March 16, 2016

Mr. Douglas E. Pittman
Assistant Plant Manager
Owens-Brockway Glass Container Inc.
2901 Fruitland Avenue
Vernon, CA 90058

Dear Mr. Pittman:

TRANSMITTAL OF WASTE DISCHARGE REQUIREMENTS (WDRS) AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR OWENS-BROCKWAY GLASS CONTAINER INC. – OWENS-BROCKWAY GLASS CONTAINER INC., VERNON FACILITY, VERNON, CA. (NPDES NO. CA0056464, CI NO. 6079)

Our letter dated February 26, 2016, transmitted the revised 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 March 10, 2016, reviewed the revised tentative requirements, considered all factors in the case, and adopted Order No. R4-2016-0122. Order No. R4-2016-0122 serves as an NPDES permit, and it expires on May 31, 2021. 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 (June 1, 2016) of Order No. R4-2016-0122. Your first monitoring report for the period of June1, 2016, through June 30, 2016, is due by August 1, 2016. Owens-Brockway Glass Container 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-6079 and NPDES No. CA0056464, 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

Enclosures: Order No. R4-2016-0122 - Waste Discharge Requirements
Attachment E - Monitoring and Reporting Program (MRP No. CI-6079)
Attachment F - Fact Sheet

cc: **(VIA Email Only)**

Mr. David Smith, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Ms. Robyn Stuber, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Ms. Becky Mitschele, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Mr. Kenneth Wong, U.S. Army Corps of Engineers
Ms. Crystal Marquez, 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
Mr. William Paznokas, Department of Fish and Wildlife, Region 5
NPDES Wastewater Unit, State water Resources Control Board, Division of Water Quality
Ms. Sutida Bergguist, 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
Ms. Betsy Weber, Environmental Defense Center
Ms. Rita Kampalath, Heal the Bay
Mr. Mr. Bruce Reznik, Los Angeles WaterKeeper
Ms. Becky Hayat, Natural Resources Defense Council
Ms. Laura West, Natural Resources Defense Council
Mr. Jae Kim, Tetra Tech
Ms. Kristy Allen, Tetra Tech
Ms. Ann LaDuca, Tetra Tech
Ms. Jayme Dryden, Ashworth Leininger Group (ALG)
Mr. Rodney Detmer, Plant Manager, Owens-Brockway Glass Container Inc.
Ms. Susan L. Smith, Counsel, Owens-Illinois, Inc.
Mr. John F. Clayton, Environmental Attorney, Owens-Illinois, Inc.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

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ORDER R4-2016-0122
NPDES NO. CA0056464

WASTE DISCHARGE REQUIREMENTS FOR THE OWENS-BROCKWAY GLASS CONTAINER INC. OWENS-BROCKWAY GLASS CONTAINER INC. LOS ANGELES COUNTY

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

Table 1. Discharger Information

Discharger	Owens-Brockway Glass Container Inc.
Name of Facility	Owens-Brockway Glass Container Inc.
Facility Address	2901 Fruitland Avenue
	Vernon, CA 90058
	Los Angeles County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001 (Fruitland Avenue)	Storm water	33.99639°	-118.21722°	Los Angeles River
002 (Soto Street)	Storm water	33.99732°	-118.21944°	Los Angeles River

Table 3. Administrative Information

This Order was adopted on:	**March 10 , 2016**
This Order shall become effective on:	**June 1, 2016**
This Order shall expire on:	**May 31, 2021**
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	**180 days prior to the Order expiration date.**
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as follows:	**Minor**

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

Samuel Unger

Samuel Unger, P.E.
Executive Officer

CONTENTS

TABLES

ATTACHMENTS

I. FACILITY INFORMATION

Information describing the Owens-Brockway Glass Container (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 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. 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 F through J are also incorporated into this Order.

C. Provisions and Requirements Implementing State Law. Some provisions/requirements in this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

D. 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.

E. 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. R4-2010-0087 as amended by Order No. R4-2010-0087-R except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger is authorized to discharge from the identified facility and outfalls into waters of the United States and shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for past violations of Order No. R4-2010-0087 as amended by Order No. R4-2010-0087-R.

III. DISCHARGE PROHIBITIONS

A. Wastes discharged shall be limited to the following:

1. Discharge Point 001 — (Latitude 33.99639° North; Longitude 118.21722° West) - Up to 0.163 million gallons per day (MGD) of storm water runoff from the central yard which includes areas such as the cooling tower, furnace building, and various administrative/maintenance buildings.

2. Discharge Point 002 — (Latitude 33.99732° North; Longitude — 118.21944° West).- Up to 0.680 MGD of storm water runoff from the main yard which includes areas such as the batch house, oxygen plant, and storage/equipment maintenance buildings.

The discharge of wastes from accidental spills or other sources is prohibited.

B. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, the Los Angeles River, 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 Resources Control Board (State Water Board) as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal CWA, and amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

F. Discharge of oil or any residuary product of petroleum to waters of the State, except in accordance with waste discharge requirements or other provisions of Division 7 of the CWC, is prohibited.

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

H. 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 001

1. Final Effluent Limitations - Storm Water Runoff From The Central Yard/Production Areas Through Discharge Point 001

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

Table 4. Effluent Limitations at Discharge Point 001 (Monitoring Location EFF-001)

Parameter	Units	Effluent Limitations – Discharge Point 001			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants					
pH	s.u.	—	---	6.5	8.5
BOD_5 @ 20°C	mg/L	—	30	---	---
	lbs/day[1]	—	41	---	---
Total Suspended Solids (TSS)	mg/L	—	75	---	---
	lbs/day[1]	—	102	---	---

Parameter	Units	Effluent Limitations – Discharge Point 001			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Oil and Grease	mg/L	—	15	---	---
	lbs/day[1]	—	20	---	---
Non-conventional Pollutants					
E. coli	CFU/100 ml or MPN/100 ml	[2]			
Temperature	°F	—	—	---	86
Settleable Solids	mL/L	—	0.3	---	
Turbidity	NTU	—	75	---	---
Chronic Toxicity[3]	Pass or Fail, % Effect	—	Pass or % Effect <50	---	---
Phenols	mg/L	—	1.0	---	---
	lbs/day[1]	—	1.4	---	---
Sulfides	mg/L	—	0.1	---	---
	lbs/day[1]	—	0.14	---	---
Fluoride	mg/L	—	1.0	---	---
	lbs/day[1]	—	1.4	---	---
Total Dissolved Solids	mg/L	—	1,500	---	---
	lbs/day[1]	—	2039	---	---
Chloride	mg/L	—	150	---	---
	lbs/day[1]	—	204	---	---
Sulfate	mg/L	—	350	---	---
	lbs/day[1]	—	476	---	---
Ammonia as Nitrogen[4]	mg/L	—	8.7	---	---
	lbs/day[1]	—	12	---	---
Priority Pollutants					
Antimony, Total Recoverable	µg/L	—	6	—	—
	lbs/day[1]	—	0.008	—	—
Arsenic, Total Recoverable[5]	µg/L	—	10	---	---
	lbs/day[1]	—	0.014	---	---
Cadmium, Total Recoverable (Wet Weather)[6,7]	µg/L	—	3.1	---	---
	lbs/day[1]	—	0.004	---	---
Chromium (VI)[8]	µg/L	—	16	---	---
	lbs/day[1]	—	0.022	---	---
Copper, Total Recoverable (Wet Weather)[6,7]	µg/L	—	17	---	---
	lbs/day[1]	—	0.023	---	---
Copper, Total Recoverable (Dry Weather)[6,9]	µg/L	—	36	—	—
	lbs/day[1]	—	0.05	—	—

Parameter	Units	Effluent Limitations – Discharge Point 001			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Lead, Total Recoverable (Wet Weather)[6,7]	µg/L	—	62	—	—
	lbs/day[1]	—	0.084	—	—
Lead, Total Recoverable (Dry Weather)[6,9]	µg/L	—	18	---	---
	lbs/day[1]	—	0.025	---	---
Mercury, Total Recoverable[8]	µg/L	—	0.102	---	---
	lbs/day[1]	—	0.00014	---	---
Nickel, Total Recoverable[10]	µg/L	—	100	---	---
	lbs/day[1]	—	0.14	---	---
Selenium, Total Recoverable[8]	µg/L	—	8.2	---	---
	lbs/day[1]	—	0.011	---	---
Thallium[10]	µg/L	—	2	---	---
	lbs/day[1]	—	0.003	---	---
Zinc, Total Recoverable (Wet Weather)[6,7]	µg/L	—	159	---	---
	lbs/day[1]	—	0.22	---	---
Cyanide[8]	µg/L	—	8.5	---	---
	lbs/day[1]	—	0.012	---	---
Pentachlorophenol[10]	µg/L	—	1	---	---
	lbs/day[1]	—	0.0014	---	---
Bis(2-ethylhexyl)Phthalate[10]	µg/L	—	4	---	---
	lbs/day[1]	—	0.005	---	---
PCBs[8,11]	µg/L	—	0.00034	---	---
	lbs/day[1]	—	4.6E-07	---	---
TCDD Equivalents[8]	µg/L	—	2.8E-08		
	lbs/day[1]	—	3.8E-11		

1. The mass-based (lbs/day) limitations are based on a discharge flow of 0.163 MGD of storm water and are calculated as follows:

   Mass (lbs/day) = 8.34 x C x Q
   where:
   C = concentration for a pollutant, in mg/L
   Q = maximum discharge flow rate in MGD for storm water.

2. The effluent limitation is based on the LA River Bacteria TMDL WLAs. The LA River Bacteria TMDL contains WLAs of zero days of allowable exceedances of the single sample target of 235/100mL *E.coli* for both dry and wet weather (defined as days with 0.1 inch of rain or greater and the three days following the rain event) and no exceedances of the geometric mean TMDL numeric target of 126/100 mL *E.coli* for general and individual NPDES permits. The rolling 30-day geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period). If any of the single sample limits are exceeded, the Regional Water Board may require repeat sampling on a daily basis until the sample falls below the single sample limit in order to determine persistence of exceedance. Results collected during accelerated monitoring can be used to calculate the geometric mean.
3. The maximum daily effluent limitation (MDEL) is exceeded when a toxicity test results in a “fail,” and the percent effect is greater than or equal to 0.50.
4. Effluent limitations are based Los Angeles River Nutrients TMDL.

5. Limit is based on previous Order No. R4-2010-0087-R and Title 22 maximum contaminant level (MCL).
6. Effluent limitations are based on the Los Angeles River Metals TMDL (Reach 2).
7. The wet weather limits apply when the maximum daily flow in the Los Angeles River at Wardlow gauge station (F319-R) is greater than or equal to 500 cubic feet per second (cfs).
8. Effluent limitations are based on the CTR and SIP procedures.
9. The dry weather limits are applicable when flow in the Los Angeles River at the Wardlow stream gauge station (F319-R) is less than 500 cfs.
10. The limits are based on the MCL.
11. PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-10166, Arclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1245, Aroclor-1254, and Aroclor-1260.

B. Effluent Limitations – Discharge Point 002

1. Final Effluent Limitations - Storm Water Runoff From The Main Yard Through Discharge Point 002

a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 002, with compliance measured at Monitoring Location EFF-002 as described in the Monitoring and Reporting Program, Attachment E:

Table 5. Effluent Limitations at Discharge Point 002 (Monitoring Location EFF-002)

Parameter	Units	Effluent Limitations – Discharge Point 002			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants					
pH	s.u.	—	—	6.5	8.5
BOD_5 @ 20°C	mg/L	—	30	---	---
	lbs/day[1]	—	170	---	---
Total Suspended Solids (TSS)	mg/L	—	75	---	---
	lbs/day[1]	—	425	---	---
Oil and Grease	mg/L	—	15	---	---
	lbs/day[1]	—	85	---	---
Non-conventional Pollutants					
E. coli	CPU/100ml or MPN/100 ml	[2]			
Temperature	°F	—	—	—	86
Settleable Solids	mL/L	—	0.3	—	—
Turbidity	NTU	—	75	—	—
Chronic Toxicity[3]	Pass or Fail, % Effect	—	Pass or % Effect <50	—	—
Phenols	mg/L	—	1.0	---	---
	lbs/day[1]	—	6	---	---
Sulfides	mg/L	—	0.1	---	---
	lbs/day[1]	—	0.6	---	---

Parameter	Units	Effluent Limitations – Discharge Point 002			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Fluoride	mg/L	—	1.0	---	---
	lbs/day[1]	—	6	---	---
Total Dissolved Solids	mg/L	—	1,500	---	--
	lbs/day[1]	—	8507		--
Chloride	mg/L	—	150	---	---
	lbs/day[1]	—	851	---	---
Sulfate	mg/L	—	350	---	---
	lbs/day[1]	—	1985	---	---
Ammonia as Nitrogen[4]	mg/L	—	8.7	---	---
	lbs/day[1]	—	49	---	---
Priority Pollutants					
Arsenic, Total Recoverable[5]	µg/L	—	10	---	---
	lbs/day[1]	—	0.06	---	---
Cadmium, Total Recoverable (Wet Weather)[6,7]	µg/L	—	3.1	---	---
	lbs/day[1]	—	0.02	---	---
Chromium VI[8]	µg/L	—	16	—	—
	lbs/day[1]	—	0.09	—	—
Copper, Total Recoverable (Wet Weather)[6,7]	µg/L	—	17	---	---
	lbs/day[1]	—	0.1	---	---
Copper, Total Recoverable (Dry Weather)[6,9]	µg/L	—	36	---	---
	lbs/day[1]	—	0.2	---	---
Lead, Total Recoverable (Wet Weather)[6,7]	µg/L	—	62	---	---
	lbs/day[1]	—	0.35	---	---
Lead, Total Recoverable (Dry Weather)[6,9]	µg/L	—	18	---	---
	lbs/day[1]	—	0.1	---	---
Mercury, Total Recoverable[8]	µg/L	—	0.102	---	---
	lbs/day[1]	—	0.0006	---	---
Nickel, Total Recoverable[10]	µg/L	—	100	---	---
	lbs/day[1]	—	0.57	---	---
Selenium, Total Recoverable[8]	µg/L	—	8.2	---	---
	lbs/day[1]	—	0.05	---	---
Thallium[10]	µg/L	—	2	---	---
	lbs/day[1]	—	0.01	---	---
Zinc, Total Recoverable (Wet Weather)[6,7]	µg/L	—	159	—	—
	lbs/day[1]	—	0.9	—	—
Cyanide[8]	µg/L	—	8.5	—	—
	lbs/day[1]	—	0.05	—	—
Pentachlorophenol[10]	µg/L	—	1	—	—
	lbs/day[1]	—	0.006	—	—

Parameter	Units	Effluent Limitations – Discharge Point 002			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Bis(2-ethylhexyl)Phthalate[10]	µg/L	—	4	—	—
	lbs/day[1]	—	0.02	—	—
PCBs[8,11]	µg/L	—	0.00034	—	—
	lbs/day[1]	—	1.9E-06	—	—
TCDD Equivalents[8]	µg/L	—	2.8E-08	—	—
	lbs/day[1]	—	1.6E-10	—	—

1. The mass-based (lbs/day) limitations are based on a discharge flow of 0.680 MGD of storm water and are calculated as follows:

   Mass (lbs/day) = 8.34 x C x Q
   where:
   C = concentration for a pollutant, in mg/L
   Q = maximum discharge flow rate in MGD for storm water.

