in the 1994 Basin Plan, to be consistent with the "1999 Update of Ambient Water Quality Criteria for Ammonia."
6. The presence of visible, floating, suspended, or deposited macroscopic particulate matter or foam.
7. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.
8. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
9. Toxic or other deleterious substances in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
10. Accumulation of bottom deposits or aquatic growths.
11. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
12. The presence of substances that result in increases of BOD that adversely affect beneficial uses.

13. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.
14. Alteration of turbidity, or apparent color beyond present natural background levels.
15. Damage, discolor, nor cause formation of sludge deposits on flood control structures of facilities nor overload the design capacity.
16. Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.
17. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
18. Create nuisance, or adversely affect beneficial uses of the receiving water.
19. Violation of any applicable water quality standards for receiving waters adopted by the 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 and/or 40 C.F.R. Part 131, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

B. Groundwater Limitations – Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D.
2. The Discharger shall comply with the following provisions. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:
 - a. 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 of a termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
 - b. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in the municipal storm water management program developed to comply with NPDES permits issued by the Regional Water Board to local agencies.

- c. Discharges of wastes 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. These requirements, as they are met, will maintain and protect the beneficial uses of the Dominguez Channel.
- 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 waste materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- g. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.
- h. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - i. Violation of any term or condition contained in this Order;
 - ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
 - iii. A change in any condition that requires either a temporary or permanent reduction of 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 the proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge with 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, a 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 purpose.
- 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,
 - ii.** Frequency of use,
 - iii.** Quantities to be used,
 - iv.** Proposed discharge concentrations, and
 - v.** USEPA 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, Average Monthly Effluent Limitation (AMEL), Maximum Daily Effluent Limitation (MDEL), instantaneous maximum 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. (Water Code section 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. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.
- b. 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 will revise and modify this Order in accordance with such more stringent standards.
- c. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.
- d. 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, based on new information that was not available at the time of permit issuance, to include requirements for the implementation of the watershed management approach, or to include new MLs.
- e. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for the Dominguez Channel.
- f. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide dilution credits or a mixing zone, as may be appropriate.

- g.** This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 C.F.R. sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order, and endangerment to human health or the environment resulting from the permitted activity.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. Chronic Toxicity Limit and Monitoring Requirements.** The Order contains chronic toxicity effluent limits. The Discharger shall monitor the effluent annually for chronic toxicity to determine the presence of chronic toxicity. If the chronic toxicity of the effluent exceeds the Maximum Daily Effluent Limitation, the Discharger shall immediately implement accelerated chronic toxicity testing, as required in Section V.B of the Monitoring and Reporting Program (Attachment E).
- b. Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan.** The Discharger shall submit to the Regional Water Board an Initial Investigation TRE workplan (1-2 pages) within **90 days** of the effective date of this Order. This plan shall describe the steps the Discharger intends to follow in the event that toxicity is detected. See section V of the Monitoring and Reporting Program (Attachment E) for an overview of accelerated monitoring and TRE requirements.
- c. Harbor Toxics TMDL Water Column, Sediment, and Fish Tissue Monitoring for Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary Compliance Monitoring Program.** As defined in the Harbor Toxics TMDL, the Discharger is a “responsible party” because it is an “Individual Industrial Permittee.” As such, either individually or with a collaborating group, the Discharger shall develop a monitoring and reporting plan (Monitoring Plan) and quality assurance project plan (QAPP) for the water column, sediment, and fish tissue in Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary. These plans shall follow the “TMDL Element – Monitoring Plan” provisions in Attachment A to Resolution No. R11-008. The Discharger must inform the Regional Water Board if they plan to join a collaborative monitoring effort or develop a site specific plan no later than **90 days** after the effective date of this Order. If the Discharger is joining a collaborative effort that notification must include documentation of such. If developing a site specific monitoring plan, the plan must be submitted no later than **12 months** after the effective date of this Order for public review and, subsequently, Executive Officer approval. Monitoring shall begin 6 months after a monitoring plan is approved by the Executive Officer.

3. Best Management Practices and Pollution Prevention

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

- a.** An updated Storm Water Pollution Prevention Plan (SWPPP) that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The Discharger shall take precautions to segregate the steam and boiler condensates from storm water. The SWPPP shall be developed in accordance with the requirements in Attachment G.
- b.** Updated Best Management Practices Plan (BMPP) that entails site-specific plans and procedures implemented and/or to be implemented to prevent hazardous

waste/material from being discharged to waters of the State. The BMPPs shall be consistent with the general guidance contained in the USEPA *Guidance Manual for Developing Best Management Practices* (BMPs) (EPA 833-B-93-004). In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material discharge to surface waters.

- c. A Spill Contingency Plan (SCP) that 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. The SCP may be substituted with an updated version of the Discharger's existing Spill Prevention Control and Countermeasure Plan.

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

The Discharger shall implement the SWPPP, BMPP, and 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 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. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable

6. Other Special Provisions – Not Applicable

7. 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 "Not Detected" (ND) or "Detected, but Not

Quantified" (DNQ) to have concentrations equal to zero, provided that the applicable ML is used.

C. Effluent Limitations Expressed as a Median

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

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

D. Mass-based Effluent Limitations

In calculating mass emission rates from the monthly average concentrations, use one half of the method detection limit for ND and the estimated concentration for DNQ for the calculation of the monthly average concentration. To be consistent with Limitations and Discharge Requirements, section VII.B, if all pollutants belonging to the same group are reported as ND or DNQ, the sum of the individual pollutant concentrations should be considered as zero for the calculation of the monthly average concentration.

E. Multiple Sample Data

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

F. Average Monthly Effluent Limitation (AMEL)

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

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

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

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

When one or more sample results are reported as ND or DNQ (see Reporting Requirement I.G. of the MRP), the median value of these four samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median shall be the lower of the two middle values.

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

G. Maximum Daily Effluent Limitations (MDEL)

If a daily discharge on a calendar day exceeds the MDEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that day for that parameter. If no sample (daily discharge) is taken over a calendar day, no compliance determination can be made for that day with respect to an effluent violation determination, but compliance determination can be made for that day with respect to reporting violation determination.

H. Instantaneous Minimum Effluent Limitation

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

I. Instantaneous Maximum Effluent Limitation

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

J. Median Monthly Effluent Limitation (MMEL)

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

K. Chronic Toxicity

This discharge is subject to determination of “Pass” or “Fail” and “Percent (%) Effect” from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (Ho) for the TST approach is: Mean discharge IWC response $\leq 0.75 \times$ Mean control response. A test result that rejects this null hypothesis is reported as “Pass”. A test result that does not reject this null hypothesis is reported as “Fail”. The relative “Percent (%) Effect” at the discharge IWC is defined and reported as: $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$.

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

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

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)

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

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

Average Monthly Effluent Limitation (AMEL)

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

Best Management Practices (BMPs)

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

Bioaccumulative

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

Carcinogenic

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

Coefficient of Variation (CV)

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

Daily Discharge

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

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

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

Detected, but Not Quantified (DNQ)

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

Dilution Credit

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

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

Effluent Concentration Allowance (ECA)

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

Enclosed Bays

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

Estimated Chemical Concentration

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

Estuaries

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

Existing Discharger

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

Infeasible

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

Inland Surface Waters

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

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

Maximum Daily Effluent Limitation (MDEL)

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

Median

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

Method Detection Limit (MDL)

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 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.

Ocean Waters

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

Persistent Pollutants

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

Pollutant Minimization Program (PMP)

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

Pollution Prevention

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

Reporting Level (RL)

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

Satellite Collection System

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

Source of Drinking Water

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

Standard Deviation (σ)

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

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

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

Toxicity Reduction Evaluation (TRE)

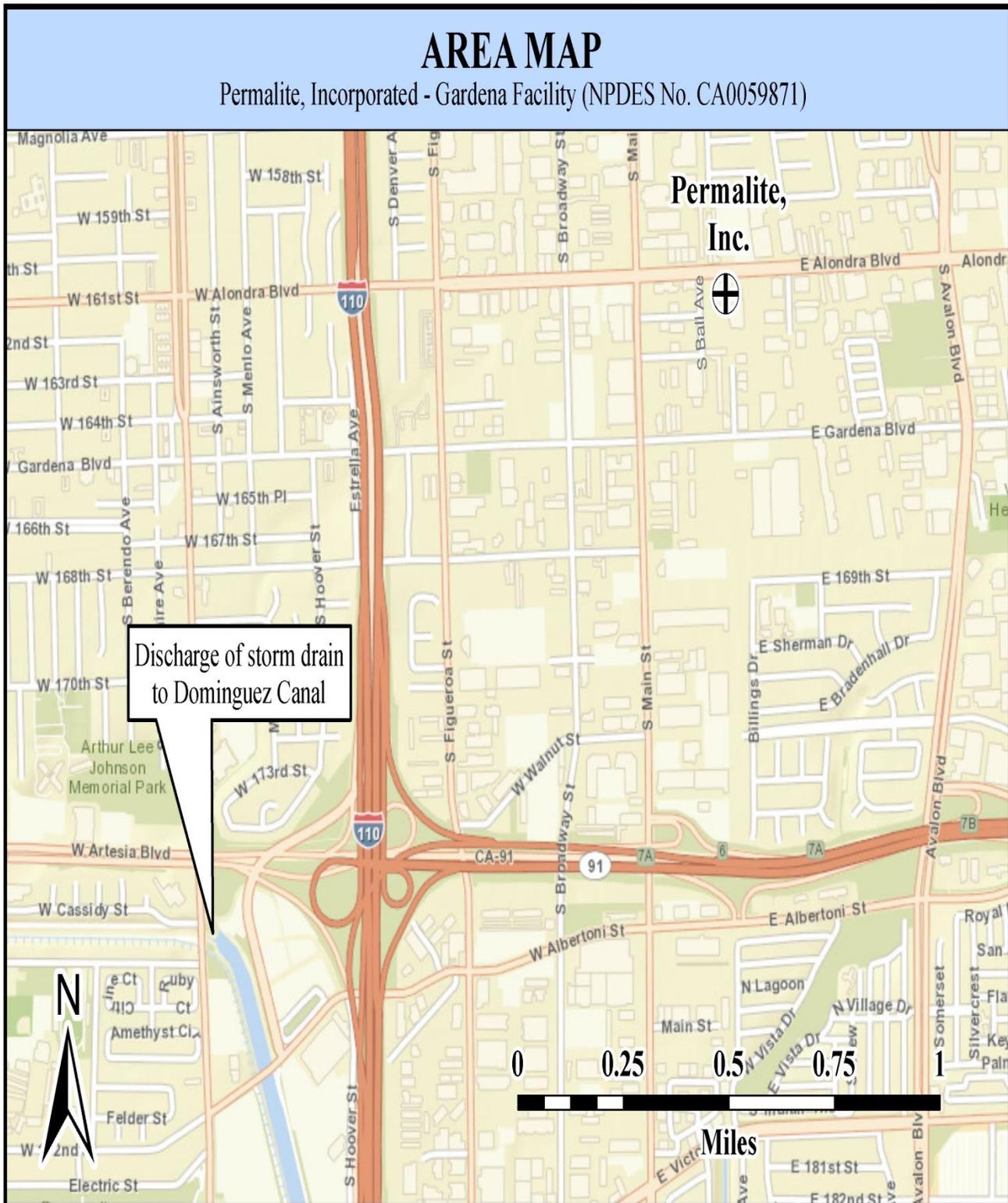
TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection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

ACRONYMS AND ABBREVIATIONS

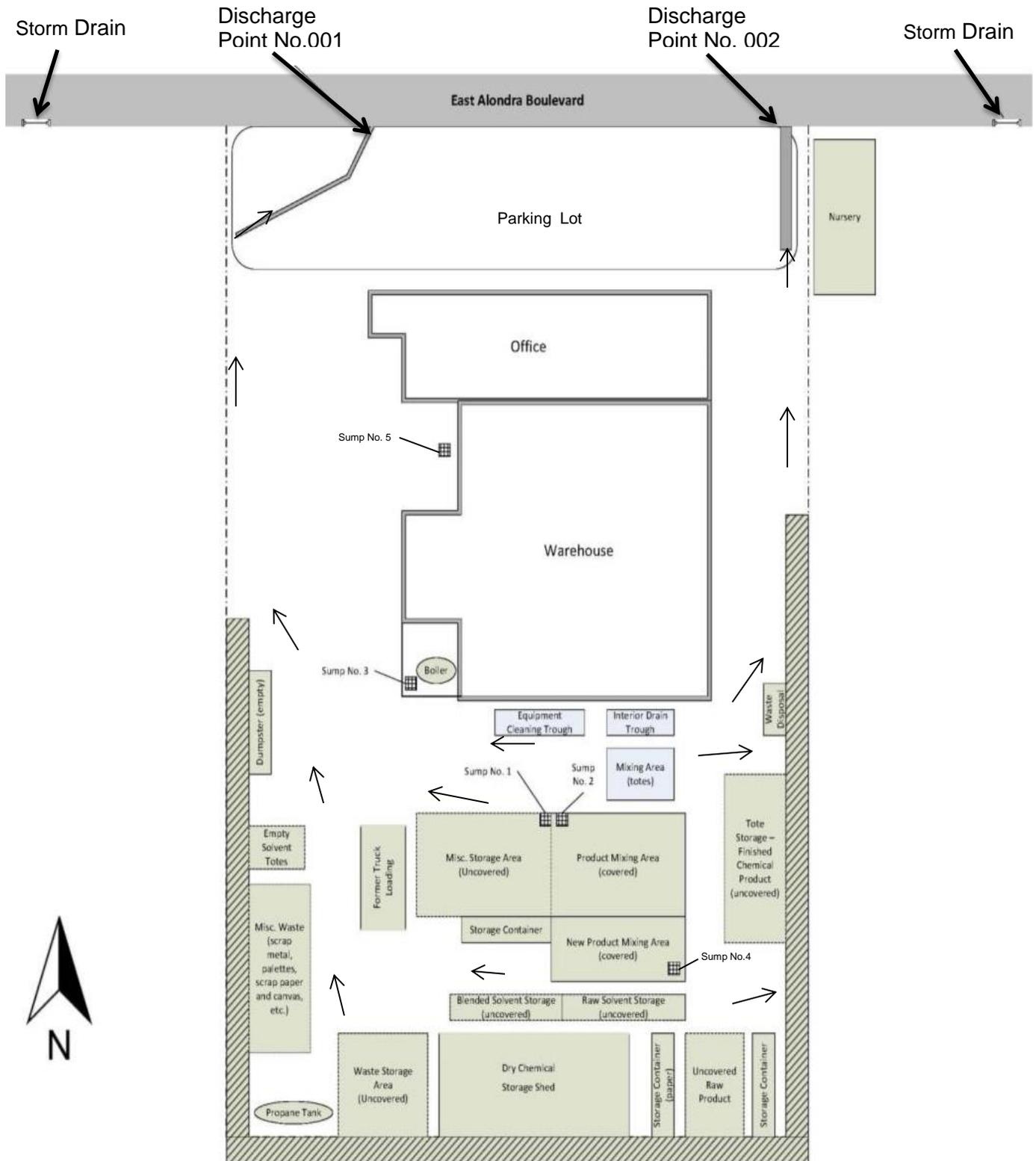
AMEL	Average Monthly Effluent Limit
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPPP	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	Charta Group Inc., DBA Permalite, Inc.
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	Permalite, Inc., Gardena Facility
gpd	gallons per day
IC	Inhibition Coefficient
IC15	Concentration at which the organism is 15% inhibited
IC25	Concentration at which the organism is 25% inhibited
IC40	Concentration at which the organism is 40% inhibited
IC50	Concentration at which the organism is 50% inhibited
LA	Load Allocations
LOEC	Lowest Observed Effect Concentration
IJg/L	micrograms per Liter
mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
NO	Not Detected
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NTR	National Toxics Rule
OAL	Office of Administrative Law
PMEL	Proposed Maximum Daily Effluent Limitation

PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
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
SIP	State Implementation Policy (Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California)
SMR	Self Monitoring Reports
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	Test Acceptability Criteria
Thermal Plan	Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document
TSS	Total Suspended Solid
TUc	Chronic Toxicity Unit
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WET	Whole Effluent Toxicity
WLA	Wasteload allocations
WQBELs	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
%	Percent

ATTACHMENT B – MAP



ATTACHMENT C – FLOW SCHEMATIC



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the 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):

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));

- 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).)

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 results 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. In the case of pollutants for which there are no approved methods under 40 C.F.R. part 136 or otherwise required under 40 C.F.R. subchapters N or O, monitoring must be conducted according to a test procedure specified in this Order for such pollutants. (40 C.F.R. §§ 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 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, and V.B.5 below. (40 C.F.R. § 122.41(k).)
2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other

comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or 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).)

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 results of monitoring of sludge use or disposal practices. (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 that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph. (40 C.F.R. § 122.41(l)(6)(ii).)
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)
 - b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

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

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

The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provision – 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 previous 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. (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).)

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. (40 C.F.R. § 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. § 122.41 (a)(3).)
- D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. (40 C.F.R. § 122.410)(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. § 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 ($\mu\text{g/L}$) (40 C.F.R. § 122.42(a)(1)(i));
 - b. 200 $\mu\text{g/L}$ for acrolein and acrylonitrile; 500 $\mu\text{g/L}$ for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 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 ($\mu\text{g/L}$) (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).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) CI NO. 6759

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) CI NO. 6759

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 Los Angeles Regional Water Quality Control Board (Regional Water Board) to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement federal and California laws and/or regulations.

I. GENERAL MONITORING PROVISIONS

- A.** An effluent sampling station shall be established for Discharge Point No. 001 and Discharge Point No. 002 and shall be located where representative samples of that effluent can be obtained.
- B.** Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.
- C.** The Regional Water Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
- D.** Pollutants shall be analyzed using the analytical methods described in parts 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 Resources Control Board (State Water Board).

Laboratories analyzing effluent samples and receiving water samples shall be certified by the State Water Board, Drinking Water Division, Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.

- E.** For any analyses performed for which no procedure is specified in the United States Environmental Protection Agency (USEPA) guidelines or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.
- F.** Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the State Water Board or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP".
- G.** The monitoring reports shall specify the analytical methods used, the Method Detection Limit (MDL), and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, 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.

- H. Where possible, the ML's 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. If the ML value is not below the effluent limitation, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test and associated laboratory QA/QC procedures.
- I. Where possible, the ML's 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. Water quality objectives for parameters may be found in the Basin Plan Chapter 3 and California Toxics Rule (40 CFR 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 (RL's), and method detection limits (MDL's).

The Regional Water Board, in consultation with the State Water Board Quality Assurance Program, shall establish an 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 18, 2012);
 3. When the Discharger agrees to use an ML that is lower than that listed in Attachment H;
 4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment H, and proposes an appropriate ML for their matrix; or,
 5. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the USEPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, the 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.
- J. Water/wastewater samples must be analyzed within allowable holding time limits as specified in section 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be 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.

- K.** All analyses shall be accompanied by the chain of custody, including but not limited to data and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a statement under penalty of perjury executed by the person responsible for the laboratory.
- L.** 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.
- M.** 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.
- N.** When requested by the Regional Water Board or USEPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.
- O.** For parameters that both average monthly and daily maximum limits are specified and the monitoring frequency is less than four times a month, the following shall apply. If an analytical result is greater than the average monthly limit, the Discharger shall collect four additional samples at approximately equal intervals during the month, if possible, 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.
- P.** In the event wastes are transported to a different disposal site during the report period, the following shall be reported in the monitoring report:
 - 1.** Types of wastes and quantity of each type;
 - 2.** Name and address for each hauler of wastes (or method of transport if other than by hauling); and
 - 3.** Location of the final point(s) of disposal for each type of waste.If no wastes are transported off-site during the reporting period, a statement to that effect shall be submitted.
- Q.** Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.

- R. Laboratories analyzing monitoring samples shall be certified by the State Water Board, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	At the discharge point, prior to entry into the storm drain located where representative samples of the commingled storm water runoff, steam condensate, and boiler condensate can be obtained. (Latitude 33° 52' 12" N, Longitude 118° 17' 22" W)
002	EFF-002	At the discharge point, prior to entry into the storm drain located where representative samples of the storm water runoff can be obtained. (Latitude 33° 53' 06" N, Longitude 118° 16' 14" W)
--	RSW-001	The Discharger shall establish a monitoring location in the Dominguez Channel at least 50 feet upstream of the location of where the storm drain conveying Facility discharges empties to the Dominguez Channel.

III. INFLUENT MONITORING REQUIREMENTS – NOT APPLICABLE

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Locations EFF-001 and EFF-002

- The Discharger shall monitor commingled storm water runoff, steam condensate, and boiler condensate discharged through Discharge Point No. 001 and storm water runoff through Discharge Point No. 002 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table E-2. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Meter	1/Discharge Event ¹	--
Conventional Pollutants				
Biochemical Oxygen Demand 5-day@20°C (BOD ₅) ⁴	mg/L	Grab	1/Discharge Event ²	3
Total Suspended Solids (TSS) ⁴	mg/L	Grab	1/Discharge Event ²	3
pH	standard units	Grab	1/Discharge Event ²	3
Oil and Grease ⁴	mg/L	Grab	1/Discharge Event ²	3
Non-Conventional Pollutants				
Chronic Toxicity	Pass or Fail and % Effect for TST approach	Grab	1/ Year ⁷	3, 6
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Discharge Event ²	3

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Color	ADMI units ⁵	Grab	1/Discharge Event ²	³
Conductivity	µmhos/ cm	Grab	1/Discharge Event ²	³
Dissolved Oxygen	mg/L	Grab	1/Discharge Event ²	³
Escherichia coli (E. coli)	MPN/ 100 ml	Grab	1/Discharge Event ²	³
Methyl-tertiary butyl ether (MTBE)	µg/L	Grab	1/Discharge Event ²	³
Phenols	mg/L	Grab	1/Discharge Event ²	³
Settleable Solids	ml/L	Grab	1/Discharge Event ²	³
Sulfides	mg/L	Grab	1/Discharge Event ²	³
Temperature	°F	Grab	1/Discharge Event ²	³
Tertiary butyl alcohol	µg/L	Grab	1/Discharge Event ²	³
Total Organic Carbon	mg/L	Grab	1/Discharge Event ²	³
Total Petroleum Hydrocarbons (TPH) as Gasoline (C4-C12)	µg/L	Grab	1/Discharge Event ²	EPA Method 503.1 or 8015B
TPH as Diesel (C13-C22)	µg/L	Grab	1/Discharge Event ²	EPA Method 503.1, 8015B, or 8270
TPH as Waste Oil (C23+)	µg/L	Grab	1/Discharge Event ²	EPA Method 503.1, 8015B, or 8270
Turbidity	NTU	Grab	1/Discharge Event ²	³
Xylene	µg/L	Grab	1/Discharge Event ²	³
Priority Pollutants				
Antimony, Total Recoverable	µg/L	Grab	1/Discharge Event ²	³
Arsenic, Total Recoverable	µg/L	Grab	1/Discharge Event ²	³
Beryllium, Total Recoverable	µg/L	Grab	1/Discharge Event ²	³
Cadmium, Total Recoverable	µg/L	Grab	1/Discharge Event ²	³
Chromium III, Total Recoverable	µg/L	Grab	1/Discharge Event ²	³
Chromium VI	µg/L	Grab	1/Discharge Event ²	³
Copper, Total Recoverable ⁴	µg/L	Grab	1/Discharge Event ²	³
Lead, Total Recoverable ⁴	µg/L	Grab	1/Discharge Event ²	³
Mercury, Total Recoverable	µg/L	Grab	1/Discharge Event ²	EPA Methods 1631E or 245.7
Nickel, Total Recoverable	µg/L	Grab	1/Discharge Event ²	³
Selenium, Total Recoverable	µg/L	Grab	1/Discharge Event ²	³
Silver, Total Recoverable	µg/L	Grab	1/Discharge Event ²	³
Thallium, Total Recoverable	µg/L	Grab	1/Discharge Event ²	³
Zinc, Total Recoverable ⁴	µg/L	Grab	1/Discharge Event ²	³
Benzene	µg/L	Grab	1/Discharge Event ²	³
Carbon Tetrachloride	µg/L	Grab	1/Discharge Event ²	³
1,3-Dichlorobenzene	µg/L	Grab	1/Discharge Event ²	³
1,4-Dichlorobenzene	µg/L	Grab	1/Discharge Event ²	³
1,1-Dichloroethane	µg/L	Grab	1/Discharge Event ²	³
1,2-Dichloroethane	µg/L	Grab	1/Discharge Event ²	³
1,1-Dichloroethylene	µg/L	Grab	1/Discharge Event ²	³
Ethylbenzene	µg/L	Grab	1/Discharge Event ²	³
Tetrachloroethylene	µg/L	Grab	1/Discharge Event ²	³
Toluene	µg/L	Grab	1/Discharge Event ²	³

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Trichloroethylene	µg/L	Grab	1/Discharge Event ²	³
Vinyl Chloride	µg/L	Grab	1/Discharge Event ²	³
Remaining Priority Pollutants ⁸	µg/L	Grab	1/Year ⁷	2, ³
TCDD Equivalents ⁹	µg/L	Grab	1/Year ⁷	³

- ¹ Flow shall be recorded daily during each period of discharge. Periods of no flow shall also be reported.
- ² During periods of extended discharge, no more than one sample per week is required. Sampling shall be during the first hour of discharge. If, for safety reasons, a sample cannot be obtained during the first hour of discharge, a sample shall be obtained at the first safe opportunity, and the reason for the delay shall be included in the report. If there is no discharge to surface waters during the reporting period, then no sampling is required and 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.
- ³ 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 Minimum Levels (MLs) specified in Attachment 4 of the SIP. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding ML.
- ⁴ The mass emission (lbs/day) for the discharge shall be calculated and reported using the measured concentration and the actual flow rate measured at the time of discharge, using the formula:
 $M = 8.34 \times C_e \times Q$
 where: M = mass discharge for a pollutant, lbs/day
 C_e = Measured concentration for a pollutant
 Q = actual discharge flow rate.
- ⁵ ADMI – American Dye Manufacturers Institute.
- ⁶ Refer to Section V, Whole Effluent Toxicity Testing Requirements of the MRP. The Maximum Daily Single Result for the TST hypothesis test shall be reported as “Pass or Fail” with a “% Effect”. Sufficient comingled storm water (Discharge Point 001) or storm water (Discharge Point 002) shall be collected in case the TIE is required following a failed initial toxicity test. Please refer to section V.A.10. for the toxicity identification evaluation (TIE) procedure
- ⁷ 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.
- ⁸ Priority Pollutants as defined by the CTR defined in Attachment I of this Order.
- ⁹ TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are provided in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculated TCDD equivalents the Discharger shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.
 Dioxin-TEQ (TCDD equivalents) = $\sum(C_x \times TEF_x)$
 where: C_x = concentration of dioxin or furan congener x
 TEF_x = TEF for congener x

Minimum Levels, and Toxicity Equivalency Factors

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

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity Testing

1. Definition of Chronic Toxicity.

Chronic toxicity measures a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or receiving waters compared to that of the control organisms. Chronic toxicity test results shall be measured using the two concentration [i.e., discharge in-stream waste concentration (IWC) and laboratory water control] Test of Significant Toxicity (TST) hypothesis testing approach and reported in units of Pass or Fail and % Effect.

2. Definition of Percent Effect.

Percent Effect is defined as the effect value—denoted as the difference between the mean control response and the mean IWC response, divided by the mean control response—multiplied by 100.

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

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

4. Sample Volume and Holding Time

The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.

5. Freshwater Test Species and Methods

For this permit, 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; Table IA, 40 C.F.R. Part 136). In no case shall these species be substituted with another organism unless written authorization from the Regional Water Board Executive Officer is received.

- a. A static renewal toxicity test with the fathead minnow, *Pimephales 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 1002.01).
- c. A static renewal toxicity test with the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).

6. Species Sensitivity Screening

Species sensitivity screening shall be conducted monthly for a period of three months. Once each month, 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. The species that exhibits the highest “Percent (%) Effect” at the discharge IWC during species sensitivity screening shall be used for routine annual monitoring.

Rescreening is required every three years. The Discharger shall rescreen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of rescreening tests demonstrates that the same species is the most sensitive, then the rescreening does not need to include more than one suite of tests. If a different species is the most sensitive, or if there is ambiguity, then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.

7. Analysis and Reporting

The results of chronic toxicity testing shall be statistically analyzed and reported in two separate ways as follows.

- a. For this monitoring program, the critical chronic instream waste concentration (IWC) is set at 100% effluent. A 100% effluent sample and a control shall be tested. Chronic toxicity test biological endpoint data shall be statistically analyzed using the Test of Significant Toxicity t-test approach specified in Appendix A of the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, DC. EPA 833-R-10-003, 2010).
- b. For this monitoring program to evaluate compliance with the chronic toxicity WQBEL based on the chronic toxicity WLA in the Harbor Toxics TMDL, the critical chronic IWC is set at 100% effluent. A 100%, 75%, 50%, 25%, and 12.5% effluent sample and a control shall be tested. Chronic toxicity test biological endpoint data shall be statistically analyzed using appropriate hypothesis testing approaches, specified in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 C.F.R. Part 136), to report $TUc = 100/NOEC$.

8. Quality Assurance and Additional Requirements

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

- a. The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (H_0) for the TST approach is: Mean discharge IWC response $\leq 0.75 \times$ Mean control response. A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent (%) Effect" at the discharge IWC is defined and reported as: $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$.
- b. The Median Monthly Effluent Limit (MMEL) for chronic toxicity only applies when there is a discharge more than one day in a calendar month period. This discharge occurs more than one day in a calendar month; consequently, during a calendar month, exactly three independent toxicity tests are required for routine monitoring when one toxicity test results in "Fail".
- c. 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.

- d. Monthly reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported.
- e. 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).

9. Preparation of an Initial Investigation TRE Workplan

The Discharger shall prepare or update 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 minimum, the work plan shall include:

- a. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
- b. A description of methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the facility; and,

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

10. Additional Toxicity Monitoring and Toxicity Identification Evaluation (TIE) for the Test of Significant Toxicity t-Test Approach.

- a. If chronic toxicity is detected (i.e., reported as “Fail” for the TST hypothesis test) at an effluent monitoring station during a discharge event, then the Discharger shall continue toxicity testing during discharge events at that monitoring station—but not more frequently than weekly—until the nature and cause(s) of the toxicity is defined and/or eliminated. A toxicity test sample is immediately subject to TIE procedures to identify the toxic chemical(s), if:

The chronic toxicity test shows a Percent Effect value >50% at the IWC. A TIE shall be performed to identify the causes of chronic toxicity using the same species and test method and, as guidance, U.S. EPA manuals: *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I* (EPA/600/6-91/005F, 1992); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996).

- b. The TIE should be conducted on the test species demonstrating the most sensitive toxicity response at a sampling station. A TIE may be conducted on a different test species demonstrating a toxicity response with the caveat that once the toxicant(s) is identified, the most sensitive test species triggering the TIE shall be further tested to verify that the toxicant has been identified and addressed.

11. Toxicity Reduction Evaluation (TRE) Process

- a. **Preparation and Implementation of Detailed TRE Work Plan.** The Discharger shall immediately initiate a TRE using—according to the type of treatment facility—EPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment*

Plants (EPA/833/B-99/002, 1999) or EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989). Within 30 days, the Discharger shall submit to the Regional Water Board Executive Officer a Detailed TRE Work Plan, which shall follow the generic Initial Investigation TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the Executive Officer:

- i. Further actions by the Discharger to investigate, identify, and correct the causes of toxicity.
 - ii. Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.
 - iii. A schedule for these actions, progress reports, and the final report.
- b. TIE Implementation.** The Discharger may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, 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.
- 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 TRE process. Additional accelerated monitoring and TRE work plans are not required once a TRE is begun.
- 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.

12. Reporting

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

- a. The toxicity test results for the TST 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.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

The Discharger may participate in coordinated receiving water, biomonitoring, and sediment monitoring program with other dischargers to the Dominguez Channel in order to provide the Los Angeles Regional Water Board with a comprehensive water and sediment quality database for this water body.