2. The effluent limitation is based on the LA River Bacteria TMDL WLAs. The LA River Bacteria TMDL contains WLAs of zero days of allowable exceedances of the single sample target of 235/100mL *E.coli* for both dry and wet weather (defined as days with 0.1 inch of rain or greater and the three days following the rain event) and no exceedances of the geometric mean TMDL numeric target of 126/100 mL *E.coli* for general and individual NPDES permits. The rolling 30-day geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period). If any of the single sample limits are exceeded, the Regional Water Board may require repeat sampling on a daily basis until the sample falls below the single sample limit in order to determine persistence of exceedance. Results collected during accelerated monitoring can be used to calculate the geometric mean.
3. The maximum daily effluent limitation (MDEL) is exceeded when a toxicity test results in a "fail," and the percent effect is greater than or equal to 0.50.
4. The effluent limitations are based on the LA River Nutrients TMDL.
5. Limit is based on previous Order No. R4-2010-0087-R and Title 22 maximum contaminant level (MCL).
6. Effluent limitations are based on the Los Angeles River Metals TMDL (Reach 2).
7. The wet weather limits apply when the maximum daily flow in the Los Angeles River at Wardlow gauge station (F319-R) is greater than or equal to 500 cubic feet per second (cfs).
8. Effluent limitations are based on the CTR and SIP procedures.
9. The dry weather limits are applicable when flow in the Los Angeles River at the Wardlow stream gauge station (F319-R) is less than 500 cfs.
10. The limits are based on the MCL.
11. PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-10166, Arclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1245, Aroclor-1254, and Aroclor-1260.

C. Interim Effluent Limitations – Not Applicable

D. Land Discharge Specifications – Not Applicable

E. Recycling Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

The discharge shall not cause the following in the Los Angeles River.

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 the temperature be raised above 80°F as a result of waste discharged.

3. Water Contact Standards

In fresh water designated for Water Contact Recreation (REC-1), the waste discharged shall not cause the following bacterial standards to be exceeded in the receiving water:

a. Rolling 30-Day Geometric Mean Limits:

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

b. Single Sample Maximum (SSM) Limits

E. coli density shall not exceed 235/100 ml.

4. Depress the concentration of dissolved oxygen below 5.0 mg/L at 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 1994 Basin Plan and its amendments. The Regional Water Board revised the water quality objectives for ammonia to be consistent with the *"1999 Update of Ambient Water Quality Criteria for Ammonia"* through the adoption of Resolution No. 2002-011 on April 25, 2002. This amendment was approved by the State Water Board, OAL and U.S. EPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. The amendment became effective on July 15, 2003. On December 1, 2005, Resolution No. 2005-014, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Revise the Early Life Stage Implementation Provision of the Freshwater Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) for Protection of Aquatic Life*, was adopted by the Regional Water Board. Resolution No. 2005-014 was approved by the State Water Board, OAL, and U.S. EPA on July 19, 2006, August 31, 2006, and April 5, 2007, respectively; it became effective on April 5, 2007. On June 7, 2007, the Regional Water Board adopted Resolution No. 2007-005 to incorporate site-specific 30-day average objectives for ammonia along with corresponding site-specific early life stage implementation provisions for select water body reaches and tributaries in the Santa Clara, Los Angeles, and San Gabriel River watersheds. The State Water Board, OAL, and U.S. EPA approved this Basin Plan amendment on January 15, 2008, May 12, 2008, and March 30, 2009, respectively. The amendment became effective on April 23, 2009.

6. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.

7. 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 or 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. Nuisance, or adverse effects on 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, 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 of this Order.

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 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. A discharge of waste to any points other than specifically described in this Order is prohibited and constitutes a violation thereof.

d. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 318, 405, and 423 of the Federal CWA and amendments thereto.

e. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

f. Oil or oily material, chemicals, refuse, or other 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 or elimination of the authorized discharge.

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

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

k. 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.

l. 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.

m. 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.

n. Violations 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.

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

p. 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 Order.

q. 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.

r. 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.

s. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitations, 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.

t. 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. 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.

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

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

d. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for the Los Angeles River Reach 2.

e. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide for dilution credits or a mixing zone, as may be appropriate.

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

g. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, 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.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

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

3. Best Management Practices and Pollution Prevention

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

a. An updated **Storm Water Pollution Prevention Plan (SWPPP)** that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The SWPPP shall address procedures for preventing fire test water from commingling with storm water discharges. The SWPPP shall be developed in accordance with the requirements in Attachment G.

b. An updated **Best Management Practice Plan (BMPP)** that will be implemented to reduce the discharge of pollutants to the receiving water. The BMPP shall include site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material from being discharged to waters of the State. Further, the Discharger shall ensure that the storm water discharges from the Facility would neither cause, nor contribute to the exceedance of water quality standards and objectives, nor create conditions of nuisance in the receiving water, and that unauthorized discharges (i.e., spills) to the receiving water have been effectively prohibited. In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material discharge to surface waters. The BMPP shall be developed in accordance with requirements in Attachment G.

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 the Discharger's existing Spill Prevention Control and Countermeasure (SPCC) Plan.

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

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 (POTW's 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 Section I.G. of the MRP), then the Discharger is out of compliance.

B. Effluent Limitations Expressed as a Sum of Several Constituents

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

C. Effluent Limitations Expressed as a Median

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

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

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

D. Multiple Sample Data

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

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

E. Average Monthly Effluent Limitation (AMEL)

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

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

1. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for that constituent, the Discharger has demonstrated compliance with the AMEL for 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 Section I.G. of the MRP), the numerical average of the analytical results of these five samples will be used for compliance determination.

When one or more sample results are reported as "Not-Detected (ND)" or "Detected, but Not Quantified (DNQ)" (see Section 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.

F. Maximum Daily Effluent Limitations (MDEL)

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

G. Instantaneous Minimum Effluent Limitation

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

H. Instantaneous Maximum Effluent Limitation

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

I. Median Monthly Effluent Limitation (MMEL)

If the median of daily discharges over a calendar month exceeds the MMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of 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.

J. Chronic Toxicity

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

The Maximum Daily Effluent Limitation (MDEL) for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed using the TST statistical approach, results in "Fail" and the "Percent (%) Effect" is ≥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 statistical approach— results in "Fail". During a calendar month, exactly three independent toxicity tests are required when one toxicity test results in "Fail".

K. Mass and Concentration Limitations

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

L. Bacterial Standards and Analyses

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

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

where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL or CFU/100 mL) found on each day of sampling.

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

Detection methods used for coliforms (total and fecal) and *Enterococcus* shall be those presented in Table 1A of 40 CFR section 136 (revised May 18, 2012), unless alternate methods have been approved by USEPA pursuant to 40 CFR section 136, or improved methods have been determined by the Executive Officer and/or USEPA.

ATTACHMENT A – DEFINITIONS

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

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

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

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

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

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

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

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

The daily discharge may be determined by the analytical results of a composite sample taken over the course of 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 USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

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

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

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

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

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

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

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

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 in 40 C.F.R. part 136, Attachment B, revised as of July 3, 1999.

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

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

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

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

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

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

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

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

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

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

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

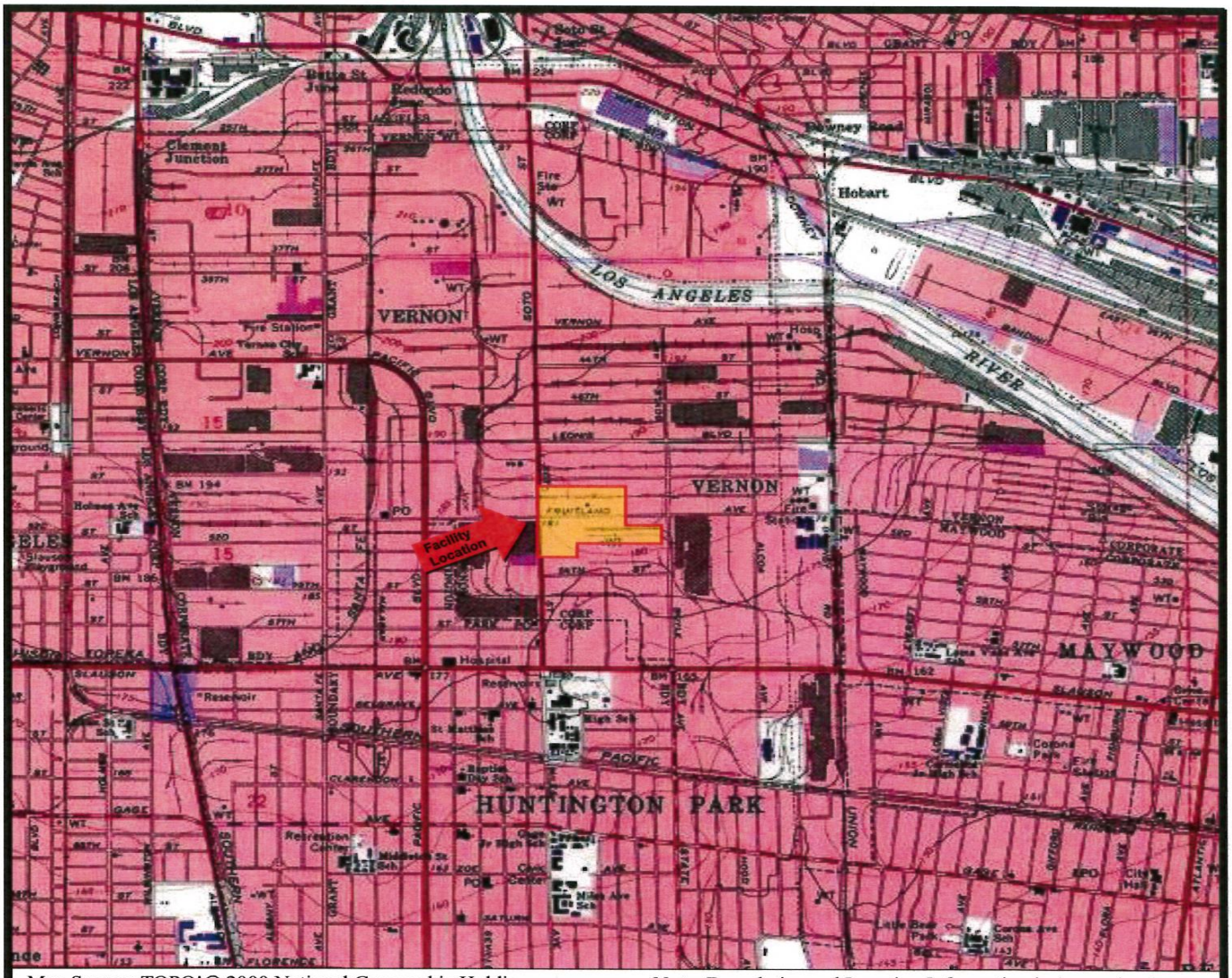
Toxicity Reduction Evaluation (TRE)
TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first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

ACRONYMS AND ABBREVIATIONS

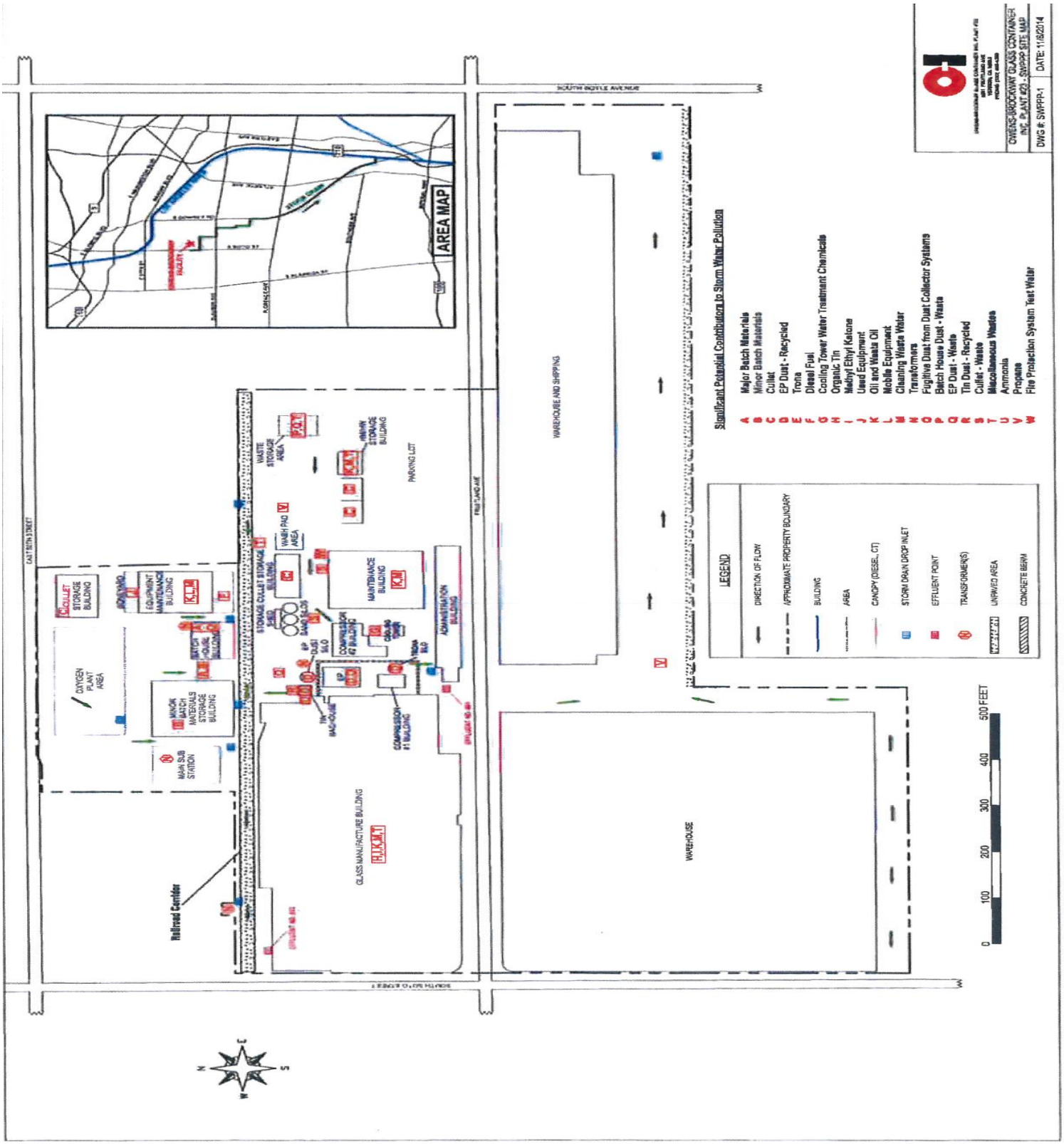
AMEL.....Average Monthly Effluent Limitation
B .....Background Concentration
BAT.....Best Available Technology Economically Achievable
Basin Plan .....Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties
BCT .....Best Conventional Pollutant Control Technology
BMP.....Best Management Practices
BMPP .....Best Management Practices Plan
BPJ .....Best Professional Judgment
BOD.....Biochemical Oxygen Demand 5-day @ 20 °C
BPT .....Best Practicable Treatment Control Technology
C.....Water Quality Objective
CCR .....California Code of Regulations
CEQA .....California Environmental Quality Act
CFR .....Code of Federal Regulations
CTR .....California Toxics Rule
CV .....Coefficient of Variation
CWA .....Clean Water Act
CWC .....California Water Code
Discharger .....Owens-Brockway Glass Container Inc.
DMR .....Discharge Monitoring Report
DNQ.....Detected But Not Quantified
ELAP .....California Department of Health Services Environmental Laboratory Accreditation Program
ELG .....Effluent Limitations, Guidelines and Standards
Facility .....Owens-Brockway Glass Container Inc.
g/kg.....grams per kilogram
gpd .....gallons per day
IC.....Inhibition Coefficient
IC_{15} .....Concentration at which the organism is 15% inhibited
IC_{25}.....Concentration at which the organism is 25% inhibited
IC_{40}.....Concentration at which the organism is 40% inhibited
IC_{50} .....Concentration at which the organism is 50% inhibited
LA .....Load Allocations
LOEC.....Lowest Observed Effect Concentration
µg/L .....micrograms per Liter
mg/L.....milligrams per Liter
MDEL.....Maximum Daily Effluent Limitation
MEC.....Maximum Effluent Concentration
MGD .....Million Gallons Per Day
ML .....Minimum Level
MRP.....Monitoring and Reporting Program
ND .....Not Detected
ng/L .....nanograms per liter
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
PAHs ..... Polynuclear Aromatic Hydrocarbons
pg/L ..... picograms per liter
PMEL ..... Proposed Maximum Daily Effluent Limitation
PMP ..... Pollutant Minimization Plan
POTW ..... Publicly Owned Treatment Works
ppm ..... parts per million
ppb ..... parts per billion
QA ..... Quality Assurance
QA/QC ..... Quality Assurance/Quality Control
Ocean Plan ..... Water Quality Control Plan for Ocean Waters of California
Regional Water Board ..... California Regional Water Quality Control Board, Los Angeles Region
RPA ..... Reasonable Potential Analysis
SCP ..... Spill Contingency Plan
SIP ..... State Implementation Policy (Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California)
SMR ..... Self-Monitoring Reports
State Water Board ..... California State Water Resources Control Board
SWPPP ..... Storm Water Pollution Prevention Plan
TAC ..... Test Acceptability Criteria
TBEL ..... Technology-Based Effluent Limitation
Thermal Plan ..... Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California
TIE ..... Toxicity Identification Evaluation
TMDL ..... Total Maximum Daily Load
TOC ..... Total Organic Carbon
TRE ..... Toxicity Reduction Evaluation
TSD ..... Technical Support Document
TSS ..... Total Suspended Solid
TU_c ..... Chronic Toxicity Unit
USEPA ..... United States Environmental Protection Agency
WDR ..... Waste Discharge Requirements
WET ..... Whole Effluent Toxicity
WLA ..... Waste Load Allocations
WQBELs ..... Water Quality-Based Effluent Limitations
WQS ..... Water Quality Standards
% ..... Percent