A. Monitoring Location RSW-001

- 1. Receiving water monitoring shall be required only in years in which a discharge occurs. When required, the Discharger shall monitor the Dominguez Channel at upstream Monitoring Location RSW-001 as follows:

Table E-3. Receiving Water Monitoring Requirements-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
Temperature	°F	Grab	1/Year ^{1, 2}	3
Salinity	mg/L	Grab	1/Year ^{1, 2}	3
Hardness (as mg/L CaCO ₃)	mg/L	Grab	1/Year ^{1, 2}	3
Priority Pollutants ⁴	µg/L	Grab	1/Year ^{1, 2}	3
TCDD Equivalents ⁵	µg/L	Grab	1/Year ^{1, 2}	3
E. Coli	MPN/100 ml	Grab	1/Year ^{1, 2}	3

- 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. If there is no discharge to surface waters, no sampling is required and 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.
- 2. Receiving water pH, temperature, salinity, and hardness, must be analyzed concurrent with effluent priority pollutant sampling (Monitoring Locations EFF-001 and EFF-002). 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
- 3. 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. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding ML.
- 4. Priority pollutants as defined by the CTR, defined in Attachment I of this Order.
- 5. TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are provided in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents the Discharger shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

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

Minimum Levels, and Toxicity Equivalency Factors

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

IX. HARBOR TOXICS TMDL MONITORING

A. Dominguez Channel Water Column Sampling

Water column and total suspended solids samples shall be collected during two wet weather events and one dry weather event each year. Both media shall, at a minimum, be analyzed for the chemical suite (lead, zinc, copper, DDT, PCBs, benzo[a]anthracene, benzo[a]pyrene, chrysene, phenanthrene, and pyrene), temperature, dissolved oxygen, pH, electrical conductivity, and a flow measurement. Sufficient volumes of suspended solids are required to allow analysis of the pollutants in the bulk sediment.

B. Sediment Monitoring

Sediment chemistry samples shall be collected every five years. The analysis shall include the chemical suite, two toxicity tests, and four benthic indices as specified in the SQO Part 1.

C. Fish Tissue Monitoring

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

X. OTHER MONITORING REQUIREMENTS

A. Storm Water Monitoring

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

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

B. Storm Water Pollution Prevention Plan (SWPPP), Best Management Practices Plan (BMPP) and Spill Prevention Control and Countermeasures (SPCC) Effectiveness Report

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

XI. 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 will indicate under penalty of perjury that no effluent was discharged to surface water during the reporting period in the corresponding monitoring report.
3. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.
4. The Discharger shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements and secure any additional permits.
5. The Discharger shall report the results of chronic toxicity testing, TRE and TIE as required in the Attachment E, Monitoring and Reporting, Section V.A.8.

B. Self-Monitoring Reports (SMR's)

1. The Discharger shall electronically submit SMR's using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). The CIWQS Web site will provide

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

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 SMR's including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this Order. SMR's are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-4. Monitoring Periods and Reporting Schedule

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

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.
5. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
 - a. Sample results greater than or equal to the RL (reported ML) shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
 - b. Sample results less than the 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 as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (\pm a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
- d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

6. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment A and I. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.
7. Multiple Sample Data. When determining compliance with an AMEL or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
 - a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
 - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
8. The Discharger shall submit SMRs in accordance with the following requirements:
 - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
 - c. SMRs must be submitted to the Regional Water Board electronically as specified in finding X.B.1, above, signed and certified as required by the Standard Provisions (Attachment D). If the size of the submittal necessitates the submittal of a disk, please mail it to the address listed below:

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

C. Discharge Monitoring Reports (DMR's) – Not Applicable

D. Other Reports

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

2. Within **90 days** of the effective date of this Order, the Discharger must submit to the Regional Water Board notification of whether the Discharger will be participating with an organized group of Responsible Parties to complete the regional monitoring required by the Harbor Toxics TMDL, or if the Discharger will be developing a site specific plan. If developing a site specific plan, that plan is due to the Regional Water Board 12 months from the effective date of this Order. Upon receipt of the plan, the Regional Water Board will review the plan and provide an opportunity for public comment. The Regional Water Board Executive Officer will then either approve the plan or provide comments and require resubmittal of the plan. The Discharger has six months after the approval to implement the plan. The Discharger or the Responsible Parties shall submit annual implementation reports to the Regional Water Board. The reports shall describe the measures implemented and the progress achieved toward meeting the assigned WLAs and LAs.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4B192512001
Discharger	Charta Group, Inc., DBA Permalite, Inc.
Name of Facility	Permalite, Inc.
Facility Address	230 East Alondra Boulevard
	Gardena, CA 90248
	Los Angeles County
Facility Contact, Title and Phone	Howard Landon, Vice President of Logistics, (310) 327-0244
Authorized Person to Sign and Submit Reports	Howard Landon, Vice President of Logistics, (310) 327-0244
Mailing Address	Same as Facility address
Billing Address	Same as Facility address
Type of Facility	Industrial
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	B
Pretreatment Program	Not Applicable
Recycling Requirements	Not Applicable
Facility Permitted Flow	0.015 million gallons per day (MGD) - Storm water runoff commingled with small amounts of steam condensate and boiler condensate. 0.0075 MGD – Storm water runoff.
Facility Design Flow	Not Applicable
Watershed	Dominguez Channel and Los Angeles/Long Beach Harbors WMA
Receiving Water	Dominguez Channel, above the Estuary
Receiving Water Type	Inland Surface Water

- A.** Charta Group, Inc. DBA Permalite, Inc. (hereinafter Discharger) is the owner and operator of Permalite, Inc. (hereinafter Facility), a paper and film coating facility. Charta Group, Inc. purchased the Facility in 2006.

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 storm water runoff commingled with small amounts of steam condensate and boiler condensate from the south west side of the Facility, and storm water runoff from the south east side of the Facility to the Dominguez Channel, a water of the United States, above the Estuary, within the Dominguez Channel and Los Angeles/Long Beach Harbors Watershed Management Area (WMA). The discharge was previously regulated by Order No. R4-2008-0201, which was adopted on December 11, 2008, and expired on November 10, 2013. The terms and conditions of Order No. R4-2008-0201 have been administratively extended as per 40 Code Federal Regulations (C.F.R.) section 122.6 and remain in effect until new Waste Discharge Requirements and an NPDES permit are adopted pursuant to this Order.
- C.** The Discharger filed a report of waste discharge (ROWD) and submitted an application for reissuance of its WDRs and NPDES permit on February 13, 2014. Supplemental information was requested on February 24, 2014, and received on March 17, 2014. A revised ROWD was submitted on June 4, 2014. Supplemental information was submitted and deemed complete on August 26, 2014. A site visit was conducted on September 25, 2013, to observe operations and collect additional data to develop permit requirements for the waste discharges at the Facility. A joint site inspection was conducted by the State Water Resources Control Board (State Water Board) and Regional Water Board staff on May 28, 2014, to determine compliance with the requirements contained in the previous permit, Order No. R4-2008-0201. Violations observed during the inspection are listed in Section II.E. (Compliance Summary) below.

II. FACILITY DESCRIPTION

The Discharger operates a paper and film coating facility that supplies papers for commercial uses (e.g., photography, graphic art supplies, blueprint papers). The Facility is located at 230 East Alondra Boulevard, in Gardena, California. It consists of a warehouse, product mixing area, new product mixing area, miscellaneous storage area, equipment cleaning trough, finished chemical product tote (white container) storage, raw chemical storage, raw and blended solvent storage, dry chemical storage shed, waste storage area, and miscellaneous waste storage area. The chemicals stored on-site include pigments, dyes, resins, solvents (such as toluene, xylene, methanol, heptane, and ethanol-denatured anhydrous), and a variety of water-based solvents and additives. Raw materials are combined in mixing and blending tanks in the product mixing area, new product mixing area, and interior drain trough to produce the coating products. The coating products are transferred to intermediary totes storage. The product in totes is fed indoors through connection lines, where the product is applied to printing media. The materials and staging of materials for product production are located outdoors in uncovered areas. The areas with overhead cover are: the product mixing area, the new product mixing area, the interior drain trough, and the storage in the dry chemical storage shed and various shipping containers used to store media awaiting the application of coatings. The Discharger also maintains a boiler system that produces condensate that commingles with storm water during rain events and discharge to the permitted Discharge Point No. 001.

A. Description of Wastewater and Biosolids Treatment and Controls

The site is paved and sloped so that storm water runoff from the back of the facility (south end) flows to the northwest of the facility to a concrete drainage swale behind the west side of the warehouse, along the western edge of the driveway entrance to the Facility, and off the property to a storm drain inlet (Discharge Point No. 001) located on Alondra Boulevard. There is no treatment for the storm water runoff that flows to the drainage swale. Storm water collected within the bermed drum storage area for solvent-based products is conveyed to a sump and it is pumped without treatment to the paved lot surface which flows to the concrete swale within the Facility. Steam condensate from the heated mixing vessels and the coating line boilers, and boiler condensate located on the western side of the facility are also discharged to the paved lot surface. The volume of water from the steam condensate and boiler condensate is estimated at 20 gallons per day or less, such that the water typically remains on the paved lot surface and evaporates before reaching the concrete swale, however, during rain events, the steam condensate and boiler condensate commingle with storm water runoff on the paved lot surface and are discharged to the storm drain.

Stormwater runoff from the south east and east side of the facility flows down an embankment covered by a black tarp and into a drainage channel that runs along the east side of the warehouse and office. The stormwater continues downstream to the employee parking lot, to a discharge point under the sidewalk at East Alondra Boulevard and discharges to the street. The discharge point was discovered during the May 28, 2014, site inspection. The revised ROWD included the discharge point that is named as "Discharge Point No. 002".

During the May 28, 2014, site inspection, five sumps were observed at the following locations:

- 1.** Sump No. 1 - Uncovered miscellaneous storage area. This sump collects storm water runoff or surface flow from the partially bermed miscellaneous storage area. The berm is open at the south end of the area and may allow inflow and outflow during storm events. The water in the sump was black in color and had a pungent odor. The pH of the water in the sump was 6.92. Water samples from Sump No. 1 were collected during the inspection and the results of the analysis are listed in Table F-3 in this Fact Sheet.

The water in the sump is either pumped out onto the paved ground that flows to the west curb towards Discharge Point No. 001 or pumped into the totes (white container) for storage in the waste storage area and hauled off-site. The Discharger indicated that its plant manager visually inspects the water in the sump to determine when to pump the sump's contents, either to the ground for evaporation and/or discharge or to the totes for storage. If the plant manager determines that the water in the sump appears clean, it is pumped onto the ground outside the berm. If it does not appear to be clean, then it is pumped to the totes for storage. The Discharger has no record of observations or the volumes discharge. This procedure is also performed for Sump Nos. 2, 3, 4, and 5.

- 2.** Sump No. 2 - Bermed area surrounding the covered product mixing area. Sump No. 2 collects liquid materials from the product mixing area within the berm. The sump contained white liquid as well as white solids floating on the surface. The pH of the liquid in the sump was 7.64. The berm has a valve that allows water to flow out from the berm. However, the Discharger indicated that the valve was not used to drain water from the bermed area. The collected liquid is visually inspected by the Facility's plant manager to

determine whether to pump the water in the sump to the ground for evaporation and/or discharge or to the totes for storage.

3. Sump No. 3 - Boiler system area. Sump No. 3 collects the boiler condensate water. During rain events, storm water may comingle with the water in the sump resulting in a discharge to the storm drain. The water in the sump was green/yellow in color. The pH of the water in the sump was 8.19.
4. Sump No. 4 – Within the berm area of the covered new product mixing area. Sump No. 4 collects liquid material from the new product mixing area within the berm area. The sump was partially covered and within a fully enclosed berm area. The liquid in the sump was not tested for pH.
5. Sump No. 5 – Warehouse loading dock area. Sump No. 5 collects storm water during rain events. No pH was tested in this sump.

No water samples were collected in Sump Nos. 2, 3, 4, and 5 because of limited sampling bottles.

B. Discharge Points and Receiving Waters

The Facility discharges up to 0.015 million gallons per day (MGD) of storm water runoff commingled with steam condensate and boiler condensate through Discharge Point No. 001 (Latitude 33° 52' 12" N, Longitude 118° 17' 22" W), and up to 0.0075 MGD of storm water runoff through Discharge Point 002 (Latitude 33° 53' 06" N, Longitude 118° 16' 14" W) to a storm drain inlet to the Dominguez Channel, a water of the United States.

Attachment B depicts a topographic map of the area around the Facility. Attachment C depicts the schematic diagram of the wastewater flow.

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

Effluent limitations contained in Order No. R4-2008-0201 for discharges from Discharge Point No. 001 (Monitoring Location 001). Monitoring data reported during the term of the previous permit are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation		Monitoring Data (Discharge Point No. 001) (From 11/30/2012 – To 1/24/2013)	
		Average Monthly	Maximum Daily	Highest Average Monthly Discharge	Highest Daily Discharge
Conventional Pollutants					
Biochemical Oxygen Demand 5-day @ 20 deg. C (BOD ₅)	mg/L	--	30	--	NR ¹
pH	standard units	--	6.5 – 8.5	--	NR ¹
Oil and Grease	mg/L	--	15	--	NR ¹
Total Suspended Solids (TSS)	mg/L	--	75	--	NR ¹
Non-Conventional Pollutants					
Phenols	mg/L	--	1.0	--	NR ¹
Settleable Solids	ml/L	--	0.3	--	NR ¹

Parameter	Units	Effluent Limitation		Monitoring Data (Discharge Point No. 001) (From 11/30/2012 – To 1/24/2013)	
		Average Monthly	Maximum Daily	Highest Average Monthly Discharge	Highest Daily Discharge
Sulfides	mg/L	--	1.0	--	NR ¹
Temperature	°F	--	86	--	NR ¹
Turbidity	NTU	--	75	--	NR ¹
Xylenes	µg/L		1,750	--	NR ¹
Priority Pollutants					
Toluene	µg/L	--	150	--	NR ¹
Acute Toxicity	% survival	--	²	--	NR ¹
Chromium VI	µg/L	--	--	--	0.045 ¹
Copper	µg/L	--	--	--	780 ¹
Zinc	µg/L	--	--	--	2180 ¹

--- No effluent limitations or monitoring data.

¹ NR – Not Reported. The Discharger only reported three sampling events, however, samples were held beyond acceptable holding times for many of the parameters, with the exception of some metals data.

² The acute toxicity of the effluent shall be such that:

- a. 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
- b. no single test shall produce less than 70% survival.

D. Analytical Results of Samples Collected in Sump No. 1 During the May 28, 2014, Site Inspection

The analytical results of water samples collected in Sump No. 1 during the site inspection on May 28, 2014, are listed below.

Table F-3. Analytical Results of Samples Collected in Sump No. 1 on May 28, 2014

Parameter	Units	Effluent Limitations ¹	CTR Criteria (Freshwater)	Results
		Maximum Daily	Criteria Maximum Concentration	
Conventional Pollutants				
Biochemical Oxygen Demand 5-day @ 20 deg. C (BOD ₅)	mg/L	30	--	815
pH	standard units	6.5 – 8.5	--	6.8
Total Suspended Solids (TSS)	mg/L	75	--	45.2
Oil and Grease	mg/L	15	--	45.2
Non-Conventional Pollutants				
Turbidity	NTU	75	--	63.4
Settleable Solids	ml/L	0.3	--	<0.1
Sulfides	mg/L	1.0	--	<0.005

Parameter	Units	Effluent Limitations ¹	CTR Criteria (Freshwater)	Results
		Maximum Daily	Criteria Maximum Concentration	
Phenols	mg/L	1.0	--	0.052
Ammonia as N	mg/L	--	--	26.8
Conductivity	µS/cm	--	--	1334
Total Petroleum Hydrocarbon (TPH) (Diesel)	mg/L	--	--	100
TPH (Gasoline)	µg/L		--	<50 (RDL) ²
Total Organic Carbon (TOC)	mg/L	--	--	1880
Priority Pollutants				
Cadmium	µg/L	--	2.07	0.436
Chromium	µg/L	--	--	0.59
Copper	µg/L	--	9.70	16.355
Lead	µg/L	--	42.70	1.212
Nickel	µg/L	--	261.01	7.99
Selenium	µg/L	--	20.00	0.41
Silver	µg/L	--	1.23	0.41
Thallium	µg/L	--	6.3 ³	0.25
Zinc	µg/L	--	69.7	29.13
Remaining Priority Pollutants	µg/L	--	--	Non-Detect (ND)

¹ Effluent Limitations contained in Order No. R4-2008-0201.

² RDL – Reporting Detection Limit.

³ Human health criteria for consumption of organism only.

The information in the table above indicates that the analytical results for some of the parameters during the site inspection on May 28, 2014, exceeded effluent limitations contained in Order No. R4-2008-0201.

E. Compliance Summary

The Discharger only reported three sampling events that occurred on November 30, 2012, December 24, 2012, and January 24, 2013. Monitoring data collected on November 30, 2012, December 24, 2012, and January 24, 2013, submitted together with the ROWD, indicates that the samples were held for up to 6 months before being sent to the laboratory for analysis, which is beyond the acceptable holding time for the parameters for which monitoring is required. On March 6, 2013, the State Water Board’s Office of Enforcement issued a notice of violation to the Discharger for non-submittal of self-monitoring reports (SMRs) electronically through the California Integrated Water Quality System (CIWQS). On May 28, 2014, Regional Water Board and State Water Board staff conducted a site inspection at the Permalite Facility. The violations noted during the site inspection and file review include the following:

1. Non-submittal of the SWPPP, BMPPP, and SCP;

2. Failure to implement control of pollutant sources and appropriate use of Best Management Practices (BMPs);
3. Failure to monitor when discharging waste from the Facility;
4. Failure to monitor rainfall and make visual observations;
5. Failure to submit timely self-monitoring reports (SMRs); and
6. Violations related to housekeeping, adequate containment, proper labeling on containers, proper storage of dry chemicals, raw and blended solvents, etc. observed during the inspection.

The Regional Water Board enforcement staff are evaluating these violations and deficiencies for appropriate enforcement action.

F. Planned Changes

The Discharger has not reported any planned changes.

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

Table F-4. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Dominguez Channel, above the Estuary	<p><u>Existing:</u> Non-contact water recreation (REC-2); preservation of rare and endangered species (RARE).</p> <p><u>Potential:</u> Municipal and domestic water supply (MUN)*; water contract recreation (REC-1)¹, warm freshwater habitat (WARM), and wildlife habitat (WILD).</p> <hr/> <ul style="list-style-type: none"> • MUN designations are designated under SB 88-63 and RB 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). <p>¹ Access prohibited by Los Angeles County Department of Public Works.</p>

2. **Thermal Plan.** The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. Requirements of this Order implement the Thermal Plan. Additionally, a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. Nonetheless, a maximum effluent temperature limitation of 86°F was determined to be appropriate for protection of aquatic life and 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, 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. 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) 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 including protecting rare, threatened, or endangered species. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

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

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

The USEPA approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2010 303(d) list and have been scheduled for TMDL development.

The Facility discharges to the Dominguez Channel. The Dominguez Channel is divided into two segments, a lined portion above Vermont Avenue, and an unlined portion below Vermont Avenue. The discharge point lies within the lined portion above Vermont Avenue which is listed in the 2010 303(d) list for pollutants of concern including: ammonia, copper, diazinon, indicator bacteria, lead, toxicity, and zinc.

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

1. **Bacteria TMDL.** The Regional Water Board approved the *Los Angeles Harbor Bacteria TMDL* (Bacteria TMDL) through Resolution 2004-011 on July 1, 2004. The State Water Board, Office of Administrative Law (OAL), and USEPA approved the TMDL on October 21, 2004, January 5, 2005, and March 1, 2005, respectively. The Bacteria TMDL addresses impairment caused by elevated indicator bacteria in the Main Ship Channel and Inner Cabrillo Beach, both located within the Los Angeles Harbor. The

Dominguez Channel is a tributary to the Main Ship Channel and was included in TMDL survey and linkage analyses. The Dominguez Channel is not specifically addressed through the Bacteria TMDL WLAs; however, this Order includes receiving water limitations for bacteria that are consistent with the Bacteria TMDL and the applicable bacteria water quality standards and effluent monitoring to evaluate reasonable potential.

- 2. Harbor Toxics TMDL.** The Regional Water Board adopted Resolution No. R11-008 on May 5, 2011, that amended the Basin Plan to incorporate the *TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbors Waters* (Harbor Toxics TMDL). The Harbor Toxics TMDL was approved by the State Water Board on February 7, 2012, the OAL on March 21, 2012, and the USEPA on March 23, 2012. The Harbor Toxics TMDL contains requirements applicable to this discharge. Therefore, this Order contains effluent limitations and monitoring requirements based on the TMDL.

For the freshwater portion of the Dominguez Channel (above Vermont Avenue), the Harbor Toxics TMDL included:

- a. Water column interim wet weather chronic toxicity allocation of 2 TUc for the Dominguez Channel freshwater (Attachment A to Resolution No. R11-008, p. 10).
- b. Concentration-based Dominguez Channel freshwater interim wet weather allocations (in µg/L) for copper, lead, and zinc (Attachment A to Resolution No. R11-008, p. 10).
- c. Water column final wet weather chronic toxic toxicity allocation of 1 TUc for the Dominguez Channel freshwater (Attachment A to Resolution No. R11-008, p. 11).
- d. Concentration-based Dominguez Channel wet-weather final allocations (in µg/L) for copper, lead, and zinc (Attachment A to Resolution No. R11-008, p. 12).
- e. Provisions for monitoring discharges and/or receiving waters during the TMDL's 20 year implementation schedule to determine attainment with waste load and load allocations as appropriate.

The provisions included here are consistent with the assumptions and requirements of the WLAs established in the Harbor Toxics TMDL.

Implementation of the Harbor Toxics TMDL

a. Final Effluent Limitations

The Harbor Toxics TMDL includes a final waste load allocation for chronic toxicity of 1 TUc, or its equivalent based on any Statewide Toxicity Policy (Attachment A to Resolution No. R11-008, p. 11). This Order includes a final effluent limit for chronic toxicity expressed in units used by the Test of Significant Toxicity (USEPA, 2010, Diamond et al., 2013).

The Harbor Toxics TMDL includes final freshwater metals allocations in wet weather for Dominguez Channel. The concentration-based allocations for NPDES dischargers (in µg/L) are 9.7 for copper, 42.7 for lead, and 69.7 for zinc (Attachment A to Resolution No. R11-008, p. 12). This Order establishes WQBELs that are

statistically calculated based on the TMDL final freshwater concentration-based allocations for copper, lead, and zinc.

b. Interim Effluent Limitations

The Harbor Toxics TMDL also includes freshwater metals interim allocations for Dominguez Channel (wet weather only) for copper (207.51 µg/L), lead (122.88 µg/L), and zinc (898.87 µg/L) (Attachment A to Resolution No. R11-008, p. 10).

The Harbor Toxics TMDL also includes interim freshwater toxicity allocations of 2 TU_c for Dominguez Channel in wet weather (Attachment A to Resolution No. R11-008, p. 10).

The discharger has not requested or submitted information sufficient to support interim effluent limitations and a compliance schedule. Therefore, no interim effluent limitations or compliance schedule are included in this Order for copper, lead, zinc, and chronic toxicity to ensure that existing performance levels of treatment are maintained.

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

The TMDL's implementation schedule allows up to 20 years after the TMDL effective date to attain WLAs and load allocations for those dischargers who justify the need for additional time in a compliance plan. During this period, the discharger is required, either individually or with a collaborating group, to develop a monitoring and reporting plan (Monitoring Plan) and quality assurance project plan (QAPP) for the water column, sediment, and fish tissue in the Dominguez Channel Estuary. These plans shall follow the "TMDL Element – Monitoring Plan" provisions in Attachment A to Resolution No. R11-008. The Discharger must inform the Regional Water Board if they plan to join a collaborative monitoring effort or develop a site specific plan no later than **90 days** after the effective date of this Order. If the Discharger is joining a collaborative effort that notification must include documentation of such. If developing a site specific monitoring plan, the plan must be submitted no later than **12 months** after the effective date of this Order for public review and, subsequently, Executive Officer approval. Monitoring shall begin 6 months after the monitoring plan is approved by the Executive Officer.

The provisions included in this Order implement and are consistent with the assumptions and requirements of all WLAs established in TMDLs that are applicable to the discharge from this Facility.

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

The Facility is a paper and film coating facility that supplies papers for commercial use (e.g., photography, graphic art supplies, blueprint papers). Order No. R4-2008-0201 established effluent limitations for BOD, total suspended solids (TSS), oil and grease, settleable solids, turbidity, phenols, sulfides, toluene, and xylene because these are the primary pollutants of concern in storm water runoff commingled with steam and boiler condensate, and storm water runoff discharges from facilities which deal with paper and film coating processes.

The Basin Plan establishes a water quality objective for pH, which states that waste discharges shall not cause pH excursions outside of the range 6.5 to 8.5 in inland surface waters. Due to the nature of the chemicals stored at the site (e.g., citric acid), pH is considered to be a pollutant of concern. In addition, the nature of materials, waste handling, and storage practices at the site indicate that temperature, color, and ammonia may also be pollutants of concern. Temperature is a pollutant of concern due to the nature of waste handling and runoff discharges at the site. The storm water is collected and stored in the sumps before being pumped out to the paved lot surface and subsequently discharged. This practice has the potential to result in heated discharges from the Facility. Color is a pollutant of concern because dyes and pigments are stored at the site. Ammonia is stored onsite.

Order No. R4-2008-0201 included acute toxicity limitations. However, chronic toxicity is a more stringent requirement than acute toxicity. A chemical at a low concentration can have chronic effects but no acute effects. Chronic toxicity evaluated using the Test of Significant Toxicity (TST) hypothesis analysis is expressed as "Pass" or "Fail" and "% Effect" for maximum daily single result. Since the discharge is intermittent, no average monthly effluent limitation for chronic toxicity is prescribed. The inclusion of a chronic toxicity limit in this permit is consistent with the requirements of the Harbor Toxics TMDL.

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

B. Technology-Based Effluent Limitations

1. Scope and Authority

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

meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 C.F.R. section 125.3.

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

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

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

2. Applicable Technology-Based Effluent Limitations

Currently, no numerical technology-based ELGs exists for the paper and film coating facilities. Thus, no effluent limitations based on ELGs are prescribed in this permit.

This Order includes technology-based effluent limitations based on BPJ in accordance with 40 C.F.R. section 125.3. Technology-based effluent limitations were established in the previous permit. Effluent limitations for BOD₅, oil and grease, TSS, turbidity, settleable solids, phenols, and sulfides were included in Order No. R4-2008-0201. Pursuant to State and federal antibacksliding regulations, this Order retains effluent limitations for these pollutants as technology-based effluent limitations. The limitations for these pollutants are consistent with technology-based limitations included in other Orders within the State for similar types of discharges.

Because the Facility utilizes petroleum based chemicals that may comeingle with storm water runoff, and the analytical result of the water sample collected in Sump No. 1 indicated 100 mg/L of total petroleum hydrocarbons (TPH) as diesel, this Order

establishes a new effluent limitation based on BPJ for TPH equal to 100 µg/L [TPH = sum of TPH gasoline (C4-C12), TPH diesel (C13-C22), and TPH oil (C23+)]. This limitation has been achievable through source control at facilities engaged in various petroleum operations and is consistent with limits included in permits for similar facilities within the Los Angeles Region.

In addition, the previous permit required the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). This Order requires the Discharger to update and continue to implement, consistent with the requirements in the previous permit, a SWPPP to outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into the storm drain. At a minimum, the management practices should ensure that raw materials and chemicals as well as hazardous and non-hazardous drum storage do not come into contact with storm water that could be discharged to surface waters.

Due to the lack of national ELGs for storm water runoff commingled with steam condensate, and boiler condensate and storm water runoff from paper and film coating facilities and the absence of data to apply BPJ to develop numeric effluent limitations, and pursuant to 40 C.F.R. section 122.44(k), Order No. R4-2008-0201 required the Discharger to develop and implement a Best Management Practices (BMPP). This Order requires the Discharger to update and continue to implement, consistent with the requirements in Order No. R4-2008-0201, a BMPP to establish site-specific procedures that will ensure proper operation and maintenance of equipment and storage areas, to ensure that unauthorized non-storm water discharges do not occur at the Facility.

Order No. R4-2008-0201 required the Discharger to update and continue to implement their Spill Contingency Plan (SCP). This Order requires the Discharger to update and continue to implement their SCP. A Spill Prevention Control and Countermeasure Plan (SPCC), developed in accordance with 40 C.F.R. Part 112, may be substituted for the SCP.

The combination of the SWPPP, BMPP, SCP, and effluent limitations from Order No. R4-2008-0201 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.

A summary of the technology-based effluent limitations for discharges of commingled storm water with small amounts of steam condensate and boiler condensate through Discharge Point 001 and storm water through Discharge Point No. 002 are shown in Table F-5.

Table F-5. Summary of Technology-based Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (BOD) (5-day @ 20°C)	mg/L	--	30	--	--
	lbs/day ¹	--	3.8	--	--
	lbs/day ²	--	1.88	--	--
Oil and Grease	mg/L	--	15	--	--
	lbs/day ¹	--	1.9	--	--
	lbs/day ²	--	0.94	--	--
Total Suspended Solids	mg/L	--	75	--	--
	lbs/day ¹	--	9.4	--	--
	lbs/day ²	--	4.69	--	--

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Phenols ³	mg/L	--	1.0	--	--
	lbs/day ¹	--	0.13	--	--
Settleable Solids ³	ml/L	--	0.3	--	--
Sulfides ³	mg/L	--	1.0	--	--
	lbs/day ¹	--	0.13	--	--
Turbidity ³	NTU	--	75	--	--
Total Petroleum Hydrocarbon (TPH) ^{3,4}	µg/L	--	100	--	--
	lbs/day ¹	--	0.125	--	--

¹ The mass-based (lbs/day) limitations are based on a maximum flow of 0.0.015 MGD for Discharge Point No. 001. The lbs/day limitations are calculated as follows:

$$\text{Flow (MGD)} \times \text{Concentration (mg/L)} \times 8.34 \text{ (conversion factor)} = \text{lbs/day.}$$

² The lbs/day limitations are based on a maximum flow of 0.0.0075 MGD for Discharge Point No. 002.

³ The effluent limits for this parameter are not applicable to Discharge Point No. 002.

⁴ TPH = sum of TPH gasoline (C4-C12), TPH diesel (C13-C22), and TPH oil (C23+).

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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

Section 122.44(d)(1)(i) of 40 C.F.R. requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) 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). Permit WQBELs must also be consistent with TMDL WLAs approved by USEPA.

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

The specific procedures for determining reasonable potential and, if necessary for calculating WQBELs, are contained in the USEPA Technical Support Document for Water Quality-Based Toxics Control (TSD) for storm water discharges and in the SIP for non-storm water discharges. However, the Section 3.3.8 Effluent Characterization of Specific Chemicals, Step 4, in the first full paragraph on p. 64 of the TSD reads: "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.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

As noted in Section II of the Limitations and Discharge Requirements, the Regional Water Board adopted a Basin Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The beneficial uses applicable to the Dominguez 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 the Dominguez Channel. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, and in accordance with 40 C.F.R. 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 the Dominguez Channel above the Estuary in the vicinity of the discharge.

Table F-6 summarizes the applicable water quality criteria/objective for priority pollutants that had been reported in detectable concentrations in the effluent.

Table F-6. Applicable Water Quality Criteria

CTR No.	Constituent	Selected Criteria	CTR/NTR Water Quality Criteria		
			Freshwater		Human Health for Consumption of: Organisms only
			Acute	Chronic	
		µg/L	µg/L	µg/L	µg/L
5b	Chromium VI	11	16	11	Narrative
6	Copper, Total Recoverable ¹	9.5	15	9.5	--
7	Lead, Total Recoverable ¹	3.3	84	3.3	Narrative
13	Zinc, Total Recoverable ¹	122	122	122	--

¹. A hardness of 103 mg/L based on median hardness data calculated from the Surface Water Ambient Monitoring Program (SWAMP) (12/2010 – 1/2012) for the Dominguez Channel above the Estuary was used to adjust the criteria.

On July 5, 2011, the Regional Water Board adopted the Harbor Waters Toxic Pollutants TMDL (Resolution No. R11-008). The State Water Board approved the TMDL on February 7, 2012; OAL and USEPA approvals were received on March 22, 2012, and March 23, 2012, respectively. This TMDL became effective on March 23, 2012. This TMDL assigned concentration-based WLAs for copper, lead, and zinc and a chronic toxicity of 1 TUC as a trigger for the wet weather discharges to the Dominguez Channel. This permit implements the applicable WLAs as required in the TMDL.

Table F-7 summarizes the applicable wet-weather WLAs for copper, lead, and zinc contained in the Harbor Waters Toxic Pollutants TMDL applicable to Dominguez Channel freshwater. These WLAs are applicable to the discharges at Discharge Point Nos. 001 and 002 to Dominguez Channel.