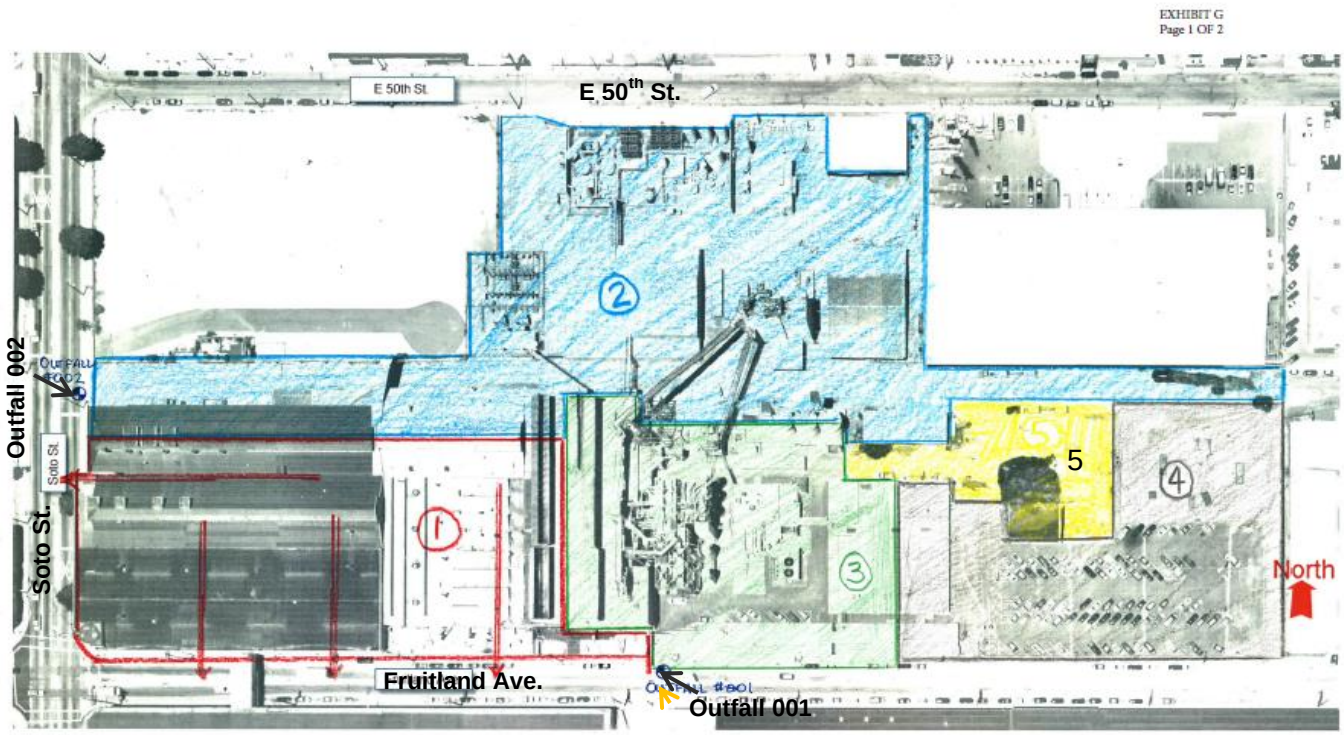
ATTACHMENT B – MAP



ATTACHMENT C – FLOW SCHEMATIC



Plant Site Drainage Diagram



Plant Site Drainage Diagram Upon Completion of the Outfall 002 Drainage Improvement Project:

- Area 1 (RED) –Storm water from this roof drains to the south and west to Fruitland Avenue and Soto Street, respectively.
- Area 2 (BLUE) –Storm water from this area drains to Outfall 002.
- Area 3 (GREEN) – Storm water from this area drains to Outfall 001.
- Area 4 (GRAY) – Storm water from the employee parking lot drains towards the south to Fruitland Avenue.
- Area 5 (YELLOW): Storm water from this area is pumped into the basement where it is used in the cullet water system.

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, USEPA, 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));

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and

c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

5. Notice

a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)

b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

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

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

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

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

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

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

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

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

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 USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request,

the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, §§ 13267, 13383.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, 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 USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));

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

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

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 subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 C.F.R. § 122.41(l)(1)(ii).)

3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R.§ 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

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

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (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 USEPA, 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.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

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

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that

discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):

a. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));

b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));

c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or

d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)

2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels" (40 C.F.R. § 122.42(a)(2)):

a. 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));

b. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));

c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or

d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) CI 6079

CONTENTS

TABLES

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) CI 6079

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

I. GENERAL MONITORING PROVISIONS

A. An effluent sampling station shall be established for Discharge Points 001 and 002, and shall be located where representative samples of waste streams contributing to 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 40 C.F.R. sections 136.3, 136.4, and 136.5 (revised May 18, 2012); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

E. Laboratory Certification: Laboratories analyzing monitoring samples shall be certified by the State Water Resources Control Board (State Water Board), Drinking Water Division, Environmental Laboratory Accreditation Program (ELAP) in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.

F. For any analyses performed for which no procedure is specified in the USEPA guidelines or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.

G. Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the State Water Board or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP".

H. The monitoring reports shall specify the analytical method used, the Method Detection Limit (MDL), and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:

1. An actual numerical value for sample results greater than or equal to the ML; or

2. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML; or,

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

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

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

I. The MLs employed for effluent analyses to determine compliance with effluent limitations shall be lower than the effluent limitations established in this Order for a given parameter as per the 40 CFR Parts 122 and 136; Use of Sufficiently Sensitive Test Methods for Permit Applications and Reporting. If the ML value is not below the effluent limitation, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test and associated laboratory QA/QC procedures.

J. The MLs employed for effluent analyses not associated with determining compliance with effluent limitations in this Order shall be lower than the lowest applicable water quality objective, for a given parameter as per the 40 CFR Parts 122 and 136; Use of Sufficiently Sensitive Test Methods for Permit Applications and Reporting. Water quality objectives for parameters may be found in Chapter 3 of the Basin Plan and the CTR (40 C.F.R. section 131.38). If the ML value is not below the water quality objective, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test, the associated laboratory QA/QC procedures, reporting levels (RLs), and method detection limits (MDLs)

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

1. When the pollutant under consideration is not included in Attachment H;

2. When the Discharger and Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in Part 136 (revised 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.

K. 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 reported in the Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.

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

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

M. All analyses shall be accompanied by the chain of custody, including but not limited to data and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.

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

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

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

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

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

1. Types of wastes and quantity of each type;

2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and

3. Location of the final point(s) of disposal for each type of waste.

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

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

T. The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Resources Control Board at the following address:

State Water Resources Control Board
Quality Assurance Program Officer, Office of Information Management and Analysis
State Water Resources Control Board
1001 I Street, Sacramento, CA 95814.

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	A sampling location shall be established where a representative sample of effluent prior to Discharge Point 001 can be obtained. Latitude: 33.99639^0, Longitude: -118.21722^0
002	EFF-002	A sampling location shall be established where a representative sample of effluent prior to Discharge Point 002 can be obtained. Latitude: 33.99732^0, Longitude: -118.21944^0
--	RSW-002	The Los Angeles County Department of Public Works' Willow Street Gauge station at Wardlow (F319-R)[1]

[1] The stream flow data can be obtained by contacting LACDPW through Mr. Arthur Gotingco at (626) 458-6379 or at agoting@dpw.lacounty.gov. The data for this station is downloaded once a month with a 1-2 week processing time for the provisional data.

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

III. INFLUENT MONITORING REQUIREMENTS – NOT APPLICABLE

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Locations EFF-001 and EFF-002

1. The Discharger shall monitor discharges of storm water runoff from the central yard/production area through Discharge Point 001 at Monitoring Location EFF-001. The Discharger shall also monitor discharges of storm water runoff from the main yard through Discharge Point 002 at Monitoring Location EFF-002. Table E-2 shows the effluent monitoring requirements. 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 – Monitoring Locations EFF-001 and EFF-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Metered[1]	1/Discharge Event[2]	--
Conventional Pollutants				
pH	s.u.	Grab	1/Discharge Event[3]	[4]
Biochemical Oxygen Demand (BOD), 5-day @ 20°C[5]	mg/L	Grab	1/Discharge Event[3]	[4]
Total Suspended Solid[5]	mg/L	Grab	1/Discharge Event[3]	[4]
Oil and Grease[5]	mg/L	Grab	1/Discharge Event[3]	[4]
Non-Conventional Pollutants				
Temperature	°F	Grab	1/Discharge Event[3]	[4]
Dissolved Oxygen	mg/L	Grab	1/Discharge Event[3]	[4]
Hardness (as $CaCO_3$)	mg/L	Grab	1/Discharge Event[3]	[4]
Turbidity	NTU	Grab	1/Discharge Event[3]	[4]
Settleable Solids	ml/L	Grab	1/Discharge Event[3]	[4]
E. coli	CFU/100ml or MPN/100 ml	Grab	1/Discharge Event[3]	[4,7]
Fecal coliform	CFU/100ml or MPN/100 ml	Grab	1/Discharge Event[3]	[4,7]
Chronic Toxicity[9]	Pass or Fail, % Effect	Grab	1/Year[8]	[4]
Total Dissolved Solids[5]	mg/L	Grab	1/Discharge Event[3]	[4]
Sulfate[5]	mg/L	Grab	1/Discharge Event[3]	[4]
Chloride[5]	mg/L	Grab	1/Discharge Event[3]	[4]
Nitrate as Nitrogen (NO_3-N)[5]	mg/L	Grab	1/Discharge Event[3]	[4]
Nitrite as Nitrogen (NO_3-N)[5]	mg/L	Grab	1/Discharge Event[3]	[4]
Nitrate as Nitrogen + Nitrite as Nitrogen (NO_3-N + NO_2-N), Total[5]	mg/L	Grab	1/Discharge Event[3]	[4]
Ammonia, Total (as Nitrogen) [5]	mg/L	Grab	1/Discharge Event[3]	[4]
Fluoride[5]	mg/L	Grab	1/Discharge Event[3]	[4]
Phenols[5]	mg/L	Grab	1/Discharge Event[3]	EPA Method 420.1 or 420.2 (using the 4AAP method)
Sulfides[5]	mg/L	Grab	1/Discharge Event[3]	[4]
Residual Chlorine[5,6]	mg/L	Grab	1/Year[8]	[4]
Specific Conductance @ 25°C	µmho/cm	Grab	1/Discharge Event[3]	[4]
Methyl-ethyl-ketone (MEK) [5]	µg/L	Grab	1/Discharge Event[3]	[4]
Tertiary Butyl Alcohol (TBA) [5]	µg/L	Grab	1/Discharge Event[3]	[4]
Methyl tertiary butyl ether (MTBE) [5]	µg/L	Grab	1/Discharge Event[3]	[4]
Total Petroleum Hydrocarbons (TPH) as Gasoline (C_4-C_{12})	µg/L	Grab	1/Discharge Event[3]	EPA Method 503.1 or 8015B
TPH as Diesel (C_{13}-C_{22})	µg/L	Grab	1/Discharge Event[3]	EPA Method 503.1, 8015B, or 8270
TPH as Waste Oil (C_{23+})	µg/L	Grab	1/Discharge Event[3]	EPA Method 503.1, 8015B, or 8270

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Priority Pollutants				
Antimony, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Arsenic, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Cadmium, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Chromium, Hexavalent[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Chromium, Total[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Copper, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Lead, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Mercury, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Nickel, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Selenium, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Silver, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Thallium, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Zinc, Total Recoverable[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Cyanide[5]	µg/L	Grab	1/Discharge Event[3]	[4]
Pentachlorophenol	µg/L	Grab	1/Discharge Event[3]	[4]
Bis(2-ethylhexyl)phthalate[5]	µg/L	Grab	1/Discharge Event[3]	[4]
PCBs[5,10]	µg/L	Grab	1/Discharge Event[3]	[4]
TCDD Equivalents[5,11]	µg/L	Grab	1/Year[8]	[4]
Remaining Priority Pollutants[11]	µg/L	Grab	1/Year[7]	[4]

[1] The Discharger shall measure the discharge flow through Discharge Point No. 001 using a flow meter. For Discharge Point No. 002 a flow meter shall be used to measure the flow upon completion of the ongoing construction at the facility. When the construction is completed in June 2016, a flow meter shall be installed at Discharge Point 002, until that time, discharge flow shall be estimated using the rainfall data.

[2] Flow shall be recorded daily during each period of discharge. Periods of no flow shall also be reported.

[3] During periods of extended discharge, no more than one sample per month needs to be taken. If, for safety reasons, a sample cannot be obtained during the first hour of discharge, then a sample shall be obtained at the first safe opportunity during daylight hours (Monday through Friday) of discharge. 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.

[4] Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP (Attachment H of this Order), where no methods are specified for a given pollutant, the methods must be approved by 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.

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

$$\text{Mass (lbs/day)} = 8.34 \times C \times Q$$

where:

C = actual measured concentration for a pollutant, in mg/L

Q = actual discharge flow rate in MGD.

[6] Residual chlorine monitoring is applicable only for Discharge Point 001.

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

[8] Monitoring is only required during years in which discharge occurs. Annual samples shall be collected during the first hour of discharge, from the first storm event of the wet season (October 1 – May 30). If, for

safety reasons, a sample cannot be obtained during the first hour of discharge, then a sample shall be obtained at the first safe opportunity during daylight hours (Monday through Friday) of discharge. If there is no discharge to surface waters, the Discharger will indicate in the corresponding monitoring report, under penalty of perjury, that no effluent was discharged to surface water during the reporting period.