Table F-7. WLAs for Wet-Weather Discharges to the Dominguez Channel

Parameter	Units	WLA (Wet-weather)
Copper, Total Recoverable ¹	µg/L	9.7
Lead, Total Recoverable ¹	µg/L	42.7
Zinc, Total Recoverable ¹	µg/L	69.7

¹. A hardness of 50 mg/L, based on data provided in the Harbor Toxics TMDL, was used to adjust criteria.

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

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. The RPA considers water quality criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Regional Water Board identifies the MEC and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger.

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:

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

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

The RPA was performed using data collected by the Discharger at Monitoring Location EFF-001 taken during three rain events between November 30, 2012, and January 24, 2013. Much of the data is invalid because the samples were held far past the acceptable sample holding times specified in 40 C.F.R. section 136.3 Table II. As a result, the RPA was performed only for pollutants for which valid effluent data were available (i.e., did not exceed holding times). Based on the RPA, pollutants that demonstrate reasonable potential are copper and zinc for Discharge Point No. 001. No monitoring data was reported for Discharge Point No. 002. Therefore, no RPA was conducted.

This Order includes final wet weather WQBELs for copper, lead, and zinc based on the wasteload allocations included in the Harbor Toxics TMDL.

Table F-8. Summary Reasonable Potential Analysis for Discharge Point No. 001

CTR No.	Constituent	Applicable Water Quality Criteria (C)	Max Effluent Conc. (MEC)	Maximum Detected Receiving Water Conc. (B)	Wet Weather TMDL WLAs	RPA Result - Need Limit?	Reason
		µg/L	µg/L	µg/L			
5b	Chromium VI	11	0.045	NR	--	No	MEC<C
6	Copper, Total Recoverable	9.5	780	NR	Yes	Yes ¹	MEC≥C, TMDL
7	Lead, Total Recoverable	3.3	<50	NR	Yes	No ¹	MDL>C, TMDL
13	Zinc, Total Recoverable	122	2,180	NR	Yes	Yes ¹	MEC≥C, TMDL

NR = Not Reported

¹ Constituent is required to have a wet weather limitation based on Harbor Toxics TMDL.

4. WQBEL Calculations

The WQBELs for CTR/NTR constituents are calculated according to procedures outlined in the SIP, as described below.

- 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. The final wet-weather WQBELs for copper, lead, and zinc for Discharge Point Nos. 001 and 002 have been calculated using the WLAs provided in the Harbor Waters Toxic Pollutants TMDL for Dominguez Channel and the procedures specified in Section 1.4 of the SIP. Wet-weather effluent limits are applicable when the

maximum daily flow in the Dominguez Channel is equal to or greater than 63 cfs as measured at Los Angeles County Department of Public Works' flow gage S-28. This gage is located in Dominguez Channel at Vermont Avenue.

This Order also includes final dry-weather WQBELs for copper and zinc for Discharge Point No. 001 based on the reasonable potential determination and are calculated using the procedures specified in Section 1.4 of the SIP. Dry-weather effluent limits are applicable when the maximum daily flow in the Dominguez Channel is less than 63 cubic feet per second (cfs) as measured at Los Angeles County Department of Public Works' flow gage S-28. Since there was no monitoring data to conduct RPA, no dry-weather effluent limits are included for Discharge Point 002.

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

Using **dry-weather total recoverable copper** as an example, the following demonstrates how WQBELs were established in this Order.

The process for developing the limits is in accordance with Section 1.4 of the SIP.

Calculation of aquatic life AMEL and MDEL:

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

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

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

Where C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order, a hardness for dry weather WQBELs was obtained from 12/2010-1/2012 Surface Water Ambient Monitoring Program (SWAMP) data from station S28, with a median hardness of 103 mg/L (http://dpw.lacounty.gov/wmd/NPDES/report_directory.cfm).

D = The dilution credit, and

B = The ambient background concentration

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

$$ECA = C$$

For dry-weather total recoverable copper:

The applicable water quality criteria are:

$$ECA_{acute} = 15 \mu\text{g/L}$$

$$ECA_{chronic} = 9.5 \mu\text{g/L}$$

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

$$LTA_{acute} = ECA_{acute} \times \text{Multiplier}_{acute99}$$

$$LTA_{chronic} = ECA_{chronic} \times \text{Multiplier}_{chronic99}$$

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6. If the data set is greater than 10 samples, and at least 20% of the samples in the data set are reported as detected, the CV shall be equal to the standard deviation of the data set divided by the average of the data set.

For dry-weather total recoverable copper, the following data were used to develop the acute and chronic LTAs using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals). Since the data is less than 10 samples, the CV of 0.6 was used in the calculation.

No. of Samples	CV	ECA Multiplier _{acute}	ECA Multiplier _{chronic}
2	0.6	0.321	0.527

Dry-weather total recoverable copper:

$$LTA_{acute} = 15 \mu\text{g/L} \times 0.321 = 4.8 \mu\text{g/L}$$

$$LTA_{chronic} = 9.5 \mu\text{g/L} \times 0.527 = 5.03 \mu\text{g/L}$$

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

For dry-weather total recoverable copper, the most limiting LTA is LTA_{acute}.

$$LTA_{dryweather} = LTA_{acute} = 4.8 \mu\text{g/L}$$

Step 4: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as AMEL and MDEL. The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of

the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the CV of the data set, the number of samples (for AMEL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

$$AMEL_{aquaticlife} = LTA \times AMEL_{multiplier95}$$

$$MDEL_{aquaticlife} = LTA \times MDEL_{multiplier99}$$

AMEL multipliers are based on a 95th percentile occurrence probability, and the MDEL multipliers are based on a 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 dry-weather total recoverable copper, the following data were used to develop the AMEL and MDEL for effluent limitations using equations provided in section 1.4, Step 5 of the SIP:

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

Dry-weather total recoverable copper:

$$AMEL = 4.8 \mu\text{g/L} \times 1.55 = 7.4 \mu\text{g/L}$$

$$MDEL = 4.8 \mu\text{g/L} \times 3.11 = 15 \mu\text{g/L}$$

Calculation of human health AMEL and MDEL:

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

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

In the case of total recoverable copper, there are no human health criteria. Therefore, there will be no AMEL or MDEL calculated for human health criteria.

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

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

In the case of total recoverable copper, there are no human health criteria. Therefore, there will be no AMEL or MDEL calculated for human health criteria.

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

For dry-weather total recoverable copper:

AMEL _{aquatic life}	MDEL _{aquatic life}	AMEL _{human health}	MDEL _{human health}
7.4 µg/L	15 µg/L	Not applicable	Not applicable

Calculations for effluent limitations are based on the acute and chronic freshwater criteria for dry-weather total recoverable copper. Calculations for effluent limitations were performed for wet-weather total recoverable copper, total recoverable lead, and total recoverable zinc based on the TMDLs wet-weather allocations. Dry-weather total recoverable zinc limitations were also calculated based on the acute and chronic freshwater criteria. This Order includes only MDELs since the discharge includes small amounts of non-storm water contributions from steam and boiler condensate water and the discharge is primarily storm water, discharges are of short duration (less than 24 hours) and infrequent. These limitations are expected to be protective of beneficial uses. Final WQBELs for copper, lead and zinc are summarized in Table F-10 of the Fact Sheet.

5. WQBELs based on Basin Plan Objectives

The Basin Plan Objectives applicable to the Discharger are identified in Table F-3. These Basin Plan Objectives were evaluated with respect to effluent monitoring data and Facility operations.

Table F-9. Applicable Basin Plan Numeric Water Quality Objectives

Constituent	Units	Water Quality Objectives
pH	s.u.	The pH of inland surface waters must be between 6.5 and 8.5 at all times and ambient pH shall not be changed more than 0.5 units from natural conditions.
Ammonia	mg/L	The ammonia nitrogen water quality objectives are based on the receiving water pH and temperature as per the current Basin Plan, Table 3-1 and Table 3-2, (Resolution No. 2002-011, and 2005-014)
Bacteria	MPN/ 100 ml	<u>Geometric Mean Limits</u> <i>E. coli density shall not exceed 126/100 ml.</i> <u>Single Sample Maximum Limits</u> <i>E. coli density shall not exceed 235/100 ml.</i>
Dissolved Oxygen	mg/L	The mean annual dissolved oxygen concentration of all waters shall be greater than 7.0 mg/L, and no single determination shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations. The dissolved oxygen content of all surface waters designated as WARM shall not be depressed below 5 mg/L as a result of waste discharges.
Turbidity	NTU	Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%. Where natural turbidity is greater than 50 NTU increases shall not exceed 10%.

- a. **pH.** This Order includes effluent limitations for pH to ensure compliance with Basin Plan Objectives for pH.

- b. **Ammonia.** No downstream receiving water monitoring data were available for ammonia, thus it was not possible to calculate the applicable ammonia objectives. Effluent and receiving water monitoring requirements have been applied in this Order and the Order contains receiving water limitations for ammonia.
- c. **Bacteria.** The Dominguez Channel is identified on the 2010 303(d) list as impaired for bacteria. To address bacteria as a pollutant of concern, this Order establishes new effluent limitations for bacteria, equal to the Basin Plan Objectives. These effluent limitations are consistent with the Bacteria TMDL
- d. **Dissolved Oxygen.** The receiving water limitation is protective of the Basin Plan Objective for dissolved oxygen.
- e. **Turbidity.** The Basin Plan requirements for turbidity are as follows:
 - i. Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%.
 - ii. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%.
 - iii. This Order applies the water quality objective for turbidity as a receiving water limitation in addition to the technology-based effluent limitation
- f. **Temperature.** Narrative temperature objectives in the Basin Plan are stated as “*For waters designated WARM, water temperature shall not be altered by more than 5°F above the natural temperature. At no time shall these WARM-designated waters be raised above 80°F as a result of waste discharges.*” The previous permit included an instantaneous effluent temperature limitation of 86°F based on a white paper titled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*. The effluent limitation is retained in this Order to implement the narrative Basin Plan objective.
- g. **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 USEPA’s Quality Criteria for Water (commonly known as the “Gold Book”). In the Gold Book, USEPA 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 has implemented an effluent limitation of 75 mg/L for the implementation of the narrative water quality objective for solids. This limitation is consistent with the limitation in Order No. R4-2008-0201.

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 measures mortality. A chronic toxicity test may measure mortality, reproduction, and growth.

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

In addition to the Basin Plan requirements, section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Discharges from the Facility enter Dominguez Channel above the Estuary. The Harbor Toxics TMDL includes WLAs for chronic toxicity in the freshwater portion (above the Estuary) of Dominguez Channel. In accordance with 40 C.F.R. section 122.44(d), because a chronic toxicity TMDL WLA is applicable to the discharge, a WQBEL based on this WLA is required (40 C.F.R. section 122.44(d)(1)(vii)(B)).

The USEPA Regions 8, 9 and 10 Toxicity Training Tool (January 2010) (Toxicity Tool) recommends that permitting authorities establish a monthly median effluent limit (MML) of 1.0 TU_c as the monthly compliance level for chronic WET for NPDES dischargers without a mixing zone or dilution allowance (Section 2.6.2). The use of the MML of 1.0 TU_c for chronic WET is recommended only in conjunction with the following permit conditions as defined in the USEPA's Technical Support Document For Water Quality-based Toxics Control (March 1991) (TSD):

- A statistically calculated maximum daily effluent limit (MDL) for chronic WET (TSD Section 5.4.1) ; and
- Routine WET monitoring using the most sensitive test species identified through screening using species representing three different phyla (TSD Section 1.3.4).

Because the discharge (stormwater and stormwater comingled with small amount of steam and boiler condensate) is intermittent, this Order establishes a MDEL of "Pass" or "% Effect <50", as the daily chronic toxicity effluent limit. While the chronic toxicity TMDL uses U.S. EPA's multi-concentration NOEC-LOEC hypothesis testing approach and recommended numeric water quality criterion of 1.0 TU_c to set and measure the toxicity target, the numeric chronic toxicity effluent limits use U.S. EPA's two-concentration TST hypothesis testing approach. Both of these approaches are scientifically valid and provide comparable levels of water quality protection. However, the TST approach is superior in that it improves test power, provides the incentive for toxicity laboratories to generate high quality data, streamlines toxicity test data analysis, and is more likely to correctly classify toxic and not toxic samples (U.S. EPA, 2010; Diamond et al, 2013). The TST-based effluent limits derive from and comply with the underlying water quality standard for chronic toxicity in the Basin Plan, and are consistent with the assumptions and requirements of the available final WLA for chronic toxicity approved by U.S. EPA (40 C.F.R. section 122.44(d)(1)(vii)). These effluent limits are feasible and fully comply with applicable NPDES regulations (e.g., 40 C.F.R. sections 122.44(d)(1) and 122.45(d)(1)). The routine WET monitoring requirements have been established in Section V.A. of Attachment E – Monitoring and Reporting Requirements of this Order.

7. Final WQBELs

Summary of Water Quality-based Effluent Limitations for Discharge Point Nos. 001 and 002 are the following:

Table F-10. Summary of Water Quality-based Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH ⁵	standard units	--	--	6.5	8.5
Copper, Total Recoverable, Dry-Weather ^{1,4}	µg/L	--	15	--	--
	lbs/day ²	--	0.0019	--	--
Copper, Total Recoverable, Wet-Weather ^{3,5}	µg/L	--	10	--	--
	lbs/day ²	--	0.0012	--	--
Lead, Total Recoverable, Wet-Weather ^{3,5}	µg/L	--	43	--	--
	lbs/day ²	--	0.0054	--	--
Zinc, Total Recoverable, Dry Weather ^{1,4}	µg/L	--	122	--	--
	lbs/day ²	--	0.015	--	--
Zinc, Total Recoverable, Wet Weather ^{3,5}	µg/L	--	70	--	--
	lbs/day ²	--	0.0088	--	--
Temperature ⁵	°F	--	--	--	86
Chronic Toxicity ⁵	TUc and Pass or Fail for TST approach	--	6	--	--

- ¹ Dry weather is assumed for any discharge that occurs when the flow is less than 63 cubic feet per second (cfs) as measured at station S28 in the Dominguez Channel. Applicable only to Discharge Point No. 001.
- ² The mass-based (lbs/day) limitations are based on a maximum flow of 0.015 MGD for Discharge Point No. 001 and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.
- ³ Wet weather is assumed for any discharge that occurs when the flow is equal to or greater than 63 cubic feet per second (cfs) as measured at station S28 in the Dominguez Channel.
- ⁴ The effluent limitations are applicable only to Discharge Point No. 001.
- ⁵ The effluent limitations are applicable to Discharge Point Nos. 001 and 002.
- ⁶ Report "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitation (MDEL). During a calendar month, exactly three independent toxicity tests are required for routine monitoring when one toxicity test results in "Fail".

D. Final Effluent Limitation Considerations

Effluent limitations for BOD₅, pH, TSS, oil and grease, toluene, phenols, settleable solids, sulfides, temperature, turbidity, and xylene are included consistent with the previous Order No. R4-2008-0201. TPH is included because it has demonstrated reasonable potential to exceed the limit for TPH of 100 µg/L. Copper and zinc have exhibited reasonable potential to exceed CTR criteria and this Order includes new effluent limitations for these constituents. Additional wet weather MDELs are included in this Order for copper, lead, and zinc, based on the Harbor Toxics TMDL.

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 in this Order are at least as stringent as the effluent limitations in Order No. R4-2008-0201.

The Regional Water Board has determined that all of the numeric effluent limitations from the previous permit continue to be applicable to the Facility except for the effluent limitation for acute toxicity, which has been removed in this Order. There was no data available to conduct RPA for acute toxicity. However, this Order establishes a chronic toxicity effluent limitation. The acute toxicity limitation was replaced with a chronic toxicity limitation because chronic toxicity is a more stringent requirement than acute toxicity. A chemical at a low concentration can have chronic effects but no acute effects. (See Section IV.C.6. above). This Order also includes additional effluent limitations for copper, lead, and zinc based on the Harbor Toxics TMDL. Bacteria limitations for receiving water are included in this Order to ensure compliance with Basin Plan objectives.

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. State Water Board Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

This Order does not allow for a reduction in the level of treatment. The limits included hold the Discharger to performance levels that will not cause or contribute to water quality impairment or water quality degradation. Further, compliance with these requirements will result in the use of best practicable treatment or control of the discharge. Therefore, the issuance of this permit 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. section 122.45(f)(1) requires that all permit limitations, standards or prohibitions be expressed in terms of mass units except under the following conditions: (1) for pH, temperature, radiation or other pollutants that cannot appropriately be expressed by mass limitations; (2) when applicable standards or limitations are expressed in terms of other units of measure; or (3) if in establishing technology-based permit limitations on a case-by-case basis limitations based on mass are infeasible because the mass or pollutant cannot be related to a measure of operation. The limitations, however, must ensure that dilution will not be used as a substitute for treatment.