[9] Refer to Section V, Whole Effluent Toxicity Testing Requirements. "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitation (MDEL)

[10] PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-10166, Arclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1245, Aroclor-1254, and Aroclor-1260.

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

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

Where: C_x = concentration of dioxin or furan congener x

TEF_x = TEF for congener x

Toxicity Equivalency Factors

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

[12] Priority Pollutants as defined by the California Toxics Rule (CTR) included as Attachment I of this Order.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity Testing

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

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

2. Sample Volume and Holding Time

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

3. Chronic Freshwater Species and Test Methods

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

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

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

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

4. Species Sensitivity Screening

Species sensitivity screening shall be conducted during this Order'sfirst required sample collection. The Discharger shall collect a single effluent sample and concurrently conduct three toxicity tests, using the fish, an invertebrate, and the alga species as referenced. The sample shall also be analyzed for the parameters required for the discharge. The species that exhibits the highest "Percent Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit cycle.

5. Quality Assurance and Additional Requirements

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

a. The discharge is subject to a determination of "Pass" or "Fail" and "Percent Effect" from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) statistical approach described in National Pollutant Discharge Elimination System Test of Significant Toxicity/Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (H_o) for the TST statistical approach is: Mean discharge IWC response ≤0.75 x Mean control response. A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent Effect" at the discharge IWC is defined and reported as: ((Mean control response - Mean discharge IWC response) ÷ Mean control response)) x 100%.

b. The Median Monthly Effluent Limitation (MMEL) for chronic toxicity only applies when there is a discharge on more than one day in a calendar month period. During such calendar months, exactly three independent toxicity tests are required when one

toxicity test results in "Fail". This requirement is not applicable to discharges composed entirely of industrial storm water.

c. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method, then the Discharger must re-sample and retest as soon as possible.

d. 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.

e. Reference toxicant test and effluent toxicity tests shall be conducted using the same test conditions (e.g. same test duration, etc.) Monthly reference toxicant testing is sufficient

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

g. The Discharger shall perform toxicity tests on final effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of the Monitoring and Reporting Program and the rationale is explained in the Fact Sheet (Attachment F).

6. Preparation of Initial Investigation TRE Work Plan

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

a. A description of the investigation and evaluation techniques that would be used to identify potential causes and source of toxicity, effluent variability, and treatment system efficiency.

b. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.

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

7. Toxicity Identification Evaluation and Toxicity Reduction Evaluation Process

a. Toxicity Identification Evaluation (TIE). A toxicity test sample is immediately subject to TIE procedures to identify the toxic chemical(s), if a chronic toxicity test shows "Fail and % Effect value ≥50". The Discharger shall initiate a TIE using, as guidance, EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.

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

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

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

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

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

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

c. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.

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

e. The Regional Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

8. Reporting

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

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

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

c. TRE/TIE results. The Regional Water Board Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses.

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

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Location RSW-002

1. The Discharger shall report the maximum daily flow in the Los Angeles River, at the Los Angeles County Department of Public Works’ Willow Street Gage Station at Wardlow.

This station is designated as RSW-002 in this Order. The stream flow data can be obtained by contacting LACDPW through Mr. Arthur Gotingco at (626) 458-6379 or at agoting@dpw.lacounty.gov. The data for this station is downloaded once a month with a 1-2 week processing time for the provisional data. This information is necessary to determine the wet weather and dry weather condition of the river, as defined in the Los Angeles River Metals TMDL. If the gauging station is not operational, an estimated maximum daily flow may be submitted.

Table E-3. Receiving Water Monitoring Requirements (RSW-002)

Parameter	Units	Sample Type	Minimum Sampling Frequency[1]	Required Analytical Test Method
Flow	cfs	Recorder	Daily	N/A

[1] Concurrent with effluent sampling for cadmium, copper, lead, and zinc.

IX. OTHER MONITORING REQUIREMENTS

A. Rainfall Monitoring

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

B. Visual Observation

The Discharger shall make visual observations of all storm water discharge locations during 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.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the Discharger shall indicate under penalty of perjury in the corresponding monitoring report that no effluent was discharged to surface water during the reporting period.
3. 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.
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.

B. Self-Monitoring Reports (SMRs)

1. The Discharger shall electronically submit SMRs using the State Water Board’s California Integrated Water Quality System (CIWQS) Program 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** SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

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

Table E-4. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
1 / Discharge Event	June 1, 2016	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
1/Year	June 1, 2016	January 1 through December 31	February 1

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

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

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

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

   For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

   c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

   d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. **Compliance Determination.** Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and in Attachment A. For purposes of reporting and administrative enforcement by the Regional Water

Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

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

   a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

   b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

7. The Discharger shall submit SMRs in accordance with the following requirements:

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

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

C. Discharge Monitoring Reports (DMRs)

As of the effective date of this Order, if the Discharger operates a "minor" facility as designated on page 1 of this Order, submittal of Discharge Monitoring Reports (DMRs) is not required. However, at any time during the term of this Order, the State Water Board or the Regional Water Board may notify and require the Discharger to electronically submit DMRs.

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 Work Plan

   b. Updated SWPPP

   c. Updated BMPP

   d. Spill Contingency Plan

   The SWPPP, BMPP, and Spill Contingency Plan status 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. All changes or revisions to the SWPPP, BMPP, and Spill Contingency Plan shall be submitted to the Regional Water Board within 30 days of revisions.

ATTACHMENT F – FACT SHEET

CONTENTS

TABLES

ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4B192085002
Discharger	Owens-Brockway Glass Container Inc.
Name of Facility	Owens-Brockway Glass Container Inc.
Facility Address	2901 Fruitland Avenue Vernon, CA 90058 Los Angeles County
Facility Contact, Title and Phone	Douglas Pittman, Assistant Plant Manager, (323) 586-4275
Authorized Person to Sign and Submit Reports	Douglas Pittman, Assistant Plant Manager (323) 586-4275
Mailing Address	2901 Fruitland Avenue, Vernon, CA 90058
Billing Address	2901 Fruitland Avenue, Vernon, CA 90058
Type of Facility	Industrial - Glass Container Manufacturer (SIC Code 3221)
Major or Minor Facility	Minor[1]
Threat to Water Quality	2
Complexity	C
Pretreatment Program	Not Applicable
Recycling Requirements	Not Applicable
Facility Permitted Flow	Discharge Point 001: Up to 0.163 million gallons per day (MGD) of storm water runoff from the central yard/production area. Discharge Point 002: Up to 0.680 MGD storm water runoff from the main yard.
Facility Design Flow	Discharge Point 001: Up to 0.163 MGD of storm water runoff from the central yard/production area. Discharge Point 002: Up to 0.680 MGD of storm water runoff from the main yard.
Watershed	Los Angeles River Watershed
Receiving Water	Los Angeles River
Receiving Water Type	Inland Surface Water

[1] Previously, the Owens-Brockway Facility was classified as a major discharge. Based on the ROWD and new information (0.163 MGD of storm water discharges through Discharge point 001, and 0.680 MGD of storm water discharge through Discharge Point 002) submitted by Owens-Brockway, the total flow is now 0.843 MGD, therefore, the Facility has been classified as a minor discharge.

A. Owens-Brockway Glass Container Inc. (hereinafter Discharger or Owens-Brockway) is the owner and operator of Owens-Brockway Glass Container Inc. Facility (hereinafter Facility), a glass container manufacturing facility.

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 to the Los Angeles River, a water of the United States and State of California. The discharge was previously regulated by Order No. R4-2010-0087 (adopted on June 3, 2010), as amended by Order No. R4-2010-0087-R, which was adopted on February 2, 2012, and expired on May 10, 2015. This Order also serves as a permit under the National Pollutant Discharge Elimination System (NPDES) program (NPDES Permit No. CA0056464). The terms and conditions of Order No. R4-2010-0087-R, as per 40 Code Federal Regulations (CFR) section 122.6 were administratively extended and continue in effect until a new Order is adopted. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

C. The Discharger filed a report of waste discharge and submitted an application for reissuance of its WDRs and an NPDES permit on November 10, 2014. Supplemental information was requested on January 21, 2015, and October 15, 2015. The additional information was received on February 6, 2015, and October 27, 2015, respectively. Additional information were also received on November 19, 2015, December 18, 2015, and January 8, 2016. A site visit was conducted on January 21, 2015, to observe operations and collect additional data to develop permit limitations and requirements for the waste discharge.

II. FACILITY DESCRIPTION

The Discharger operates the Owens-Brockway Glass Container Inc. facility located at 2901 Fruitland Avenue, Vernon, California. Owens-Brockway manufactures glass containers from raw materials and recycled glass (referred to as "cullet"), primarily for the food and beverage industries. The Facility manufactures flint (clear), amber (brown), and emerald (green) bottles from both new materials – consisting primarily of silica sand and soda ash - and recycled glass. While water is not a component of the product itself, it is used throughout the manufacturing process for supporting equipment and plant operations.

A. Description of Wastewater

Information submitted by the Discharger on November 19, 2015, indicated that the total storm water discharge from the Facility is 0.843 MGD (i.e., 0.163 MGD at Discharge Point 001 and 0.680 MGD at Discharge Point 002).

The previous NPDES permit (Order No. R4-2010-0087-R) allowed the discharge of 1.0453 MGD of wastewater and 1.566 MGD storm water, to surface waters. The wastewater consisted of 1.0 MGD furnace drain water, 0.04 MGD oxygen plant vacuum pump seal water, and 0.0053 MGD fire protection system test water. The discharges of the plant wastewater (furnace drain water and oxygen plant vacuum pump seal water) to surface waters occurred when discharge to the sanitary sewer is not possible (i.e., under emergency conditions). The ROWD, permit renewal application, and self-monitoring reports submitted, indicate that since November 2004, all routinely-generated plant wastewater is discharged to the sanitary sewer under a joint permit issued by the City of Vernon and Los Angeles County Sanitation Districts of (Permit No. 1029).

Although the discharge of 1.0 MGD furnace drain water was allowed by the previous permit, furnace drain water was never discharged to the storm sewer. Approximately,

every 12 — 15 years, a furnace is drained of glass for maintenance or color change purposes. It takes approximately 24 hours to drain a furnace of glass. During a furnace drain, glass is discharged into a flume of water flowing into a holding area in the basement or slab outside the furnace building, where it is collected in a fabricated "pond" for recirculation. Excess furnace drain water is hauled off-site for disposal or discharged into the sanitary sewer; it is not discharged to the storm drain.

Pure oxygen is used for combustion with natural gas in the furnaces to reduce the formation of oxides of nitrogen. Two “molecular sieve” oxygen regeneration plants provide this oxygen. Air flow through each plant is provided by two roots-type positive-displacement vacuum pumps. To increase the vacuum, the pump inlet air is saturated with a fresh water spray. A thin film of water is formed between the rotors, providing an improved seal. Wet silencers are also used. In the past, untreated City-supplied water evaporated from the pump rotors, leaving a scale layer. A sodium-cycle zeolite water softener is added to the system. This unit replaced calcium and magnesium in the feed water with sodium, reducing the formation of scale and allowing water to be recycled. The vacuum pump seal water from Oxygen Plant Nos. 1 and 2 are combined into a recirculating system. Bleed water from this water recirculation system was previously discharged via Discharge Point 001, but is now recirculated as cooling water As of November 2004, the bleed water is discharged to the sanitary sewer through the basement sump. Order No. R4-2010-0087-R permitted the discharge of oxygen plant seal water in the event of an emergency (e.g., loss of sewer system pumps) to the storm drain through Discharge Point 001. However, even in the event of loss of sewer system pumps, oxygen plant vacuum pump seal water would not be discharged to storm drain.

The current permit allows Owens to discharge 0.0053 MGD of fire protection water. The fire protection system is tested approximately once every 3 months, using City-supplied water, without the addition of any chemicals. During testing, test water was previously allowed to flow to catch basins that discharge to storm water outfalls. Information submitted by the Discharger on December 18, 2015, and January 8, 2016, indicated that the fire protection system test water will no longer be discharged to the storm drain. It will be either routed to the basement closed loop recirculation system or pumped into a container for off-site disposal. Therefore, this permit does not authorize the discharge of fire protection system test water to the storm drain and into the surface waters.

Supplemental information submitted by the Discharger indicated that the estimated volume of storm water discharge to Discharge Point 001 is 162,750 gallons per day (0.163 MGD) and for Discharge Point 002 is 679, 875 gallons per day (0.680 MGD). The estimated storm water discharge is based on a 25-year, 24-hour rainfall event of 5.25 inches per day at Owens’ location (National Oceanic and Atmospheric Administration Nation Weather Service Hydrometeorological Design Studies Center website, http://hdsc.nws.noaa.gov), and the Facility’s drainage areas which includes 52,350 square feet of impervious surfaces for Discharge Point 001, and 203,150 square feet of impervious surfaces and 27,225 square feet of pervious surfaces for Discharge Point 002. The estimated total storm water discharge from the Facility is 842,625 gallons per day (0.843 MGD).

The Facility no longer requires an option for discharge of the furnace drain water and oxygen plant vacuum pump seal water, or fire protection system test water to surface waters. Therefore, this Order only regulates the discharge of storm water runoff from the central yard/production areas (cullet bins, silos, and cooling tower areas), and storm water runoff from the main yard (cullet bins, cooling towers, and silo areas).

Storm water sheet flow from the parking lot and access roads, and storm water from roof gutters/drains flows to the curb and into the storm drain.

Completed Improvement Projects at the Facility

The Facility has completed a number of storm water drainage improvement projects and implemented other measures to improve the quality of storm water discharges. In early 2015, the Facility replaced an open top drain trench located in the parking lot near Discharge Point 001 with underground piping, catch basins and manholes to eliminate a major source of sediment loading in the storm water discharge. The old cracked concrete and asphalt in the area (approximately 2,000 square feet) was replaced with new concrete to improve the storm water drainage flow to Discharge Point 001. During dry periods, rubber mats are placed over the manhole grates to prevent sediment from entering and accumulating in the catch basins.

The Facility replaced numerous seals, gaskets, fittings, valves, piping, and ductwork associated with its furnace air pollution control equipment to eliminate discharges of sodium carbonate (trona) granules from the scrubber and electrostatic precipitator onto the surrounding pavement. A berm was also constructed on the pavement surrounding the area used for washing the equipment to capture the wash water for off-site disposal.

B. Discharge Points and Receiving Waters

The Facility discharges up to 0.843 MGD of storm water through two discharge points (Discharge Points 001 and 002), to the Los Angeles River, a water of the United States and State of California.

1. Discharge Point 001 – (Latitude 33.99639º North; Longitude -118.21722º West)

The discharge through Discharge Point 001 consists of up to 0.163 MGD of storm water runoff from the central yard/production area. This includes areas such as the cooling tower, furnace building, and various administrative/maintenance buildings.

2. Discharge Point 002 - (Latitude 33.99732º North; Longitude -118.21944º West)

The discharge through Discharge Point 002 consists of up to 0.680 MGD of storm water runoff from the main yard. This includes areas such as the batch house, oxygen plant, and storage/equipment maintenance buildings.

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

Effluent limitations contained in the existing Order for discharges from Discharge Point No. 001 (Monitoring Location EFF-001 and EFF-002) and representative monitoring data from the term of the previous Order for discharges of storm water are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data (Discharge Point 001)

Parameter	Units	Effluent Limitation – Discharge Point 001			Monitoring Data[a] (December 2010 – June 2015)
		Average Monthly	Maximum Daily	Instantaneous Minimum/ Maximum	Range of Reported Concentrations
pH	s.u.	---	---	6.5 – 8.5	7.5 – 9.8
Temperature	°F	---	---	86 (maximum)	62 – 70
Biochemical Oxygen Demand (BOD), 5-day @ 20°C	mg/L	20	30	---	2.6 – 18
	lbs/day[1]	258	388	---	NR
Total Suspended Solids (TSS)	mg/L	50	75	---	16 – 500
	lbs/day[1]	646	969	---	NR
Oil and Grease	mg/L	10	15	---	< 1.3 – 5.9
	lbs/day[1]	129	194	---	NR

Parameter	Units	Effluent Limitation – Discharge Point 001			Monitoring Data[a] (December 2010 – June 2015)
		Average Monthly	Maximum Daily	Instantaneous Minimum/ Maximum	Range of Reported Concentrations
Settleable Solids	ml/L	0.1	0.3	---	< 0.1 – 0.3
Turbidity	NTU	50	75	---	14 – 83
Residual Chlorine	mg/L	---	0.1	---	All are ND
	lbs/day[1]	---	1.3	---	NR
Total Dissolved Solids	mg/L	---	1,500	---	210 – 2,100
	lbs/day[1]	---	19,378	---	NR
Sulfate	mg/L	---	350	---	13 – 710
	lbs/day[1]	---	4,522	---	NR
Chloride	mg/L	---	150	---	9 – 98
	lbs/day[1]	---	1,938	---	NR
Total Ammonia – N	mg/L	2.4	8.7	---	0.14 – 0.55
	lbs/day[1]	31	112	---	NR
Nitrate – N	mg/L	8.0	---	---	0.87 – 14
	lbs/day[1]	103	---	---	NR
Nitrite – N	mg/L	1.0	---	---	< 0.15 – 0.830
	lbs/day[1]	13	---	---	NR
Nitrate+Nitrite – N	mg/L	8.0	---	---	1.7 – 8.3
	lbs/day[1]	103	---	---	NR
Phenols	mg/L	---	1.0	---	0.0084 – 0.062
	lbs/day[1]	---	13	---	NR
Sulfides	mg/L	—	0.1	---	All ND
	lbs/day[1]	—	1.3	---	NR
Fluoride	mg/L	—	1.0	---	0.63 – 2.5
	lbs/day[1]	—	13	---	NR
Arsenic, Total Recoverable	µg/L	---	10	---	13 – 110
	lbs/day[1]	---	0.13	---	NR
Cadmium, Total Recoverable (Wet Weather)[2]	µg/L	3[2]	5[2]	---	9.3 – 55
	lbs/day[1]	0.04	0.07	---	NR
Chromium, Total	µg/L	---	50	---	15 – 270
	lbs/day[1]	---	0.65	---	NR
Copper, Total Recoverable (Wet Weather)[2]	µg/L	14[2]	28[2]	---	26 – 110
	lbs/day[1]	0.18	0.36	---	NR
Copper, Total Recoverable (Dry Weather)[3]	µg/L	18[3]	36[3]	---	NA
	lbs/day[1]	0.23	0.47	---	NA
Lead, Total Recoverable (Wet Weather)[2]	µg/L	51[2]	102[2]	---	80 – 430
	lbs/day[1]	0.66	1.32	---	NR
Lead, Total Recoverable (Dry Weather)[3]	µg/L	9[3]	18[3]	---	NA
	lbs/day[1]	0.12	0.23	---	NA
Mercury	µg/L	---	2	---	< 0.0039 – 0.16
	lbs/day[1]	---	0.03	---	NR
Selenium, Total Recoverable	µg/L	---	10	---	480 – 4,900
	lbs/day[1]	---	0.13	---	NR
Silver, Total Recoverable	µg/L	---	50	---	0.2 – 2.9
	lbs/day[1]	---	0.65	---	NR

Parameter	Units	Effluent Limitation – Discharge Point 001			Monitoring Data[a] (December 2010 – June 2015)
		Average Monthly	Maximum Daily	Instantaneous Minimum/ Maximum	Range of Reported Concentrations
Thallium	µg/L	6	13	---	1.2 – 11
	lbs/day[1]	0.08	0.17	---	NR
Zinc, Total Recoverable (Wet Weather)[2]	µg/L	130[2]	261[2]	---	700 – 3,600
	lbs/day[1]	1.68	3.37	---	NR
Cyanide	µg/L	4	8	---	< 2.7 – 5.9
	lbs/day[1]	0.05	0.10	---	NR
TCDD Equivalents	µg/L	1.4E-08	2.8E-08	---	2.71E-06 - 9.27E-06
	lbs/day[1]	1.8E-10	3.6E-10	---	NR
Bis(2-ethylhexyl)phthalate	µg/L	6	12	---	< 2.3 – 7.8
	lbs/day[1]	0.08	0.16	---	NR
Acute Toxicity	% Survival	[4]		---	[5]

NR = Not reported. NA = Not available because there were no discharges during dry weather.

a. No discharge occurred during the 1st and 2nd Quarters 2015.

1. Mass-based (lbs/day) effluent limitations were based on a previous maximum discharge flow rate of 1.549 for Discharge Point 001. The mass-based effluent limitation is calculated, using the formula:

   Mass (lbs/day) = 8.34 x C x Q
   where: C = concentration for a pollutant, in mg/L
   Q = maximum discharge flow rate in MGD

2. The wet weather TMDL limits apply when the maximum daily flow at Reach 1 of the Los Angeles River at Willow Street gage station at Wardlow is equal to or greater than 500 cubic feet per second (approx. 320 million gallons per day).

3. The dry weather TMDL limits apply when the maximum daily flow at Reach 1 of the Los Angeles River at Willow Street gage station at Wardlow is less than 500 cubic feet per second.

4. The average survival of undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and no single test producing less than 70% survival.

The Discharger reported 0% survival during the monitoring periods on 1/24/2013 and 2/28/2014 for Discharge Point No. 001. The Discharger has implemented the accelerated monitoring program and begun investigation (Toxicity Identification Evaluation, TIE) of the causes of the acute toxicity violations. The 1st Quarter 2013 and 1st Quarter 2014 Self-Monitoring Reports indicated that corrective actions (Good Housekeeping, preventive measures, and fabric filters were installed along the trench drain inlets at Discharge Points 001 and 002, installation of fresh gravel along 002 corridor) and best management practices (BMPs) were implemented.

Table F-3. Historic Effluent Limitations and Monitoring Data (Discharge Point 002)

Parameter	Units	Effluent Limitation – Discharge Point 002			Monitoring Data[a] (December 2010 – June 2015)
		Average Monthly	Maximum Daily	Instantaneous Minimum/ Maximum	Range of Reported Concentrations
pH	s.u.	---	---	6.5 – 8.5	7 – 10.7
Temperature	°F	---	---	86 (maximum)	61 – 68
Biochemical Oxygen Demand (BOD), 5-day @ 20°C	mg/L	20	30	---	3.5 –14
	lbs/day[1]	177	266	---	NR
Total Suspended Solids (TSS)	mg/L	50	75	---	18 –180
	lbs/day[1]	443	664	---	NR
Oil and Grease	mg/L	10	15	---	<5 – 6.4
	lbs/day[1]	89	133	---	NR

Parameter	Units	Effluent Limitation – Discharge Point 002			Monitoring Data[a] (December 2010 – June 2015)
		Average Monthly	Maximum Daily	Instantaneous Minimum/ Maximum	Range of Reported Concentrations
Settleable Solids	ml/L	0.1	0.3	---	<0.1 –0.1
Turbidity	NTU	50	75	---	27 --260
Residual Chlorine	mg/L	---	0.1	---	<0.0015 – 0.18
	lbs/day[1]	---	0.9	---	NR
Total Dissolved Solids	mg/L	---	1,500	---	36 – 1,800
	lbs/day[1]	---	13,286	---	NR
Sulfate	mg/L	---	350	---	5.4 – 87
	lbs/day[1]	---	3,100	---	NR
Chloride	mg/L	---	150	---	2.4 – 14
	lbs/day[1]	---	1,329	---	NR
Total Ammonia – N	mg/L	2.4	8.7	---	< 0.046 – 0.34
	lbs/day[1]	21	77	---	NR
Nitrate – N	mg/L	8.0	---	---	0.62 – 6.5
	lbs/day[1]	71	---	---	NR
Nitrite – N	mg/L	1.0	---	---	< 0.02 – 110
	lbs/day[1]	9	---	---	NR
Nitrate+Nitrite – N	mg/L	8.0	---	---	0.62 – 2.7
	lbs/day[1]	71	---	---	NR
Phenols	mg/L	---	1.0	—	0.0083 – 0.062
	lbs/day[1]	---	9	—	NR
Sulfides	mg/L	—	0.1	—	All ND
	lbs/day[1]	—	0.9	—	NR
Fluoride	mg/L	—	1.0	—	0.10 – 0.35
	lbs/day[1]	—	9	—	NR
Arsenic, Total Recoverable	µg/L	---	10	---	2.8 – 17
	lbs/day[1]	---	0.09	---	NR
Cadmium, Total Recoverable (Wet Weather)[2]	µg/L	3[2]	5[2]	---	1 – 7.1
	lbs/day[1]	0.03	0.04	---	NR
Chromium, Total	µg/L	---	50	---	4.2 – 29
	lbs/day[1]	---	0.44	---	NR
Copper, Total Recoverable (Wet Weather)[2]	µg/L	14[2]	28[2]	---	16 – 81
	lbs/day[1]	0.12	0.25	---	NR
Copper, Total Recoverable (Dry Weather)[3]	µg/L	18[3]	36[3]	---	NA
	lbs/day[1]	0.16	0.32	---	NA
Lead, Total Recoverable (Wet Weather)[2]	µg/L	51[2]	102[2]	---	39 – 220
	lbs/day[1]	0.45	0.90	---	NR
Lead, Total Recoverable (Dry Weather)[3]	µg/L	9[3]	18[3]	---	NA
	lbs/day[1]	0.08	0.16	---	NA
Mercury	µg/L	---	2	---	< 0.0039 – 0.12
	lbs/day[1]	---	0.02	---	NR
Selenium, Total Recoverable	µg/L	---	10	---	17 – 530
	lbs/day[1]	---	0.09	---	NR
Silver, Total Recoverable	µg/L	---	50	---	< 0.027 – 0.41
	lbs/day[1]	---	0.44	---	NR

Parameter	Units	Effluent Limitation – Discharge Point 002			Monitoring Data[a] (December 2010 – June 2015)
		Average Monthly	Maximum Daily	Instantaneous Minimum/ Maximum	Range of Reported Concentrations
Thallium	µg/L	6	13	---	< 0.009 – 0.29
	lbs/day[1]	0.05	0.12	---	NR
Zinc, Total Recoverable (Wet Weather)[2]	µg/L	130[2]	261[2]	---	530 – 2,000
	lbs/day[1]	1.15	2.31	---	NR
Cyanide	µg/L	4	8	---	All are ND
	lbs/day[1]	0.04	0.07	---	All are ND
TCDD Equivalents	µg/L	1.4E-08	2.8E-08	---	7.98E-06
	lbs/day[1]	1.2E-10	2.5E-10	---	NR
Bis(2-ethylhexyl)phthalate	µg/L	6	12	---	< 2.3 – 5.1
	lbs/day[1]	0.05	0.11	---	NR
Acute Toxicity	% Survival	[4]		---	[5]

NR = Not reported. NA = Not available because there were no discharges during dry weather.

[a] No discharge occurred during 1st and 2nd Quarters 2015.

[1] Mass-based (lbs/day) effluent limitations were based on a previous maximum discharge flow rate of 1.062 MGD for Discharge Point 002. The mass-based effluent limitation is calculated, using the formula:

Mass (lbs/day) = 8.34 x C x Q

where: C = concentration for a pollutant, in mg/L

Q = maximum discharge flow rate in MGD

[2] The wet weather TMDL limits apply when the maximum daily flow at Reach 1 of the Los Angeles River at Willow Street gage station at Wardlow is equal to or greater than 500 cubic feet per second (approx. 320 million gallons per day).

[3] The dry weather TMDL limits apply when the maximum daily flow at Reach 1 of the Los Angeles River at Willow Street gage station at Wardlow is less than 500 cubic feet per second.

[4] The average survival of undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and no single test producing less than 70% survival.

[5] The Discharger reported 10% survival during the monitoring period on 1/24/2013 and 0% survival on 2/28/2014 monitoring for Discharge Point 002. The Discharger has implemented the accelerated monitoring program and begun investigation (Toxicity Identification Evaluation, (TIE)) of the causes of the acute toxicity violations. The 1st Quarter 2013 and 1st Quarter 2014 Self-Monitoring Reports indicated that corrective actions (Good Housekeeping, preventive measures, and fabric filters were installed along the trench drain inlets at Discharge Points 001 and 002, installation of fresh gravel along 002 corridor) and best management practices (BMPs) were implemented.

D. Compliance Summary

On October 9, 2013, the Regional Water Board issued a Stipulated Order on Amended Settlement Offer No. R4-2013-0028 for effluent limitations violations for the period from 4th Quarter 2010 through the 1st Quarter 2013 in the amount of $453,000. The violations included effluent limitations for pH, TSS, settleable solids, turbidity, fluoride, sulfate, nitrite-N, nitrate + nitrite-N, arsenic, cadmium, copper, lead, selenium, zinc, TCDD-equivalents, and bis(2-ethylhexyl)phthalate at Discharge Points 001 and 002.

On February 17, 2015, the Regional Water Board issued a Stipulated Order on Settlement Offer No. R4-2014-0206 for effluent limitation violations for the period during the 1st Quarter 2014 in the amount of $93,000. The violations included effluent limitations for pH, TSS, turbidity, fluoride, sulfate, arsenic, cadmium, chromium, copper, lead, selenium, thallium, zinc, and TCDD-equivalents at Discharge Points 001 and 002.

E. Planned Changes

In November 2015, the Discharger began a construction project to improve the drainage for storm water discharge through Discharge Point 002. The project includes installation of new drainage pipes, catch basins, manholes, and replacing the discharge point (Discharge Point

002). It also includes removal of accumulated sediment and glass from the ground surface, and re-contouring of the ground surface that drains to Discharge Point 002. Approximately, 72,000 square feet of concrete will be placed in areas which was previously unpaved or as a replacement for old, cracked concrete and asphalt. The paving and drainage improvement project for Discharge Point 002 is on-going.

The facility's existing air pollution control equipment is a closed loop system in which dry scrubbers use hydrated sodium carbonate material (trona) to remove sulfur oxides from the furnace exhaust stream. Electrostatic precipitators then remove the trona from the exhaust and return the trona to the glass melting furnaces as batch material. The discharges of trona granules from the system may affect the storm water discharges. Due to age and condition of the existing control equipment, the Discharger plans to replace the existing air pollution control equipment system with a new-state-of-the-art system. The engineering work and selection of vendor is almost complete. The construction and installation of the new air pollution control equipment is scheduled to begin in late 2016 or early 2017 with startup in mid-year 2017.

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 also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the 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 Plan.** 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 Los Angeles River are as follows:

Table F-4. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001 and 002	Los Angeles River, Reach 2 (Rio Hondo Reach 1 to Figueroa Street)	Existing: Ground Water Recharge (GWR); Warm Freshwater Habitat (WARM) Potential: Municipal and Domestic Supply (MUN)*; Industrial Service Supply (IND); Wildlife Habitat (WILD) * 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).

2. **Title 22 of the California Code of Regulations.** Primary and secondary maximum contaminant levels (MCLs) for inorganic, organic, and radioactive contaminants in drinking water are codified in Title 22, California Code of Regulations (Title 22). To protect the beneficial uses of MUN, the Basin Plan (Chapter 3) includes the "Chemical Constituents" water quality objectives, which incorporates Title 22 primary MCLs by reference as water quality objectives. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. Title 22 primary MCLs have been used as bases for effluent limitations in this Order to protect the groundwater recharge (GWR) beneficial use when that receiving groundwater is designated as MUN. The receiving groundwater (Coastal Plain of Los Angeles, Central Groundwater Basin) is designated as MUN beneficial use. The Basin Plan also includes the narrative water quality objective that states that "Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses." Secondary MCLs are used in this Order to implement the narrative objective to protect groundwater MUN use.