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)

4. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. This Order’s technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

Water quality-based effluent limitations have been derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 C.F.R. section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the SIP, which was approved by U.S. EPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by 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). Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

5. Summary of Final Effluent Limitations

- a. Table F-11 provides a summary of the final effluent limitations at Discharge Point No. 001.

Table F-11. Summary of Final Effluent Limitations For Discharge Point No. 001

Parameter	Units	Effluent Limitations				Basis ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Conventional Pollutants						
Biochemical Oxygen Demand (BOD) 5-day @ 20°C	mg/L	--	30	--	--	P, BPJ
	lbs/day ²	--	3.8	--	--	
Oil and Grease	mg/L	--	15	--	--	P, BPJ
	lbs/day ²	--	1.9	--	--	
pH	standard units	--	--	6.5	8.5	BP, P
Total Suspended Solids (TSS)	mg/L	--	75	--	--	P, BPJ
	lbs/day ²	--	9.4	--	--	
Non-Conventional Pollutants						
Phenols	mg/L	--	1.0	--	--	P, BPJ
	lbs/day ²	--	0.13	--	--	
Settleable Solids	ml/L	--	0.3	--	--	P, BPJ
Sulfides	mg/L	--	1.0	--	--	P, BPJ
	lbs/day ²	--	0.13	--	--	
Temperature	°F	--	--	--	86	BP, P, T
Turbidity	NTU	--	75	--	--	P, BPJ
Xylene	µg/L	--	1,750	--	--	P, BPJ
	lbs/day ²	--	0.22	--	--	

Parameter	Units	Effluent Limitations				Basis ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Total Petroleum Hydrocarbon (TPH) ³	µg/L	--	100	--	--	BPJ
	lbs/day ²	--	0.125	--	--	
Chronic Toxicity ⁴	Pass or Fail and % Effect for TST approach	--	Pass or % Effect <50	--	--	TMDL
Priority Pollutants						
Copper, Total Recoverable, Dry Weather ⁵	µg/L	--	15	--	--	CTR, SIP
	lbs/day ²	--	0.0019	--	--	
Copper, Total Recoverable, Wet Weather ⁶	µg/L	--	10	--	--	TMDL
	lbs/day ²	--	0.0012	--	--	
Lead, Total Recoverable, Wet Weather ⁶	µg/L	--	43	--	--	TMDL
	lbs/day ²	--	0.0054	--	--	
Zinc, Total Recoverable, Dry Weather ⁵	µg/L	--	122	--	--	CTR, SIP
	lbs/day ²	--	0.015	--	--	
Zinc, Total Recoverable, Wet Weather ⁶	µg/L	--	70	--	--	TMDL
	lbs/day ²	--	0.0088	--	--	
Toluene	µg/L	--	150	--	--	P, BPJ
	lbs/day ²	--	0.019	--	--	

¹ P = Previous Order No. R4-2008-0201; BP = Basin Plan; T = Thermal Plan; BPJ = Best Professional Judgment; TMDL = Total Maximum Daily Load; CTR = California Toxics Rule; SIP = State Implementation Policy

² The mass-based (lbs/day) limitations are based on a maximum flow of 0.015 MGD and is calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

³ TPH equals the sum of TPH gasoline (C4-C12), TPH diesel (C13-C22), and TPH oil (C23+).

⁴ Report "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitation (MDEL). During a calendar month, exactly three independent toxicity tests are required for routine monitoring when one toxicity test results in "Fail". The EPA Test of Significant Toxicity (TST) approach is used to demonstrate that the instream waste concentration is not toxic.

⁵ Dry weather is assumed for any discharge that occurs when the flow is less than 63 cubic feet per second (cfs) as measured at station S28 in the Dominguez Channel.

⁶ Wet weather is assumed for any discharge that occurs when the flow is equal to or greater than 63 cubic feet per second (cfs) as measured at station S28 in the Dominguez Channel.

b. Table F-12 provides a summary of the final effluent limitations at Discharge Point No. 002.

Table F-12. Summary of Final Effluent Limitations for Discharge Point No. 002

Parameter	Units	Effluent Limitations				Basis ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Conventional Pollutants						
Biochemical Oxygen Demand (BOD) 5-day @ 20°C	mg/L	--	30	--	--	BPJ
	lbs/day ²	--	1.88	--	--	
Oil and Grease	mg/L	--	15	--	--	BPJ
	lbs/day ²	--	0.94	--	--	
pH	standard units	--	--	6.5	8.5	BP

Parameter	Units	Effluent Limitations				Basis ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Total Suspended Solids (TSS)	mg/L	--	75	--	--	BPJ
	lbs/day ²	--	4.69	--	--	
Non-Conventional Pollutants						
Temperature	°F	--	--	--	86	BP, T
Chronic Toxicity ³	Pass or Fail and % Effect for TST approach	--	Pass or % Effect <50	--	--	TMDL
Priority Pollutants						
Copper, Total Recoverable, Wet Weather ⁴	µg/L	--	10	--	--	TMDL
	lbs/day ²	--	0.0006	--	--	
Lead, Total Recoverable, Wet Weather ⁴	µg/L	--	43	--	--	TMDL
	lbs/day ²	--	0.0027	--	--	
Zinc, Total Recoverable, Wet Weather ⁴	µg/L	--	70	--	--	TMDL
	lbs/day ²	--	0.0044	--	--	

¹ BPJ = Best Professional Judgment; BP = Basin Plan; T = Thermal Plan; TMDL = Total Maximum Daily Load.

² The mass-based limitations are based on a maximum flow of 0.0075 MGD.

³ Report "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitation (MDEL). During a calendar month, exactly three independent toxicity tests are required for routine monitoring when one toxicity test results in "Fail". The EPA Test of Significant Toxicity (TST) approach is used to demonstrate that the instream waste concentration is not toxic.

⁴ Wet weather is assumed for any discharge that occurs when the flow is equal to or greater than 63 cubic feet per second (cfs) as measured at station S28 in the Dominguez Channel.

E. Interim Effluent Limitations – Not Applicable

F. Land Discharge Specifications – Not Applicable

G. Recycling Specifications – Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

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

A. Surface Water

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 C.F.R. section 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this Order are included to ensure protection of beneficial uses of the receiving water and are based on the water quality objectives contained in the Basin Plan.

B. Groundwater – Not Applicable

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

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

B. Special Provisions

1. Reopener Provisions

These provisions are based on 40 C.F.R. Part 123 and the previous permit. 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 the Harbor Toxics TMDL.

2. Special Studies and Additional Monitoring Requirements

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

b. **Harbor Toxics TMDL Water Column, Sediment, and Fish Tissue Monitoring for Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary Compliance Monitoring Program.** This provision implements the Compliance Monitoring Program as required in the Harbor Toxics TMDL. The Compliance Monitoring Program include water column monitoring, sediment monitoring and fish tissue monitoring at monitoring station in Dominguez Channel.

3. Best Management Practices and Pollution Prevention

a. **Storm Water Pollution Prevention Plan (SWPPP).** Order No. R4-2008-0201 required the Discharger update and implement a 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 contaminated storm water runoff from being discharged directly into the Dominguez Channel. At a minimum, the management

practices should ensure that raw materials and chemicals do not come into contact with storm water. SWPPP requirements are included as Attachment G, based on 40 C.F.R. section 122.44(k).

- b. Best Management Practices Plan (BMPP).** Order No. R4-2008-0201 required the Discharger to develop and implement BMPs in order to reduce the amount of pollutants entering the discharge. This Order requires the Discharger to update and continue to implement the BMPP. The BMPP may be included as a component of the SWPPP. The purpose of the BMPP is to establish site-specific procedures that ensure proper operation and maintenance of equipment, to ensure that unauthorized non-storm water discharges (i.e., spills) do not occur at the Facility.

The Harbor Toxics TMDL addresses BMPs as follows:

“When permits for responsible parties are revised, the permits should provide mechanisms to make adjustments to the required BMPs as necessary to ensure their adequate performance. If proposed structural and non-structural BMPs adequately implement the WLAs then additional controls will not be necessary. Alternatively, if the proposed structural and non-structural BMPs selected prove to be inadequate then additional structural and non-structural BMPs or additional controls may be required.”

Special Provision VI.C.3 requires the Discharger to update and maintain a BMPP that incorporates requirements contained in Appendix G. Appendix 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 update and continue to implement a SCP to control the discharge of pollutants. The SCP shall include a technical report on the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events at the site. This provision is included in this Order to minimize and control the amount of pollutants discharged in case of a spill. The SCP shall be site specific and shall cover all areas of the Facility.

4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of section 122.41(e) and Order No. R4-2008-0201. It requires that the Discharger properly operate and maintain all facilities and systems used to achieve compliance with this Order.

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

6. Other Special Provisions – Not Applicable

7. Compliance Schedules – Not Applicable

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48, 40 C.F.R., requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E, establishes monitoring and reporting 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

Monitoring for pollutants expected to be present in the discharge will be required as established in the MRP (Attachment E). To demonstrate compliance with established effluent limitations, the Order includes monitoring requirements for parameters for which effluent limitations have been established. The Order requires that the monitoring for the pollutants that have effluent limitations is performed once per discharge event.

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

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. For this permit, chronic toxicity in the discharge has a limit and it is evaluated using USEPA's 2010 TST hypothesis testing approach.

This Order includes a chronic toxicity limitation for discharges from Discharge Points EFF-001 and EFF-002, and therefore, monitoring requirements are included in the MRP to determine compliance with the effluent limitation.

D. Receiving Water Monitoring

1. Surface Water

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

This Order includes monitoring requirements for Monitoring Locations RSW-001. Monitoring for dissolved oxygen is required to demonstrate compliance with Basin Plan Objectives. Monitoring for ammonia is required to collect data to determine reasonable potential.

2. Groundwater – Not Applicable

E. Other Monitoring Requirements

The Discharger is required to conduct observations in the vicinity of the discharge to observe the presence of floating and suspended materials, oil and grease, discoloration, turbidity, and odor.

To implement the Harbor Toxics TMDL, the Discharger is encouraged to participate in the Regional Monitoring program(s) to address pollutants as specified in the Harbor Toxics TMDL or to develop a site specific plan.

VIII. PUBLIC PARTICIPATION

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

A. Notification of Interested Parties

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

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

B. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person or by mail, or submitted by e-mail to losangeles@waterboards.ca.gov with a copy to Rosario.Aston@waterboards.ca.gov.

To be fully responded to by staff and considered by the Regional Water Board, the written comments were due at the Regional Water Board office by 5:00 p.m. on January 9, 2015.

C. Public Hearing

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

Date: February 12, 2015
Time: 9:00 a.m.
Location: Metropolitan Water District of Southern California, Board Room
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.

D. 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

E. Information and Copying

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

F. Register of Interested Persons

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

G. Additional Information

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

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 from the date of the submittal of the SWPPP to the Regional Water Board (whichever comes first).

II. Objectives

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

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

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

III. Planning and Organization

A. Pollution Prevention Team

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

B. Review Other Requirements and Existing Facility Plans

The SWPPP may incorporate or reference the appropriate elements of other regulatory requirements. Facility operators should review all local, State, and Federal requirements that impact, complement, or are consistent with the requirements of this General permit. Facility

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

IV. Site Map

A. 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**

B.

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

The following information shall be included on the site map:

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

V. List of Significant Materials

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

VI. Description of Potential Pollutant Sources

- A. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in section A.4.e above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:
 - 1. **Industrial Processes.** Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.
 - 2. **Material Handling and Storage Areas.** Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response

procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

- 3. Dust and Particulate Generating Activities.** Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.
- 4. Significant Spills and Leaks.** Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges since April 17, 1994. Include toxic chemicals (listed in 40 C.F.R. Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency 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 non-storm water discharges and associated drainage area.

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

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

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

VII. Assessment of Potential Pollutant Sources

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

Facility operators are required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in 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 A.6. and 7. above). The BMPs shall be developed and implemented to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

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

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

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

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

A. Non-Structural BMPs

Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low

technology, cost-effective measures. Facility operators should consider all possible non-structural BMPs options before considering additional structural BMPs (see section A.8.b. below). Below is a list of non-structural BMPs that should be considered:

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

B. Structural BMPs.

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

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

IX. Annual Comprehensive Site Compliance Evaluation

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

- A. A review of all visual observation records, inspection records, and sampling and analysis results.
- B. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
- C. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.
- D. An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in section A.10.e, for implementing SWPPP revisions, (v) any incidents of non-compliance and the corrective actions taken, and (vi) a certification that the facility operator is in compliance with this Permit. If the above certification cannot be provided, explain in the evaluation report why the facility operator is not in compliance with this General Permit. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Standard Provisions V.D.5 of Attachment D.

X. SWPPP General Requirements

- A. The SWPPP shall be retained on site and made available upon request of a representative of the 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.
- 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.

ATTACHMENT H – STATE WATER BOARD MINIMUM LEVELS

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

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

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

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

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
Endosulfan Sulfate	0.05
Endrin	0.01

Table 2d – PESTICIDES – PCBs*	GC
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

ATTACHMENT I – LIST OF PRIORITY POLLUTANTS

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

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
45	2-Chlorophenol	95578	1
46	2,4-Dichlorophenol	120832	1
47	2,4-Dimethylphenol	115679	1
48	2-Methyl-4,6-Dinitrophenol	534521	1
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

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
96	N-Nitrosodimethylamine	62759	1
97	N-Nitrosodi-n-Propylamine	621647	1
98	N-Nitrosodiphenylamine	86306	1
99	Phenanthrene	85018	1
110	Pyrene	129000	1
111	1,2,4-Trichlorobenzene	120821	1
112	Aldrin	309002	1
113	alpha-BHC	319846	1
114	beta-BHC	319857	1
115	gamma-BHC	58899	1
116	delta-BHC	319868	1
117	Chlordane	57749	1
118	4,4'-DDT	50293	1
119	4,4'-DDE	72559	1
111	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 (revised May 18, 2012); for priority pollutants, the methods must meet the lowest MLs specified in Attachment 4 of the SIP (Attachment H of this permit package) or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level.

**ATTACHMENT J – REASONABLE POTENTIAL DETERMINATION AND EFFLUENT LIMITATIONS
CALCULATIONS**

CTR#	Parameters	Reason	HUMAN HEALTH CALCULATIONS				AQUATIC LIFE CALCULATIONS												
			AMEL th = ECA = C th O only	Organisms only	AMEL multiplier	MEDEL th	ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL multiplier 99	MEDEL multiplier 99	MEDEL aq life	Lowest AMEL	Lowest MEDEL	Recommendation	
1	Antimony	UDI/MEC-C & no B															No Limit		
2	Arsenic	UDI/MEC-C & no B															No Limit		
3	Beryllium	No Criteria															No Limit		
4	Cadmium	UDI-Effluent ND,MDL-C & No															No Limit		
5a	Chromium (III)	UDI/MEC-C & no B															No Limit		
5b	Chromium (VI)	UDI/MEC-C & no B															No Limit		
6	Copper	MEC>=C	2.01					0.32	4.79	0.53	5.03	4.79	1.55	7.44	3.11	14.93	14.9	No Limit	
7	Lead	UDI-Effluent ND,MDL-C & No															No Limit		
8	Mercury	No effluent data & no B															No Limit		
9	Nickel	UDI-Effluent ND,MDL-C & No															No Limit		
10	Selenium	UDI-Effluent ND,MDL-C & No															No Limit		
11	Silver	UDI-Effluent ND,MDL-C & No															No Limit		
12	Thallium	UDI-Effluent ND,MDL-C & No															No Limit		
13	Zinc	MEC>=C	2.01					0.32	39.28	0.53	64.53	39.28	1.55	60.99	3.11	122.3496	60.99	122.35	No Limit
14	Cyanide	No effluent data & no B															No Limit		
15	Asbestos	No Criteria															No Limit		
16	2,3,7,8 TCDD	No effluent data & no B															No Limit		
17	TCDD Equivalents	No effluent data & no B															No Limit		
18	Aroclor	No effluent data & no B															No Limit		
19	Acrylonitrile	No effluent data & no B															No Limit		
20	Bromoforn	No effluent data & no B															No Limit		
21	Carbon Tetrachloride	No effluent data & no B															No Limit		
22	Chlorobenzene	No effluent data & no B															No Limit		
23	Chlorodibromomethane	No effluent data & no B															No Limit		
24	Chloroethane	No Criteria															No Limit		
25	2-Chloroethylmethyl ether	No Criteria															No Limit		
26	Chloroform	No Criteria															No Limit		
27	Dichlorobromomethane	No effluent data & no B															No Limit		
28	1,1-Dichloroethane	No Criteria															No Limit		
29	1,2-Dichloroethane	No effluent data & no B															No Limit		
30	1,1-Dichloroethylene	No effluent data & no B															No Limit		
31	1,2-Dichloropropane	No effluent data & no B															No Limit		
32	1,3-Dichloropropylene	No effluent data & no B															No Limit		
33	Ethylbenzene	No effluent data & no B															No Limit		
34	Methyl Bromide	No effluent data & no B															No Limit		
35	Methyl Chloride	No Criteria															No Limit		
36	Methylene Chloride	No effluent data & no B															No Limit		
37	1,1,2,2-tetrachloroethane	No effluent data & no B															No Limit		
38	Tetrachloroethylene	No effluent data & no B															No Limit		
39	Toluene	No effluent data & no B															No Limit		
40	1,2-Trans-Dichloroethylene	No effluent data & no B															No Limit		
41	1,1,1-Trichloroethane	No Criteria															No Limit		
42	1,1,2-Trichloroethane	No effluent data & no B															No Limit		
43	Trichloroethylene	No effluent data & no B															No Limit		
44	Vinyl Chloride	No effluent data & no B															No Limit		
45	2-Chlorophenol	No effluent data & no B															No Limit		
46	2,4-Dichlorophenol	No effluent data & no B															No Limit		
47	2,4-Dimethylphenol	No effluent data & no B															No Limit		
48	4,6-dinitro-o-resol (aka2-methyl-4,5-Dinitrophenol)	No effluent data & no B															No Limit		
49	2,4-Dinitrophenol	No effluent data & no B															No Limit		
50	2-Nitrophenol	No Criteria															No Limit		
51	4-Nitrophenol	No Criteria															No Limit		
52	3-Methyl-4-Chlorophenol (aka p-chloro-m-resol)	No Criteria															No Limit		
53	Pentachlorophenol	No effluent data & no B															No Limit		
54	Phenol	No effluent data & no B															No Limit		
55	2,4,6-Trichlorophenol	No effluent data & no B															No Limit		
56	Acenaphthene	No effluent data & no B															No Limit		
57	Acenaphthylene	No Criteria															No Limit		
58	Anthracene	No effluent data & no B															No Limit		
59	Benidine	No effluent data & no B															No Limit		
60	Benzo(a)Anthracene	No effluent data & no B															No Limit		
61	Benzo(b)Pyrene	No effluent data & no B															No Limit		
62	Benzo(e)Fluoranthene	No effluent data & no B															No Limit		
63	Benzo(g,h,i)Perylene	No Criteria															No Limit		

CTR#	Parameters	Units	CV	MEC	C acute = C chronic = CMC tot	Freshwater consumption of:	Human Health for	Water & Organisms	Organisms only	Lowest C	Lowest C	MEC >= Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?	If all data points ND (MDL) (ug/L)	Enter the min detection limit (MDL) (ug/L)	Enter the max pollutant B (ug/L)	MDL > C? If all B is ND, is	If B > C, effluent limit required	Tier 3 - other info, ?	RPA Result - Need Limit?	Reasonable Potential Analysis (RPA)	
																						Organisms	Water & Organisms
64	Benzol(k)fluoranthene	ug/L							0.049	0.049	0.049	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
65	Bis(2-chlorobutyl)Methane Ether	ug/L							1.4	1.4	1.4	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
66	Bis(2-chloroethyl)Ether	ug/L							17000	17000	17000	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
67	Bis(2-chloroisopropyl)Ether	ug/L							5.9	5.9	5.9	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
68	Bis(2-ethylhexyl)Phthalate	ug/L										No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
69	Bromophenyl Phenyl Ether	ug/L							5200	5200	5200	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
70	Bulybenzyl Phthalate	ug/L							4300	4300	4300	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
71	2-Chlorophthalene	ug/L							No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
72	4-Chlorophenyl Phenyl Ether	ug/L							No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
73	Chrysene	ug/L							0.049	0.049	0.049	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
74	Dibenzol(a,h)Anthracene	ug/L							0.049	0.049	0.049	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
75	1,2-Dichlorobenzene	ug/L							17000	17000	17000	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
76	1,3-Dichlorobenzene	ug/L							2800	2800	2800	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
77	1,4-Dichlorobenzene	ug/L							2800	2800	2800	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
78	3,3-Dichlorobenzidine	ug/L							0.077	0.077	0.077	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
79	Diethyl Phthalate	ug/L							120000	120000	120000	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
80	Dimethyl Phthalate	ug/L							2900000	2900000	2900000	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
81	Dn-Buryl Phthalate	ug/L							12000	12000	12000	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
82	2,4-Dinitrobenzene	ug/L							9.10	9.10	9.10	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
83	2,6-Dinitrobenzene	ug/L							No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
84	Dn-Octyl Phthalate	ug/L							No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
85	1,2-Diphenyltriazine	ug/L							0.54	0.54	0.54	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
86	Fluoranthene	ug/L							370	370	370	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
87	Fluorene	ug/L							14000	14000	14000	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
88	Hexachlorobenzene	ug/L							0.00077	0.00077	0.00077	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
89	Hexachlorobutadiene	ug/L							50.00	50.00	50.00	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
90	Hexachlorocyclopentadiene	ug/L							17000	17000	17000	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
91	Hexachlorocretene	ug/L							8.9	8.9	8.9	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
92	Indeno(1,2,3-cd)Pyrene	ug/L							0.0490	0.0490	0.0490	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
93	Isoflorane	ug/L							600	600	600	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
94	Naphthalene	ug/L							No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
95	Nitrobenzene	ug/L							1900	1900	1900	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
96	N-Nitrosodimethylamine	ug/L							8.10	8.10	8.10	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
97	N-Nitrosod-n-Propylamine	ug/L							1.40	1.40	1.40	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
98	N-Nitrosodiphenylamine	ug/L							16	16	16	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
99	N-Nitrosodiphenylamine	ug/L							1.40	1.40	1.40	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
100	Pyrene	ug/L							11000	11000	11000	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
101	1,2,4-Trichlorobenzene	ug/L							No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
102	Adren	ug/L							0.00014	0.00014	0.00014	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
103	alpha-BHC	ug/L							0.0130	0.0130	0.0130	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
104	beta-BHC	ug/L							0.046	0.046	0.046	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
105	gamma-BHC	ug/L							0.063	0.063	0.063	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
106	delta-BHC	ug/L							No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
107	Chlordane	ug/L							0.0059	0.0059	0.0059	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
108	4,4-DDT	ug/L							0.0059	0.0059	0.0059	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
109	4,4-DDE (linked to DDT)	ug/L							0.0059	0.0059	0.0059	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
110	4,4-DDD	ug/L							0.00084	0.00084	0.00084	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
111	Dieldrin	ug/L							0.00014	0.00014	0.00014	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
112	alpha-Endosulfan	ug/L							0.0560	0.0560	0.0560	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
113	beta-Endosulfan	ug/L							0.0560	0.0560	0.0560	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
114	Endosulfan Sulfate	ug/L							240	240	240	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
115	Endrin	ug/L							0.0360	0.0360	0.0360	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
116	Endrin Alderlyde	ug/L							0.81	0.81	0.81	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
117	Heptachlor Epoxide	ug/L							0.00021	0.00021	0.00021	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
118	Heptachlor Epoxide	ug/L							0.0038	0.0038	0.0038	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
119-125	PCBs sum (2)	ug/L							0.014	0.014	0.014	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud
126	Toxaphene	ug/L							0.0002	0.0002	0.0002	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	Ud	Ud

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

Notes:
 Ud = Undetermined due to lack of data
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CTR#	Parameters	Reasons	HUMAN HEALTH CALCULATIONS					AQUATIC LIFE CALCULATIONS				
			Organisms only	MDL/AMEL	ECA acute	LTA	ECA chronic	LTA	AMEL	AMEL aq	MDL aq	MDL
64	Benzo(k)fluoranthene	No effluent data & no B										No Limit
65	Bis(2-Chloroethoxy)Methane	No Criteria										No Limit
66	Bis(2-Chloroethyl)Ether	No effluent data & no B										No Limit
67	Bis(2-Ethoxyhexyl)Phthalate	No effluent data & no B										No Limit
68	Bis(2-Ethylhexyl)Phthalate	No effluent data & no B										No Limit
69	4-Bromophenyl Phenyl Ether	No Criteria										No Limit
70	4-Toluenyl Phenyl Ether	No effluent data & no B										No Limit
71	2-Chlorophthalene	No effluent data & no B										No Limit
72	4-Chlorophenyl Phenyl Ether	No Criteria										No Limit
73	Chrysene	No effluent data & no B										No Limit
74	Dibenz(a,h)Anthracene	No effluent data & no B										No Limit
75	1,2-Dichlorobenzene	No effluent data & no B										No Limit
76	1,3-Dichlorobenzene	No effluent data & no B										No Limit
77	1,4-Dichlorobenzene	No effluent data & no B										No Limit
78	3,3-Dichlorobenzidine	No effluent data & no B										No Limit
79	Dibutyl Phthalate	No effluent data & no B										No Limit
80	Dimethyl Phthalate	No effluent data & no B										No Limit
81	Dn-Buyl Phthalate	No effluent data & no B										No Limit
82	2,4-Dimethylolurea	No effluent data & no B										No Limit
83	2,6-Dimethylolurea	No Criteria										No Limit
84	Dn-Octyl Phthalate	No Criteria										No Limit
85	1,2-Diphenylhydrazine	No effluent data & no B										No Limit
86	Fluoranthene	No effluent data & no B										No Limit
87	Fluorene	No effluent data & no B										No Limit
88	Hexachlorobenzene	No effluent data & no B										No Limit
89	Hexachlorobutadiene	No effluent data & no B										No Limit
90	Hexachlorocyclopentadiene	No effluent data & no B										No Limit
91	Hexachlorocyclohexane	No effluent data & no B										No Limit
92	Indeno(1,2,3-cd)Pyrene	No effluent data & no B										No Limit
93	Isophorone	No effluent data & no B										No Limit
94	Naphthalene	No Criteria										No Limit
95	Nitrobenzene	No effluent data & no B										No Limit
96	N-Nitrosodimethylaniline	No effluent data & no B										No Limit
97	N-Nitroso-n-Propylaniline	No effluent data & no B										No Limit
98	N-Nitrosodiphenylamine	No effluent data & no B										No Limit
99	Phenanthrene	No Criteria										No Limit
100	Pyrene	No effluent data & no B										No Limit
101	1,2,4-Trichlorobenzene	No Criteria										No Limit
102	Adrin	No effluent data & no B										No Limit
103	alpha-BHC	No effluent data & no B										No Limit
104	beta-BHC	No effluent data & no B										No Limit
105	gamma-BHC	No effluent data & no B										No Limit
106	delta-BHC	No Criteria										No Limit
107	Chlordane	No effluent data & no B										No Limit
108	4,4-DDT	No effluent data & no B										No Limit
109	4,4-DDE (linked to DDT)	No effluent data & no B										No Limit
110	4,4-DDD	No effluent data & no B										No Limit
111	Dieldrin	No effluent data & no B										No Limit
112	alpha-Endosulfan	No effluent data & no B										No Limit
113	beta-Endosulfan	No effluent data & no B										No Limit
114	Endosulfan Sulfate	No effluent data & no B										No Limit
115	Endrin	No effluent data & no B										No Limit
116	Endrin Alderhyde	No effluent data & no B										No Limit
117	Heptachlor Epoxide	No effluent data & no B										No Limit
118	Heptachlor Epoxide	No effluent data & no B										No Limit
119-125	PCBs sum (2)	No effluent data & no B										No Limit
126	Toxaphene	No effluent data & no B										No Limit

Attachment 1
 Reasonable Potential Analysis and Effluent Limitations (Dry Weather)
 Charts Group, Inc. DBA Formable, Inc.
 Discharge Point 001

CTR#	Parameters	Units	CV	MEC	Freshwater		Human Health for consumption of:		REASONABLE POTENTIAL ANALYSIS (RPA)											
					C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only	Lowest C or TMDL Wet Weather WLAs	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) (ug/L)	Enter the pollutant B detected max concs (ug/L)	If all B is ND, is MDL > C?	If B > C, effluent limit required	Tier 3 - other info, ?		
1	Antimony	ug/L	0.6						4300.00											
2	Arsenic	ug/L	0.6	340.00	150.00					150.00										
3	Beryllium	ug/L	0.6	No Criteria						No Criteria										
4	Cadmium	ug/L	0.6	2.07	1.43					1.43										
5a	Chromium (III)	ug/L	0.6	984.32	117.32					117.32										
5b	Chromium (VI)	ug/L	0.6	16.29	11.43					11.43										
6	Copper (wet weather)	ug/L	0.6	9.70						9.70										
7	Lead (wet weather)	ug/L	0.6	42.70						42.70										
8	Mercury	ug/L	0.6	Res	Res					0.051										
9	Nickel	ug/L	0.6	261.01	29.02					4600.00										
10	Selenium	ug/L	0.6	20.00	5.00					5.00										
11	Silver	ug/L	0.6	1.23						1.23										
12	Thallium	ug/L	0.6	6.30						6.30										
13	Zinc (wet weather)	ug/L	0.6	69.70						69.70										
14	Cyanide	ug/L	0.6	22.00	5.20					5.20										
15	Asbestos	Fibers/L	0.6	No Criteria						No Criteria										
16	2,3,7,8 TCDD	ug/L	0.6							0.00000014										
17	TCDD Equivalents	ug/L	0							0.00000014										
18	Acrylonitrile	ug/L	0.6							780										
19	Benzene	ug/L	0.6							0.66										
20	Bromoform	ug/L	0.6							71										
21	Carbon Tetrachloride	ug/L	0.6							360										
22	Chlorobenzene	ug/L	0.6							4.4										
23	Chlorodibromomethane	ug/L	0.6							21000										
24	Chloroethane	ug/L	0.6							34										
25	2-Chloroethylvinyl ether	ug/L	0.6	No Criteria						No Criteria										
26	Chloroform	ug/L	0.6	No Criteria						No Criteria										
27	Dichlorobromomethane	ug/L	0.6	No Criteria						No Criteria										
28	1,1-Dichloroethane	ug/L	0.6	No Criteria						46										
29	1,2-Dichloroethane	ug/L	0.6							99										
30	1,1-Dichloroethylene	ug/L	0.6							3.2										
31	1,2-Dichloropropane	ug/L	0.6							39										
32	1,3-Dichloropropylene	ug/L	0.6							1700										
33	Ethylbenzene	ug/L	0.6							29000										
34	Methyl Bromide	ug/L	0.6							4000										
35	Methyl Chloride	ug/L	0.6	No Criteria						No Criteria										
36	Methylene Chloride	ug/L	0.6							1600										
37	1,1,2,2-Tetrachloroethane	ug/L	0.6							11										
38	Tetrachloroethylene	ug/L	0.6							8.85										
39	Toluene	ug/L	0.6							200000										
40	1,2-Trans-Dichloroethylene	ug/L	0.6							140000										
41	1,1,1-Trichloroethane	ug/L	0.6	No Criteria						No Criteria										
42	1,1,2-Trichloroethane	ug/L	0.6							42										
43	Trichloroethylene	ug/L	0.6							81										
44	Vinyl Chloride	ug/L	0.6							525										
45	2-Chlorophenol	ug/L	0.6							400										
46	2,4-Dichlorophenol	ug/L	0.6							790										
47	2,4-Dimethylphenol	ug/L	0.6							2300										
48	4,6-dinitro-o-resol	ug/L	0.6							765										
49	2,4-Dinitrophenol	ug/L	0.6							14000										
50	2-Nitrophenol	ug/L	0.6	No Criteria						No Criteria										
51	4-Nitrophenol	ug/L	0.6	No Criteria						No Criteria										
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-ressol)	ug/L	0.6	No Criteria						No Criteria										
53	Pentachlorophenol	ug/L	0.6							8.2										
54	Phenol	ug/L	0.6							4600000										
55	2,4,6-Trichlorophenol	ug/L	0.6							6.5										
56	Acenaphthene	ug/L	0.6							2700										
57	Acenaphthylene	ug/L	0.6	No Criteria						No Criteria										
58	Anthracene	ug/L	0.6							110000										
59	Benzo(a)Anthracene	ug/L	0.6							0.00054										
60	Benzo(a)Pyrene	ug/L	0.6							0.049										
61	Benzo(b)Fluoranthene	ug/L	0.6							0.049										
62	Benzo(g)Fluoranthene	ug/L	0.6							0.049										
63	Benzo(k)Fluoranthene	ug/L	0.6	No Criteria						No Criteria										
64	Benzo(k)Fluoranthene	ug/L	0.6							0.049										