   Groundwater Recharge (GWR). The Los Angeles River Reach 2 (Rio Hondo Reach 1 to Figueroa Street) is designated as GWR. Surface water from the Los Angeles River percolates into the Coastal Plain of Los Angeles, Central Groundwater Basin with MUN beneficial use specified in the Basin Plan.. Since groundwater from this Basin is used to provide drinking water to the community, the groundwater aquifers must be protected. Therefore, Title 22-based limits are used to protect that drinking water supply. The MCLs were considered during the development of effluent limits included in this Order.

3. **Thermal Plan.** The State Water Board adopted the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan) on January 7, 1971, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. This plan contains a maximum temperature limitation of 86°F for thermal discharges to the Estuaries. Requirements of this Order implement the Thermal Plan. Additionally, a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region,* evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel, a number of aquatic species prevalent in the region. A maximum effluent temperature limitation of 86°F was determined to be appropriate for protection of aquatic life and it is consistent with the maximum

temperature limitation of 86°F in the Thermal Plan. Therefore, a maximum effluent temperature limitation of 86°F is included in this Order.

4. **Domestic Use of Water.** It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to meet maximum contaminant levels developed to protect human health and ensure that water is safe for domestic use.

5. **California Toxics Rule (CTR).** On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and incorporated the previously adopted National Toxics Rule (NTR) criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain federal water quality criteria for priority pollutants.

6. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

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

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

9. **Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state, including protecting rare, threatened, or endangered species. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

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 has adopted or plans to develop and adopt total maximum daily loads (TMDLs) that will specify waste load allocations (WLAs) for point sources and load allocations (LAs) for non-point sources, as appropriate.

On November 12, 2010, USEPA approved California's 2010 CWA Section 303(d) list of impaired waters and disapproved the omission of several water bodies and associated pollutants that meet federal listing requirements. USEPA identified additional water bodies and pollutants for inclusion on the State's 303(d) list. On October 11, 2011, USEPA issued its final decision regarding the waters USEPA added to the State's CWA 303(d) list.

The Facility discharges into Los Angeles River Reach 2. The 2010 California CWA section 303(d) List classifies the Los Angeles River Reach 2 as impaired. The pollutants/stressors of concern for the Los Angeles River Reach 2 include: ammonia, coliform bacteria, copper, lead, nutrients (algae), oil, and trash. The following are summaries of adopted TMDLs developed to address these impairments in Los Angeles River Reach 2.

1. **Bacteria TMDL for Los Angeles River.** On July 9, 2010, the Regional Water Board adopted Resolution No. R10-007, Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a TMDL for Indicator Bacteria in the Los Angeles River Watershed (LA River Bacteria TMDL). The LA River Bacteria TMDL contains WLAs of single sample and geometric mean numeric targets for *E.coli* during both dry and wet weather events for general and individual NPDES permits. The LA River Bacteria TMDL was approved by the State Water Board on November 1, 2011; by the OAL on March 21, 2012; and by the USEPA on March 23, 2012. It became effective on March 23, 2012. This Order includes effluent limitations based on the LA River Bacteria TMDL
2. **Nutrient TMDL for Los Angeles River.** The Regional Water Board adopted Resolution No. 03-009 on July 10, 2003, that amended the Basin Plan to incorporate a TMDL for Nutrients (nitrogen compounds, including ammonia-nitrogen, nitrate-nitrogen, and nitrate nitrogen plus nitrite-nitrogen, and related effects) in the Los Angeles River (LA River Nutrients TMDL). The TMDL was approved by the State Water Board and Office of Administrative Law on November 19, 2003, and February 27, 2004, respectively. The LA River Nutrients TMDL was approved by USEPA on March 18, 2004, and became effective on March 23, 2004. Subsequently, Resolution No. 2003-016, which revised the interim effluent limitations for ammonia, was adopted by the Regional Water Board on December 4, 2003. The State Water Board approved the TMDL with Resolution 2004-0014 on March 24, 2004. OAL approved the TMDL on September 27, 2004, and it became effective on the same date. The TMDL was amended again by Resolution No. R12-010 to incorporate site-specific objectives for select reaches and tributaries of the Los Angeles River watershed. This amendment was approved by the Regional Water Board on December 6, 2012; by the State Water Board on June 4, 2013; by the OAL on June 9, 2014; by the USEPA on August 7, 2014; and became effective on August 7, 2014. This Order includes effluent limitations based on the LA River Nutrients TMDL.
3. **Trash TMDL for Los Angeles River.** The Los Angeles River Trash TMDL was adopted by the Regional Water Board on September 19, 2001. The TMDL established a numeric target of zero trash in the Los Angeles River. The TMDL was to be implemented via storm water permits in a phased reduction for a period of 10 years. The Los Angeles River Trash

TMDL was approved by the State Water Board on February 19, 2002, and OAL on July 16, 2002. The USEPA approved the TMDL on August 1, 2002, and it became effective on August 28, 2002. There were legal challenges to the Los Angeles River Trash TMDL, which resulted in the TMDL being set aside by the Regional Water Board on June 8, 2006, and the State Water Board on July 17, 2006. The Regional Water Board adopted an amendment to the Los Angeles River Trash TMDL (Resolution No. 2007-012) on August 9, 2007. The State Water Board approved the TMDL on April 15, 2008. OAL approved the TMDL on July 1, 2008. The USEPA approved the TMDL on July 24, 2008, and it became effective on September 23, 2008. This TMDL is implemented through Municipal Separate Storm Sewer System (MS4) NPDES permits. This Order requires a Storm Water Pollution Prevention Plan (SWPPP), which is expected to minimize/prevent the discharge of trash from the Facility to the Los Angeles River Watershed.

4. **Metals TMDL for Los Angeles River.** The Regional Water Board adopted Resolution No. 2005-006 on June 2, 2005, which amended the Basin Plan to incorporate a TMDL for metals (cadmium, copper, lead, selenium, and zinc) in the Los Angeles River (LA River Metals TMDL). The State Water Board approved the LA River Metals TMDL on October 20, 2005, and OAL approved the TMDL on December 9, 2005. The USEPA approved the LA River Metals TMDL on December 22, 2005, and it became effective on January 11, 2006. The LA River Metals TMDL establishes numeric water quality targets that are based on objectives established by USEPA in the CTR. An amendment to the TMDL (Resolution No. R2007-014) was adopted by the Regional Water Board on September 6, 2007. The State Water Board and OAL approved the amendment on June 17, 2008, and October 17, 2008, respectively. USEPA approved the amendment on October 14, 2008, and it became effective on October 29, 2008. The LA River Metals TMDL was subsequently amended by Resolution No. R10-003, which was adopted by the Regional Water Board on May 6, 2010; by the State Water Board on April 19, 2011; by the OAL on July 28, 2011; and by the USEPA on November 3, 2011. Resolution No. R10-003, effective November 3, 2011, establishes WLAs in Los Angeles River Reach 2 for cadmium, copper, lead, and zinc in dry and wet weather events (defined where the maximum daily flow at station F319-R is greater than 500 cubic feet per second). This Order includes effluent limitations based on the LA River Metals TMDL.

E. Other Plans, Policies and Regulations – Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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

The Discharger operates a glass manufacturing facility. The Discharger directs all process wastewater to the sanitary sewer as authorized by the Los Angeles County Sanitation District Permit No. 001029. The fire protection test water is either routed to the basement closed loop recirculation system or pumped into a container for off-site disposal. Therefore, the effluent discharged from the Facility consists only of storm water runoff from the central yard/production area, and main yard. Storm water runoff from the central yard/production areas (includes areas such as the cooling tower, furnace building, and various administrative/maintenance

buildings) is directed through Discharge Point 001. The discharge through Discharge Point 002 consists of storm water that may pick up pollutants from the main yard (includes areas such as the batch house, oxygen plant, and storage/equipment maintenance buildings). The ROWD (EPA Form 2F) indicated that significant materials used onsite include diesel fuel, sand, soda ash, limestone, saltcake, hydrated sodium carbonate material, cullet, "minor" raw materials (including selenium, tube scale, and carbon), tin, electrostatic precipitator dust, waste batch, cooling tower chemicals, and ammonia. These materials are stored or transferred in areas that may allow exposure to storm water. These materials are stored/staged in bins, covered hoppers, tanks, drums, and cylinders. In addition, hazardous waste accumulation areas are located in closed containers in areas that may allow exposure to storm water. Therefore, the typical pollutants of concern in the discharge through Discharge Points 001 and 002 from the Facility may include solids and metals.

Effluent limitations in Order R4-2010-0087-R were established for pH, temperature, total suspended solids, total dissolved solids, turbidity, BOD, oil and grease, settleable solids, phenols, sulfides, sulfate, chloride, residual chlorine, fluoride, ammonia (as N), nitrate (as N), nitrite (as N), nitrate plus nitrite, arsenic, cadmium, total chromium, copper, lead, mercury, selenium, silver, thallium, zinc, cyanide, TCDD equivalents, bis(2-ethylhexyl)phthalate, and acute toxicity for discharges through Discharge Points 001 and 002. Due to the nature of products that are handled at the Facility (including diesel fuel), these pollutants (except residual chlorine) can be indicators of spills within the Facility. Therefore, the proposed Order includes effluent limitations for discharges through Discharge Points 001 and 002 for all these pollutants except acute toxicity and residual chlorine. Acute toxicity was replaced with chronic toxicity since the limitation for chronic toxicity is more stringent than acute as described in Section IV.C.6. Since fire protection test water is longer discharged through Discharge Point 001, the residual chlorine limitation was removed in this permit.

The ROWD indicated that in March 2014, twenty-four gallons of diesel fuel was spilled on the pavement from a leaking delivery truck; the diesel fuel was contained and did not enter the storm drain system. The Discharger noted in the ROWD that they implemented clean-up procedures that were satisfactory to the local Certified Unified Program Agency (CUPA). Therefore, total petroleum hydrocarbons (TPH) are considered pollutants of concern and the proposed Order requires monitoring for TPH.

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

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 Los Angeles River.

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

Under part 426.80, ELGs exist for the glass container manufacturing subcategory and regulate oil and grease, TSS, and pH. The degree of effluent reduction attained by the application of BPT is based on the pounds of glass produced per 1,000 pounds of furnace pull. Part 426.81, defines furnace pull as the amount of glass drawn from the glass furnace or furnaces.

2. Applicable Technology-Based Effluent Limitations

Part 426 establishes effluent limitations and requirements for the Glass Container Manufacturing point source category. The applicability discussion in the regulation indicates that the category applies to discharges resulting from the process by which raw materials are melted in a furnace and mechanically processed into glass containers.

Therefore, the ELGs are applicable to furnace draining activities but are not applicable to other waste streams produced at the Facility (e.g., oxygen plant vacuum pump seal water, fire protection system test water, and storm water runoff). The fire protection test water is either routed to the basement closed loop recirculation system or pumped into a container for off-site disposal. The Discharger directs all process wastewater, including furnace drain wastewater, to the sanitary sewer. Storm water runoff is the only waste stream discharged under this permit. Therefore, this permit does not establish technology-based effluent limitations based on ELGs for discharges through Discharge Points 001 and 002.

As per 40 C.F.R. section 122.45(d), continuous discharges require both daily maximum and a monthly average effluent limit. The discharge from the Owens consists only of storm water and is not a continuous discharge. Therefore, this permit includes only daily maximum.

Order No. R4-2010-0087-R required the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). This Order will continue to require the Discharger to update and implement, consistent with the requirements in Order No. R4-2010-0087-R, a SWPPP to outline site-specific management processes to minimize pollution from storm water runoff and to prevent polluted storm water runoff from being discharged directly into the storm drain. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water and unauthorized non-storm water discharges do not occur at the Facility. This Order requires the Discharger to update and continue to implement the SWPPP (Attachment G).

Order No. R4-2010-0087-R also required the Discharger to develop and implement a Best Management Practices Plan (BMPP). The Discharger provided in the ROWD a summary of BMPs to control the potential exposure of pollutants to storm water. This Order will continue to require the Discharger to update and continue to implement, consistent with the requirements in Order No. R4-2010-0087-R, a BMPP that outlines site-specific management practices to minimize polluted storm water runoff and to prevent polluted storm water runoff from being discharged directly into the storm drain.

This order will also require the Discharger to implement a Spill Contingency Plan (SCP). The SCP should be site-specific and shall cover all areas of the Facility. A Spill Prevention Control and Countermeasure Plan (SPCC), developed in accordance with 40 C.F.R. Part 112, may be substituted for the SCP.

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

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

Table F-5. Summary of Technology-Based Effluent Limitations - Discharge Point 001 (Monitoring Location EFF-001)

Parameter	Units	Effluent Limitations – Discharge Point 001	
		Average Monthly	Maximum Daily
BOD_5 20	mg/L	—	30
	lbs/day[1]	—	41

Parameter	Units	Effluent Limitations – Discharge Point 001	
		Average Monthly	Maximum Daily
TSS	mg/L	—	75
	lbs/day[1]	—	102
Oil & Grease	mg/L	—	15
	lbs/day[1]	—	20
Settleable Solids	mL/L	—	0.3
Turbidity	NTU	—	75
Phenols	mg/L	---	1.0
	lbs/day[1]	---	1.4
Sulfides	mg/L	---	0.1
	lbs/day[1]	---	0.14
Fluoride	mg/L	---	1.0
	lbs/day[1]	---	1.4

[1] Mass-based (lbs/day) effluent limitations are based on a maximum discharge flow rate of 0.163 MGD (storm water) for Discharge Point 001. The mass-based effluent limitations are calculated using the formula:

Mass (lbs/day) = 8.34 x C x Q

where:

C = concentration for a pollutant, in mg/L

Q = maximum discharge flow rate in MGD for storm water.

Table F-6. Summary of Technology-Based Effluent Limitations - Discharge Point 002 (Monitoring Location EFF-002)

Parameter	Units	Effluent Limitations – Discharge Point 002	
		Average Monthly	Maximum Daily
BOD_5 20	mg/L	—	30
	lbs/day[1]	—	170
TSS	mg/L	—	75
	lbs/day[1]	—	425
Oil & Grease	mg/L	—	15
	lbs/day[1]	—	85
Settleable Solids	mL/L	—	0.3
Turbidity	NTU	—	75
Phenols	mg/L	---	1.0
	lbs/day[1]	---	6
Sulfides	mg/L	---	0.1
	lbs/day[1]	---	0.6
Fluoride	mg/L	---	1.0
	lbs/day[1]	---	6

[1] Mass-based (lbs/day) effluent limitations are based on a maximum discharge flow rate of 0.680 MGD (storm water) for Discharge Point 002. The mass-based effluent limitations are calculated using the formula:

Mass (lbs/day) = 8.34 x C x Q

where:

C = concentration for a pollutant, in mg/L

Q = maximum discharge flow rate in MGD for storm water.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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

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

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated 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.

The specific procedures for determining reasonable potential for discharges from the Facility, 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. The TSD in section 3.3.8 in the first paragraph on page 64 states: "*The statistical approach shown in Box 3-2 or an analogous approach developed by a regulatory authority can be used to determine the reasonable potential.*" The Regional Water Board has determined the procedures for determining reasonable potential and calculating WQBELs contained in the SIP for non-storm water discharges may be used to evaluate reasonable potential and calculate WQBELs for storm water discharges as well. As described in the statement from the TSD, an analogous approach may also be used to evaluate reasonable potential and calculate WQBELs for storm water discharges as well. Hence, in this Order, the Regional Water Board has used the SIP methodology to evaluate reasonable potential for discharges through Discharge Points 001 and 002.