CTR#	Parameters	RPA Result - Need Limit?	Reason	HUMAN HEALTH CALCULATIONS										AQUATIC LIFE CALCULATIONS				LIMITS	Recommendation				
				Organisms only					Satwater / Freshwater / Basin Plan					AMEL aq	MDL	MDL	MDL						
				AMEL hh = ECA = C	MDL/AMEL	MDL	ECA acute	LTA	ECA chronic	LTA	Lowest	AMEL	multiplier 95	life	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	
				multiplier	multiplier	multiplier (p.7)	acute	multiplier	chronic	LTA	Lowest	multiplier 95	life	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	
1	Antimony	UD	No effluent data & no B																				No Limit
2	Arsenic	UD	No effluent data & no B																				No Limit
3	Beryllium	UC	No Criteria																				No Limit
4	Cadmium	UD	No effluent data & no B																				No Limit
5a	Chromium (III)	UD	No effluent data & no B																				No Limit
5b	Chromium (VI)	UD	No effluent data & no B																				No Limit
6	Copper (wet weather)	Yes	TMDL	2.01	0.32	3.11	0.53	3.11	1.55	4.84	3.11	9.7	4.84	9.70									No Limit
7	Lead (wet weather)	Yes	TMDL	2.01	0.32	13.71	0.53	13.71	1.55	21.28	3.11	42.7	21.28	42.70									No Limit
8	Mercury	UD	No effluent data & no B																				No Limit
9	Nickel	UD	No effluent data & no B																				No Limit
10	Selenium	UD	No effluent data & no B																				No Limit
11	Silver	UD	No effluent data & no B																				No Limit
12	Thallium	UD	No effluent data & no B																				No Limit
13	Zinc (wet weather)	Yes	TMDL	2.01	0.32	22.38	0.53	22.38	1.55	34.74	3.11	69.7	34.74	69.70									No Limit
14	Cyanide	UD	No effluent data & no B																				No Limit
15	Asbestos	UC	No Criteria																				No Limit
16	2,3,7,8 TCDD	UD	No effluent data & no B																				No Limit
17	Acroline	UD	No effluent data & no B																				No Limit
18	Acrylonitrile	UD	No effluent data & no B																				No Limit
19	Benzene	UD	No effluent data & no B																				No Limit
20	Bromoform	UD	No effluent data & no B																				No Limit
21	Carbon Tetrachloride	UD	No effluent data & no B																				No Limit
22	Chlorobenzene	UD	No effluent data & no B																				No Limit
23	Chlorodibromomethane	UD	No effluent data & no B																				No Limit
24	Chloroethane	UC	No Criteria																				No Limit
25	2-Chloroethylvinyl ether	UC	No Criteria																				No Limit
26	Chloroform	UC	No Criteria																				No Limit
27	Dichlorobromomethane	UD	No effluent data & no B																				No Limit
28	1,1-Dichloroethane	UC	No Criteria																				No Limit
29	1,2-Dichloroethane	UD	No effluent data & no B																				No Limit
30	1,1-Dichloroethylene	UD	No effluent data & no B																				No Limit
31	1,2-Dichloropropane	UD	No effluent data & no B																				No Limit
32	1,3-Dichloropropylene	UD	No effluent data & no B																				No Limit
33	Ethylbenzene	UD	No effluent data & no B																				No Limit
34	Methyl Bromide	UD	No effluent data & no B																				No Limit
35	Methyl Chloride	UC	No Criteria																				No Limit
36	Methylene Chloride	UD	No effluent data & no B																				No Limit
37	1,1,2,2-Tetrachloroethane	UD	No effluent data & no B																				No Limit
38	Tetrachloroethylene	UD	No effluent data & no B																				No Limit
39	Toluene	UD	No effluent data & no B																				No Limit
40	1,2-Trans-Dichloroethylene	UD	No effluent data & no B																				No Limit
41	1,1,1-Trichloroethane	UC	No Criteria																				No Limit
42	1,1,2-Trichloroethane	UD	No effluent data & no B																				No Limit
43	Trichloroethylene	UD	No effluent data & no B																				No Limit
44	Vinyl Chloride	UD	No effluent data & no B																				No Limit
45	2-Chlorophenol	UD	No effluent data & no B																				No Limit
46	2,4-Dichlorophenol	UD	No effluent data & no B																				No Limit
47	2,4-Dimethylphenol	UD	No effluent data & no B																				No Limit
48	4,6-Dinitro-o-resol	UD	No effluent data & no B																				No Limit
49	2,4-Dinitrophenol	UD	No effluent data & no B																				No Limit
50	2-Nitrophenol	UC	No Criteria																				No Limit
51	4-Nitrophenol	UC	No Criteria																				No Limit
52	3-Methyl-4-Chlorophenol (aka	UC	No Criteria																				No Limit
53	Pentachlorophenol	UD	No effluent data & no B																				No Limit
54	Phenol	UD	No effluent data & no B																				No Limit
55	2,4,6-Trichlorophenol	UD	No effluent data & no B																				No Limit
56	Acenaphthylene	UD	No effluent data & no B																				No Limit
57	Acenaphthylene	UC	No Criteria																				No Limit
58	Anthracene	UD	No effluent data & no B																				No Limit
59	Benztidine	UD	No effluent data & no B																				No Limit
60	Benzof(a)Anthracene	UD	No effluent data & no B																				No Limit
61	Benzof(b)Pyrene	UD	No effluent data & no B																				No Limit
62	Benzof(k)Fluoranthene	UD	No effluent data & no B																				No Limit
63	Benzof(g)Fluoranthene	UC	No Criteria																				No Limit
64	Benzof(k)Fluoranthene	UD	No effluent data & no B																				No Limit

CTR#	Parameters	Units	CV	MEC	Freshwater		Human Health for consumption of:		Lowest C or TMDL Wet Weather WLAS	MEC >= Lowest C Limit?	Tier 1 - Need	B Available (Y/N)?	Are all B data points non-defects (Y/N)?	If all data points ND Enter the min detection limit (MDL) (ug/L)	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. ?
					C acute = CMC tot	C chronic = CCC tot	Water & Organisms only	Organisms only										
65	Bis(2-Chloroethoxy)Methane	ug/L	0.6	No Criteria				1.4	1,400	No Criteria	N					No detected value of B. Step 7	No Criteria	
66	Bis(2-Chloroethyl)Ether	ug/L	0.6					170000	170000	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
67	Bis(2-Chloroisopropyl)Ether	ug/L	0.6					5.9	5.9	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
68	Bis(2-Ethylhexyl)Phthalate	ug/L	0.6	No Criteria				5200	5200	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
69	4-Bromophenyl Phenyl Ether	ug/L	0.6					4300	4300	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
70	Buylbenzyl Phthalate	ug/L	0.6					0.049	0.0490	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
71	2-Chloronaphthalene	ug/L	0.6	No Criteria				17000	17000	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
72	4-Chlorophenyl Phenyl Ether	ug/L	0.6					2600	2600	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
73	Chrysene	ug/L	0.6					2600	2600	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
74	Dibenz(a,h)Anthracene	ug/L	0.6					0.077	0.077	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
75	1,2-Dichlorobenzene	ug/L	0.6					120000	120000	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
76	1,3-Dichlorobenzene	ug/L	0.6					2900000	2900000	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
77	1,4-Dichlorobenzene	ug/L	0.6					9.10	9.10	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
78	3,3-Dichlorobenzidine	ug/L	0.6					0.54	0.540	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
79	Diethyl Phthalate	ug/L	0.6					370	370	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
80	Dimethyl Phthalate	ug/L	0.6					14000	14000	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
81	Di-n-Butyl Phthalate	ug/L	0.6					0.0077	0.0077	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
82	2,4-Dinitrotoluene	ug/L	0.6					50	50.00	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
83	2,6-Dinitrotoluene	ug/L	0.6	No Criteria				17000	17000	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
84	Di-n-Octyl Phthalate	ug/L	0.6	No Criteria				8.9	8.9	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
85	1,2-Diphenylhydrazine	ug/L	0.6					0.049	0.0490	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
86	Fluoranthene	ug/L	0.6					600	600.0	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
87	Fluorene	ug/L	0.6					1900	1900	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
88	Hexachlorobenzene	ug/L	0.6					8.10	8.10000	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
89	Hexachlorobutadiene	ug/L	0.6					1.40	1.400	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
90	Hexachlorocyclopentadiene	ug/L	0.6					16	16.0	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
91	Hexachloroethane	ug/L	0.6					11000	11000	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
92	Indeno(1,2,3-cd)Pyrene	ug/L	0.6					0.00014	0.00014	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
93	Isophorone	ug/L	0.6					0.013	0.0130	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
94	Naphthalene	ug/L	0.6	No Criteria				0.046	0.046	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
95	Nitrobenzene	ug/L	0.6					0.063	0.063	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
96	Nitrosodimethylamine	ug/L	0.6					0.00059	0.00059	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
97	N-Nitrosod-n-Propylamine	ug/L	0.6					0.00059	0.00059	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
98	N-Nitrosodiphenylamine	ug/L	0.6	No Criteria				0.00059	0.00059	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
99	Phenanthrene	ug/L	0.6					0.00084	0.00084	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
100	Pyrene	ug/L	0.6					0.00014	0.00014	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
101	1,2,4-Trichlorobenzene	ug/L	0.6	No Criteria				0.0560	0.0560	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
102	Aldrin	ug/L	0.6					240	240	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
103	alpha-BHC	ug/L	0.6					240	240	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
104	beta-BHC	ug/L	0.6					0.81	0.81	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
105	gamma-BHC	ug/L	0.6	No Criteria				0.00017	0.00017	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
106	delta-BHC	ug/L	0.6					0.0002	0.0002	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
107	Chlordane	ug/L	0.6					0.00059	0.00059	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
108	4,4'-DDT	ug/L	0.6					0.00059	0.00059	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
109	4,4'-DDE (linked to DDT)	ug/L	0.6					0.00059	0.00059	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
110	4,4'-DDD	ug/L	0.6					0.00084	0.00084	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
111	Dieldrin	ug/L	0.6					0.00014	0.00014	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
112	alpha-Endosulfan	ug/L	0.6					240	240	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
113	beta-Endosulfan	ug/L	0.6					240	240	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
114	Endosulfan Sulfate	ug/L	0.6					0.81	0.81	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
115	Endrin	ug/L	0.6					0.81	0.81	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
116	Endrin Aldehyde	ug/L	0.6					0.00021	0.00021	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
117	Heptachlor	ug/L	0.6					0.0038	0.0038	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
118	Heptachlor Epoxide	ug/L	0.6					0.52	0.52	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
119-123	PCBs sum (2)	ug/L	0.6					0.00017	0.00017	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria
126	Toxaphene	ug/L	0.6					0.00075	0.00075	No Criteria	N					No detected value of B. Step 7	No detected value of B. Step 7	No Criteria

Notes:
 Ud = Undetermined due to lack of data
 Uc = Undetermined due to lack of CTR Water Quality Criteria
 C = Water Quality Criteria
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CTRF#	Parameters	RPA Result - Need Limit?	Reason	HUMAN HEALTH CALCULATIONS				AQUATIC LIFE CALCULATIONS				LIMITS	Recommendation		
				AMEL hh = ECA = C MDEL/AMEL	MDEL	MDL hh	ECA acute LTA multiplier (p.27)	ECA chronic LTA multiplier	chronic LTA multiplier	Lowest LTA multiplier 95	AMEL aq multiplier 99			MDEL	MDEL
65	Bis(2-Chloroethoxy)Methane	UC	No Criteria											No Limit	
66	Bis(2-Chloroisopropyl)Ether	UD	No effluent data & no B											No Limit	
67	Bis(2-Ethylhexyl)Phthalate	UD	No effluent data & no B											No Limit	
68	4-Bromophenyl Phenyl Ether	UC	No Criteria											No Limit	
69	Bis(2-Ethylhexyl)Phthalate	UD	No effluent data & no B											No Limit	
70	Bis(2-Ethylhexyl)Phthalate	UD	No effluent data & no B											No Limit	
71	2-Chlorophthalate	UD	No effluent data & no B											No Limit	
72	4-Chlorophenyl Phenyl Ether	UC	No Criteria											No Limit	
73	Chrysene	UD	No effluent data & no B											No Limit	
74	Dibenzo(a,h)Anthracene	UD	No effluent data & no B											No Limit	
75	1,2-Dichlorobenzene	UD	No effluent data & no B											No Limit	
76	1,3-Dichlorobenzene	UD	No effluent data & no B											No Limit	
77	1,4-Dichlorobenzene	UD	No effluent data & no B											No Limit	
78	3,3-Dichlorobenzidine	UD	No effluent data & no B											No Limit	
79	Diethyl Phthalate	UD	No effluent data & no B											No Limit	
80	Dimethyl Phthalate	UD	No effluent data & no B											No Limit	
81	Di-n-Butyl Phthalate	UD	No effluent data & no B											No Limit	
82	2,4-Dinitrotoluene	UD	No effluent data & no B											No Limit	
83	2,6-Dinitrotoluene	UC	No Criteria											No Limit	
84	Di-n-Octyl Phthalate	UC	No Criteria											No Limit	
85	1,2-Diphenylhydrazine	UD	No effluent data & no B											No Limit	
86	Fluoranthene	UD	No effluent data & no B											No Limit	
87	Fluorene	UD	No effluent data & no B											No Limit	
88	Hexachlorobenzene	UD	No effluent data & no B											No Limit	
89	Hexachlorocyclopentadiene	UD	No effluent data & no B											No Limit	
90	Hexachlorocyclopentadiene	UD	No effluent data & no B											No Limit	
91	Hexachloroethane	UD	No effluent data & no B											No Limit	
92	Indeno(1,2,3-cd)Pyrene	UD	No effluent data & no B											No Limit	
93	Isophorene	UD	No effluent data & no B											No Limit	
94	Naphthalene	UC	No Criteria											No Limit	
95	Nitrobenzene	UD	No effluent data & no B											No Limit	
96	N-Nitrosodimethylamine	UD	No effluent data & no B											No Limit	
97	N-Nitrosodi-n-Propylamine	UD	No effluent data & no B											No Limit	
98	N-Nitrosodiphenylamine	UD	No effluent data & no B											No Limit	
99	Phenanthrene	UC	No Criteria											No Limit	
100	Pyrene	UD	No effluent data & no B											No Limit	
101	1,2,4-Trichlorobenzene	UC	No Criteria											No Limit	
102	Aldrin	UD	No effluent data & no B											No Limit	
103	alpha-BHC	UD	No effluent data & no B											No Limit	
104	beta-BHC	UD	No effluent data & no B											No Limit	
105	gamma-BHC	UD	No effluent data & no B											No Limit	
106	delta-BHC	UC	No Criteria											No Limit	
107	Chlordane	UD	No effluent data & no B											No Limit	
108	4,4'-DDT	UD	No effluent data & no B											No Limit	
109	4,4'-DDE (linked to DDT)	UD	No effluent data & no B											No Limit	
110	4,4'-DDD	UD	No effluent data & no B											No Limit	
111	Dieldrin	UD	No effluent data & no B											No Limit	
112	alpha-Endosulfan	UD	No effluent data & no B											No Limit	
113	beta-Endosulfan	UD	No effluent data & no B											No Limit	
114	Endosulfan Sulfate	UD	No effluent data & no B											No Limit	
115	Endrin	UD	No effluent data & no B											No Limit	
116	Endrin Aldehyde	UD	No effluent data & no B											No Limit	
117	Hepachlor	UD	No effluent data & no B											No Limit	
118	Hepachlor Epoxide	UD	No effluent data & no B											No Limit	
119-125	PCBs sum (2)	UD	No effluent data & no B											No Limit	
126	Toxaphene	UD	No effluent data & no B											No Limit	

Notes:
 UD = Undetermined due to lack of data
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 B = Background receiving water data