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 Los Angeles River 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 Los Angeles River. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with 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, or the applicable CCR Title 22 MCLs as listed in the Basin Plan, whichever is more stringent, are used to prescribe the effluent limitations to protect the beneficial uses of the Los Angeles River Reach 2, a water of the United States. Groundwater recharge (GWR) of the underlying Coastal Plain of Los Angeles, Central Groundwater Basin is also a beneficial use for the receiving water body (Los Angeles River Reach 2). The GWR beneficial use is protected using the Basin Plan Maximum Contaminant Levels (MCLs).

Some water quality criteria are hardness dependent. There was no available hardness data during the term Order No. R4-2010-0087-R. No receiving water monitoring requirements was prescribed in Order No. R4-2010-0087-R because the Facility's discharge point is approximately 4.5 miles away from the receiving water and the storm drain system passes through approximately 10 laterals prior to reaching the Los Angeles River. In the absence of the Discharger-specific hardness data, a hardness value of 268 mg/L as CaCO3, based on the 50th percentile hardness value reported for Reach 2, used in the TMDL for Metals in the Los Angeles River and Tributaries was used to evaluate reasonable potential and calculate the WQBELs that are hardness dependent.

Table F-7 summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations historically in the discharge effluent at EFF-001 and EFF-002. These criteria were used in conducting the RPA used in this Order.

Table F-7. Applicable Water Quality Criteria

CTR No.	Parameter	Most Stringent Criteria	CTR/NTR Water Quality Criteria			Title 22 Maximum Contaminant Level
			Freshwater		Human Health for Consumption of:	
			Acute	Chronic	Organisms Only	
		µg/L	µg/L	µg/L	µg/L	µg/L
1	Antimony	6	---	---	4,300	6
2	Arsenic	10	340	150	---	10
3	Beryllium	No Criteria	---	---	---	--
4	Cadmium	5	13.73	5.34	Narrative	5
5a	Chromium (III)	464.06	3,893.32	464.06	Narrative	--
5b	Chromium (VI)	11.43	16.29	11.43	Narrative	---
6	Copper	21.66	35.44	21.66	--	--
7	Lead	11.16	286.38	11.16	Narrative	--
8	Mercury	0.051	--	--	0.051	2
9	Nickel	100	1,080.29	120.11	4,600	100
10	Selenium	5	20	5	Narrative	50
11	Silver	22.12	22.12	--	--	--
12	Thallium	2	--	--	6.3	2
13	Zinc	276.23	276.23	276.23	--	--
14	Cyanide	5.2	22	5.2	220,000	200
15	2,3,7,8-TCDD	1.4E-8	--	--	1.4E-8	3E-8
53	Pentachlorophenol	1	14.42	11.06	8.2	1
68	Bis(2-ethylhexyl)Phthalate	4	--	--	5.9	4
70	Butylbenzyl Phthalate	5,200	--	--	5,200	--
79	Diethyl Phthalate	120,000	--	--	120,000	--

CTR No.	Parameter	Most Stringent Criteria	CTR/NTR Water Quality Criteria			Title 22 Maximum Contaminant Level
			Freshwater		Human Health for Consumption of:	
			Acute	Chronic	Organisms Only	
		µg/L	µg/L	µg/L	µg/L	µg/L
80	Dimethyl Phthalate	2,900,000	--	--	2,900,000	--
81	Di-n-Butyl Phthalate	12,000	--	--	12,000	--
119-125	PCBs	0.00017	--	0.014	0.00017	0.5

LA River Metals TMDL. The TMDL establishes concentration-based dry weather WLAs in Los Angeles River Reach 2 for copper and lead and concentration based wet weather WLAs for cadmium, copper, lead, and zinc. The numeric target portion of the TMDL specifies when the wet weather and dry weather targets (based on numeric water quality criteria established by the CTR) are applicable. Wet weather targets are applicable when the flow in the Los Angeles River at F319-R Wardlow gauge station is greater than or equal to 500 cubic feet per second (cfs). Dry weather targets are applicable when flow in the Los Angeles River at that station is less than 500 cfs. The TMDL states that permit writers may translate applicable WLAs into effluent limitations for the major, minor, and general NPDES permits by applying the effluent limitation procedures in Section 1.4 of the SIP or other applicable engineering practices authorized under federal regulations. This Order includes dry-weather effluent limitations for copper and lead, and wet weather effluent limitations for cadmium, copper, lead, and zinc based on the WLAs contained in the LA River Metals TMDL and applying the procedures in Section 1.4 of the SIP.

Table F-8 summarizes the applicable dry and wet weather WLAs for cadmium, copper, lead, and zinc contained in the LA River Metals TMDL. These WLAs are applicable to Discharge Point 001 discharging to the Los Angeles River Reach 2, and are converted into effluent limitations by applying CTR-SIP procedures.

Table F-8. LA River Metals TMDL WLAs Applicable to Discharge Points 001 and 002

Parameter	Units	WLA	
		Dry Weather[2]	Wet Weather[3]
Cadmium, Total Recoverable[1]	µg/L	---	3.1
Copper, Total Recoverable[1]	µg/L	22	17
Lead, Total Recoverable[1]	µg/L	11	62
Zinc, Total Recoverable[1]	µg/L	---	159

1. Numeric targets are expressed as total recoverable, and are hardness dependent and metals conversion factors specified in the CTR.
2. Dry weather targets for copper and lead are based on chronic CTR criteria. Copper and lead targets are based on 50th percentile hardness values collected at Los Angeles River Reach 2.
3. Wet weather targets for cadmium, copper, lead, and zinc based on acute CTR criteria and the 50th percentile hardness values for storm water collected at F319-R Wardlow gauge station.

LA River Nutrients TMDL. The TMDL establishes concentration-based WLAs for minor point sources. The implementation portion of the TMDL states that WLAs shall be applied to minor point source dischargers on the effective date of the TMDL. The following WLAs are applicable to the discharges under this Order:

a. Total Ammonia (as nitrogen) – 2.4 mg/L (30-day average)
– 8.7 mg/L (1-hour average)

b. Nitrate-nitrogen (NO_3-N) – 8 mg/L (30 day average)

c. Nitrite-nitrogen(NO_2-N) – 1 mg/L (30 day average)

d. Nitrite-nitrogen plus nitrite-nitrogen (NO_3-N + NO_2-N) – 8 mg/L (30 day average)

This Order implements the applicable WLAs as required in the TMDLs.

LA River Bacteria TMDL. The LA River Bacteria TMDL contains WLAs of zero days of allowable exceedances of the single sample target of 235/100mL *E.coli* for both dry and wet weather (defined as days with 0.1 inch of rain or greater and the three days following the rain event) and no exceedances of the geometric mean numeric target of 126/100 mL *E.coli* for general and individual NPDES permits. The calculation of the rolling 30-day geometric mean requires a statistically sufficient number of samples (generally, at least five equally spaced samples over a 30-day period). This Order includes effluent limitations based on the LA River Bacteria TMDL

LA River Trash TMDL. The TMDL establishes WLAs for trash to the Los Angeles River and applicable tributaries on municipal storm water permittees, including Caltrans. The implementation of the TMDL is specific to MS4 permittees within the Los Angeles River watershed. No WLAs are specified for non-municipal storm water NPDES permittees. However, the implementation of the SWPPP discussed in section IV.B.2 of this Fact Sheet is expected to prevent/minimize the discharge of trash to the Los Angeles River watershed from the Facility and is consistent with the intent of the TMDL.

3. Determining the Need for WQBELs

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

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

1) Trigger 1 – If the MEC ≥ 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 Regional Water Board developed WQBELs for cadmium, copper, lead, and zinc based on the waste load allocations included in the LA River Metals TMDL. The Regional Water Board also developed WQBELs for ammonia as nitrogen, nitrite as nitrogen, nitrate as nitrogen, and total nitrate plus nitrite as nitrogen based on the waste load allocations specified in the LA River Nutrients TMDL; and WQBELs for E. coli in accordance with the LA River Bacteria TMDL. The effluent limitations for these pollutants were established regardless of whether or not there is reasonable potential for the pollutants to be present in the discharge at levels that would cause or contribute to a violation of water quality standards. Water quality-based effluent limitations for these pollutants were developed pursuant to 40 C.F.R. section 122.44(d)(1)(vii), which does not require or contemplate a reasonable potential analysis for effluent limitations consistent with the assumption and requirements of a TMDL WLA. Similarly, the SIP at Section 1.3 recognizes that reasonable potential analysis is not appropriate if a TMDL has been developed.

The RPA was performed for the priority pollutants regulated in the CTR for which data are available from the previous permit term. For Discharge Points 001 and 002, data were available from nine sampling events (for the period from 4th Quarter 2010 through 4th Quarter 2014). No monitoring data was reported for the 1st and 2nd Quarters of 2015 for Discharge Points 001 and 002 because no discharges occurred.

Based on the RPA, pollutants that demonstrate reasonable potential are chromium (VI), mercury, nickel, selenium, thallium, cyanide, 2,3,7,8-TCDD, bis(2-ethylhexyl)phthalate, and PCBs for discharges through Discharge Point 001. For Discharge Point 002, pollutants that demonstrated reasonable potential are mercury, selenium, TCDD equivalents, and PCBs. Effluent limitations are established for the pollutants that demonstrated reasonable potential at the respective discharge locations. The previously limited pollutants that did not demonstrate reasonable potential based on a comparison of the MEC and applicable water quality criteria included arsenic, chromium (total), and silver for Discharge Point 001, and arsenic, chromium (total), chromium VI, nickel, silver, thallium, cyanide, and bis(2-ethylhexyl)phthalate for Discharge Point 002. However, based on the nature of operations at the Facility, arsenic, , chromium VI, nickel, , thallium, cyanide, and bis(2-ethylhexyl)phthalate are still considered pollutants of concern. Based on section 1.3, Trigger 3, of the SIP, there is reasonable potential for these pollutants. The Regional Water Board determined that effluent limitations for these pollutants are still appropriate. Therefore, effluent limitations for these pollutants are included in this Order. Refer to Attachment J for a summary of the RPA and associated effluent limitation calculations. Tables F-9 and F-10 also show the summary of the RPA.

Table F-9. Summary of Reasonable Potential Analysis – Discharge Point 001

CTR No.	Constituent	Most Stringent Water Quality Criteria (C)[5]	Maximum Effluent Conc. (MEC)	Applicable CTR/NTR Water Quality Criteria[4]	Title 22 MCL	TMDL WLAs	RPA Result - Need Limit?	Reason
		µg/L	µg/L	µg/L	µg/L	µg/L		
1	Antimony	6[1]	13	4,300	6	--	Yes	MEC > C
2	Arsenic	10[1]	110	150	10	--	Yes	MEC > C
4	Cadmium	5[1]	55	5.34	5	3.1[2]	Yes	MEC > C, TMDL
5a	Chromium (III)	464.06	260	464.06	--	--	No	MEC < C
5b	Chromium (VI)	11.43	30	11.43	---	--	Yes	MEC > C
6	Copper	21.66	110	21.66	--	22[3] /17[2]	Yes	MEC > C, TMDL
7	Lead	11.16	430	11.16	--	11[3] /62[2]	Yes	MEC > C, TMDL
8	Mercury	0.051	0.16	0.051	2	--	Yes	MEC > C
9	Nickel	100[1]	180	120.11	100	--	Yes	MEC > C
10	Selenium	5	4,900	5	50	--	Yes	MEC > C
11	Silver	22.12	2.9	22.12	--	--	No	MEC<C
12	Thallium	2[1]	11	6.3	2	--	Yes	MEC > C
13	Zinc	276.23	3,600	276.23	--	159[2]	Yes	MEC > C, TMDL
14	Cyanide	5.2	5.9	5.2	200	--	Yes	MEC > C
15	2,3,7,8-TCDD	1.4E-8	9.27E-6	1.4E-8	3E-8	--	Yes	MEC > C
53	Pentachlorophenol	1[1]	5.2	8.2	1	--	Yes	MEC > C
68	Bis(2-ethylhexyl)phthalate	4[1]	7.6	5.9	4	--	Yes	MEC > C
70	Butylbenzyl Phthalate	5200	3	5,200	--	--	No	MEC < C
79	Diethyl Phthalate	120,000	3.2	120,000	--	--	No	MEC < C
80	Dimethyl Phthalate	2,900,000	1.9	2,900,000	--	--	No	MEC < C
81	Di-n-Butyl Phthalate	12,000	1.2	12,000	---	--	No	MEC < C
119-125	PCBs	0.00017	0.72	0.00017	0.5	--	Yes	MEC > C

[1] Based on MCL.
[2] Based on TMDL (Wet Weather WLAs)
[3] Based on TMDL (Dry Weather WLAs).
[4] Based on the most stringent water quality criteria from the freshwater (acute and chronic), and human health for consumption of organism only criteria. See Table F-7.
[5] Based on the most stringent water quality criteria from the applicable CTR/NTR water quality criteria and the MCL criteria.

Table F-10. Summary of Reasonable Potential Analysis – Discharge Point 002

CTR No.	Constituent	Most Stringent Water Quality Criteria (C)[5]	Maximum Effluent Conc. (MEC)	Applicable CTR/NTR Water Quality Criteria[4]	Title 22 MCL	TMDL WLAs	RPA Result - Need Limit?	Reason
		µg/L	µg/L	µg/L	µg/L	µg/L		
1	Antimony	6[1]	3	4,300	6	--	No	MEC < C
2	Arsenic	10[1]	17	150	10	--	Yes	MEC > C
4	Cadmium	5[1]	7.1	5.34	5	3.1[2]	Yes	MEC > C, TMDL
5a	Chromium (III)	464.06	28	464.06	--	--	No	MEC < C
5b	Chromium (VI)	11.43	6.6	11.43	---	--	Yes	Trigger 3 (BPJ)
6	Copper	21.66	81	21.66	--	22[3] /17[2]	Yes	MEC > C, TMDL
7	Lead	11.16	220	11.16	--	11[3] /62[2]	Yes	MEC > C, TMDL
8	Mercury	0.051	0.12	0.051	2	--	Yes	MEC > C
9	Nickel	100[1]	12	120.11	100	--	Yes	Trigger 3 (BPJ)
10	Selenium	5	530	5	50	--	Yes	MEC > C
11	Silver	22.12	0.41	22.12	--	--	No	MEC<C
12	Thallium	2[1]	0.29	6.3	2	--	Yes	Trigger 3 (BPJ)
13	Zinc	276.23	2000	276.23	--	159[2]	Yes	MEC > C, TMDL
14	Cyanide	5.2	<5	5.2	200	--	Yes	Trigger 3 (BPJ)
15	2,3,7,8-TCDD	1.4E-8	9.02E-6	1.4E-8	3E-8	--	Yes	MEC > C
53	Pentachlorophenol	1[1]	1.1	8.2	1	--	Yes	MEC > C
68	Bis(2-ethylhexyl)phthalate	4[1]	5.1	5.9	4	--	Yes	MEC > C
70	Butylbenzyl Phthalate	5200	1.3	5,200	--	--	No	MEC < C
79	Diethyl Phthalate	120,000	0.18	120,000	--	--	No	MEC < C
80	Dimethyl Phthalate	2,900,000	<0.18	2,900,000	--	--	No	MEC < C
81	Di-n-Butyl Phthalate	12,000	0.73	12,000	---	--	No	MEC < C
119-125	PCBs	0.00017	0.17	0.00017	0.5	--	Yes	MEC > C

[1] Based on MCL.
[2] Based on TMDL (Wet Weather WLAs)
[3] Based on TMDL (Dry Weather WLAs).
[4] Based on the most stringent water quality criteria from the freshwater (acute and chronic), and human health for consumption of organism only criteria. See Table F-7.
[5] Based on the most stringent water quality criteria from the applicable CTR/NTR water quality criteria and the MCL criteria.

4. WQBEL Calculations

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

i. If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).

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

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

b. WQBELs for cadmium, copper, lead, zinc, ammonia-nitrogen, nitrite-nitrogen, nitrate-nitrogen, and nitrate-nitrogen plus nitrite-nitrogen are based on TMDLs developed for the Los Angeles River Reach 2. The WQBELs for cadmium, copper, lead, and zinc were changed in this Order to reflect the correct wet weather AMELs and MDELs calculated utilizing a "factor based on acute exposure" also known as "ECA acute multiplier" based on Section 1.4 of the SIP. The previous Order No. R4-2010-0087-R contained WQBELs for cadmium, copper, lead, and zinc that have incorrect wet weather AMELs and MDELs calculated utilizing a "factor based on chronic exposure" also known as "ECA chronic multiplier" instead of the "ECA acute multiplier" that correspond to the wet weather WLAs for cadmium, copper, lead, and zinc based on the acute CTR criteria as per the Los Angeles River Metals TMDL. Section IV.C.6.d below demonstrates how the "ECA chronic/acute multiplier" is utilized in the calculations of the AMELs and MDELs. The WQBELs for the cadmium, copper, lead, and zinc wet weather AMELs and MDELs were calculated using the "ECA acute multipier" based on Section 1.4 of the SIP.

WQBELs are established for chromium (VI), mercury, nickel, selenium, cyanide, TCDD equivalents, and PCBs for discharges through Discharge Point 001; and mercury, selenium, TCDD equivalents, and PCBs for Discharge point 002 based on Section 1.4 of the SIP. The WQBELs for antimony, arsenic, thallium, bis(2-ethylhexyl)phthalate, and pentachlorophenol are based on the MCL.

WQBELs for chromium (total), and silver are consistent with the limits included in Order No. R4-2010-0087-R. The Regional Water Board has determined that these numeric effluent limitations continue to be applicable to the Facility, and they have been included based on BPJ.

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 included. However, in accordance with the reopener provision in Section VI.C.1.e, 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 total recoverable copper (dry weather and wet weather) and zinc (wet weather) as examples, the following demonstrates how WQBELs were established for this Order. The tables in Attachment J summarize the development and calculation of all WQBELs for this Order using the process described below.

Concentration-Based Effluent Limitations

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

Calculation of aquatic life AMEL and MDEL:

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

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

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

Where C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order a hardness value of 268 mg/L (as $CaCO_3$) was used for development of hardness-dependent criteria for Discharge Point 001, and a pH of 7.5 was used for pH dependent criteria.

D = The dilution credit, and

B = The ambient background concentration

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

$ECA = C$

When a WLA has been established through a TMDL for a parameter, the WLA is set equal to the ECA. Note that for cadmium, copper, lead, and zinc, the acute criterion was used to develop the wet weather WLA and therefore wet weather WLA for these constituents will become the ECA_{acute}. Chronic criterion was used to develop dry weather WLA and therefore dry weather WLA will become the $ECA_{chronic}$. The chronic criterion is used for dry weather because it is the most protective and the most applicable to dry weather, which occurs for long, uninterrupted periods of time in the Los Angeles Region.

For total recoverable copper the applicable water quality criteria are (reference Table F- 8):

ECA_{acute} = 17 µg/L (TMDL wet weather WLA)

$ECA_{chronic}$ = 22 µg/L (TMDL dry weather WLA)

For total recoverable zinc (wet weather) the applicable water quality criteria is (reference Table F-8):

ECA_{acute} = 159 µg/L (TMDL wet weather WLA)

$ECA_{chronic}$ = Not Applicable (No dry weather WLA in TMDL)

Step 2: For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the

multipliers based on the value of the CV. Equations to develop the multipliers are provided in Section 1.4, Step 3 of the SIP and will not be repeated here.

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

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

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

The number of available data points for copper and zinc are less than 10 samples, so the CVs are set equal to 0.6. The following values were used to develop the acute and chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides these values up to three decimals):

No. of Samples	CV	ECA Multiplier$_{acute\ 99}$	ECA Multiplier$_{chronic\ 99}$
Copper (Dry Weather)			
9	0.6	0.321	0.527
Copper (Wet Weather)			
9	0.6	0.321	0.527
Zinc Wet Weather			
9	0.6	0.321	0.527

Total recoverable copper (dry weather):

LTA_{acute} = Not applicable

$LTA_{chronic}$ = 22 µg/L x 0.527 = 11.6 µg/L

Total recoverable copper (wet weather):

LTA_{acute} = 17 µg/L x 0.321 = 5.46 µg/L

$LTA_{chronic}$ = Not applicable

Total recoverable zinc (wet weather):

LTA_{acute} = 159 µg/L x 0.321 = 51 µg/L

$LTA_{chronic}$ = Not applicable

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

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

Since we only have acute criteria for total recoverable zinc (wet weather), the acute criterion must be used.

Step 4: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as Average Monthly Effluent Limitations (AMEL) and Maximum Daily Effluent Limitation (MDEL). The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the coefficient of variation (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.

AMELaquatic life = LTA x AMELmultiplier 95

MDELaquatic life = LTA x MDELmultiplier 99

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

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

No. of Samples Per Month	CV	$Multiplier_{MDEL\ 99}$	$Multiplier_{AMEL\ 95}$
For Copper			
4	0.6	3.115	1.552
For Zinc			
4	0.6	3.115	1.552

Total recoverable copper (dry weather):

$AMEL_{aquatic\ life}$ = 11.6 x 1.552 = 18 µg/L

$MDEL_{aquatic\ life}$ = 11.6 x 3.115 = 36.1 µg/L

Total recoverable copper (wet weather):

$AMEL_{aquatic\ life}$ = 5.46 x 1.552 = 8.47 µg/L

$MDEL_{aquatic\ life}$ = 5.46 x 3.115 = 17 µg/L

Total recoverable zinc (wet weather):

$AMEL_{aquatic\ life}$ = 51 x 1.552 = 79.2 µg/L

$MDEL_{aquatic\ life}$ = 51 x 3.115 = 159 µg/L

***Calculation of human health AMEL and MDEL**:*

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

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

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

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

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

This step is not applicable for the parameters addressed in this Order.

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

For the parameters subject to the LA River Metals TMDL, such as cadmium, copper, lead, and zinc, a comparison is not necessary and the effluent limitations are applied directly.

Final WQBELs Applicable to Discharge Points 001 and 002:

Parameters	AMEL	MDEL
Total Recoverable Copper (Dry Weather):	18	36.1
Total Recoverable Copper (Wet Weather):	8.47	17
Total Recoverable Zinc (Wet Weather):	79.2	159

For cadmium, copper, lead, and zinc, there are no human health (Consumption of Organism Only) criteria, and WLAs have been established based on the LA River Metals TMDL; therefore, the established effluent limitations are based on aquatic life criteria used for the LA River Metals TMDL WLAs. For chromium VI, nickel, selenium, and cyanide, the effluent limitations are calculated based on chronic aquatic life criteria. For mercury, TCDD equivalents, and PCBs, no aquatic life criteria exist, therefore, the calculated effluent limitations are based on human health criteria (consumption of organisms only). For antimony, arsenic, thallium, pentachlorophenol, and bis(2-ethylhexyl)phthalate, the effluent limitations are based on the MCLs, since the MCLs are more stringent than the aquatic life or human health criteria. These effluent limitations are expected to be protective of the beneficial uses. The final WQBELs for these pollutants for Discharge Points 001 and 002 are summarized in Tables F-13 and F-14, respectively, of this Fact Sheet. The Facility discharges storm water only through Discharge Points 001 and 002, and the discharges occur infrequently. Therefore, maximum daily effluent limitations (MDELs) are prescribed for Discharge Points 001 and 002 in this Order.

5. WQBELs Based on Basin Plan Objectives

The following Basin Plan Objectives, evaluated with respect to effluent monitoring data and Facility operations, are applicable to the Discharger:

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

b. Dissolved Oxygen. This Order addresses dissolved oxygen through receiving water monitoring and receiving water limitations.

c. Turbidity. Where natural turbidity is between 0 to 50 NTU, increases shall not exceed 20%. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%. This Order applies the water quality objective for turbidity as a technology-based effluent limitation.

d. Temperature. The Basin Plan lists temperature requirements for the receiving waters and references the Thermal Plan. The Thermal plan contains a maximum

temperature limitation of 86°F for thermal discharges to the Estuaries. 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,* evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel, a number of aquatic species prevalent in the region. A maximum effluent temperature limitation of 86°F was determined to be appropriate for protection of aquatic life and it is consistent with the maximum temperature limitation of 86°F in the Thermal Plan. Therefore, a maximum effluent temperature limitation of 86°F is included in the permit.

e. **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, U.S. EPA notes that "In a study downstream from a discharge where inert suspended solids were increased to 80 mg/L, the density of macroinvertebrates decreased by 60 percent…". This indicates that suspended solids concentrations of 80 mg/L in the receiving water resulted in adverse effects to aquatic life. As such, the Regional Water Board implemented an MDEL of 75 mg/L and an AMEL of 50 mg/L for the implementation of the narrative water quality objective for solids. These limitations are consistent with the limitations in Order No. R4-2010-0087-R and are retained as the technology-based effluent limitations.

f. **TDS, Sulfate, and Chloride.** The Basin Plan, in Table 3-8, lists water quality objectives for selected parameters in inland surface waters. Water quality objectives for TDS, sulfate, and chloride for the Los Angeles River are established in the Basin Plan and are included in this Order.

6. Whole Effluent Toxicity (WET)

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

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses by aquatic organisms. Detrimental response includes, but is not limited to, decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. In accordance with the Basin Plan, the acute toxicity objective for discharges dictates that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Order No. R4-2010-0087-R contains acute toxicity limitations based on the objectives in the Basin Plan. Data collected on January 24, 2013, and February 26, 2014, yielded exceedances of the acute toxicity limit. The acute toxicity limit only addresses the mortality endpoint

Chronic toxicity is a more stringent requirement than acute toxicity. A chemical at a low concentration can have chronic effects but no acute effects. The chronic toxicity limit addresses the mortality endpoint as well as changes in species growth and reproduction. Because discharge from the Facility may include a number of chemicals, which individually may not be present in toxic concentrations while exhibiting aggregated toxic effects as a whole, this Order prescribes a chronic toxicity effluent limitation and requires chronic toxicity monitoring for the effluent at Discharge Points 001 and 002. The whole effluent toxicity testing requirements are based on U.S. EPA's 2010 Test of Significant Toxicity (TST) hypothesis testing approach. Chronic toxicity results are expressed as "Pass" or "Fail" and "% Effect.

7. Final WQBELs

Table F-11. Summary of Water Quality-based Effluent Limitations – Discharge Point 001

Parameter	Units	Effluent Limitations – Discharge Point 001			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants					
pH	S.U.	—	—	6.5	8.5
Temperature	°F	—	—	—	86
TSS	mg/L	—	75	—	—
	lbs/day[1]	—	102	—	—
Non-conventional Pollutants					
E. coli	CPU/100mL or MPN/100 ml	[2]			
Chronic Toxicity[3]	Pass or Fail, % Effect	--	Pass or % Effect <50	—	—
Total Dissolved Solids	mg/L	—	1,500	—	—
	lbs/day[1]	—	2039	—	—
Chloride	mg/L	—	150	—	—
	lbs/day[1]	—	204	—	—
Sulfate	mg/L	—	350	—	—
	lbs/day[1]	—	476	—	—
Ammonia as Nitrogen[4]	mg/L	—	8.7	—	----
	lbs/day[1]	—	12	—	----
Priority Pollutants					
Antimony, Total Recoverable	µg/L	—	6	—	—
	lbs/day[1]	—	0.0084	—	—
Arsenic, Total Recoverable[5]	µg/L	—	10	—	—
	lbs/day[1]	—	0.014	—	—
Cadmium, Total Recoverable (Wet Weather)[6,7]	µg/L	—	3.1	—	—
	lbs/day[1]	—	0.004	—	—
Chromium (VI)[8]	µg/L	—	16	—	—
	lbs/day[1]	—	0.022	—	—
Copper, Total Recoverable (Wet Weather)[6,7]	µg/L	—	17	—	—
	lbs/day[1]	—	0.0243	—	—

Parameter	Units	Effluent Limitations – Discharge Point 001			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable (Dry Weather)[6,9]	µg/L	—	36	—	—
	lbs/day[1]	—	0.05	—	—
Lead, Total Recoverable (Wet Weather)[6,7]	µg/L	—	62	—	—
	lbs/day[1]	—	0.084	—	—
Lead, Total Recoverable (Dry Weather)[6,9]	µg/L	—	18	—	—
	lbs/day[1]	—	0.025	—	—
Mercury, Total Recoverable[8]	µg/L	—	0.102	—	—
	lbs/day[1]	—	0.00014	—	—
Nickel, Total Recoverable[10]	µg/L	—	100	—	—
	lbs/day[1]	—	0.14	—	—
Selenium, Total Recoverable[8]	µg/L	—	8.2	—	—
	lbs/day[1]	—	0.011	—	—
Thallium[10]	µg/L	—	2	—	—
	lbs/day[1]	—	0.003	—	—
Zinc, Total Recoverable (Wet Weather)[6,7]	µg/L	—	159	—	—
	lbs/day[1]	—	0.22	—	—
Cyanide[8]	µg/L	—	8.5	—	—
	lbs/day[1]	—	0.012	—	—
Pentachlorophenol[10]	µg/L	----	1	—	—
	lbs/day[1]	----	0.0014	—	—
Bis(2-ethylhexyl)Phthalate[10]	µg/L	----	4	—	—
	lbs/day[1]	----	0.005	—	—
PCBs[8,11]	µg/L	—	0.00034	—	—
	lbs/day[1]	—	4.6E-07	—	—
TCDD Equivalents[8]	µg/L	—	2.8E-08	—	—
	lbs/day[1]	—	3.8E-11	—	—

1. The mass-based (lbs/day) limitations are based on a maximum discharge flow of 0.163 MGD of storm water, and are calculated as follows:

   Mass (lbs/day) = 8.34 x C x Q
   where:
   C = concentration for a pollutant, in mg/L
   Q = maximum discharge flow rate in MGD for storm water and fire protection test water.

2. The Los Angeles River Bacteria TMDL contains WLAs of zero days of allowable exceedances of the single sample target of 235/100mL *E.coli* for both dry and wet weather (defined as days with 0.1 inch of rain or greater and the three days following the rain event) and no exceedances of the geometric mean TMDL numeric target of 126/100 mL *E.coli* for general and individual NPDES permits. The calculation of the rolling 30-day geometric mean requires a statistically sufficient number of samples (generally, at least five equally spaced samples over a 30-day period).
3. The maximum daily effluent limitation (MDEL) is exceeded when a toxicity test results in a "fail," and the percent effect is greater than or equal to 0.50.
4. Effluent limitations are based Los Angeles River Nutrients TMDL.
5. Limit is based on previous Order No. R4-2010-0087-R and Title 22 maximum contaminant level (MCL).
6. Effluent limitations are based on the Los Angeles River Metals TMDL (Reach 2).
7. The wet weather limits apply when the maximum daily flow in the Los Angeles River at Wardlow gauge station (F319-R) is greater than or equal to 500 cubic feet per second (cfs).
8. Effluent limitations are based on the CTR and SIP procedures.

9. The dry weather limits are applicable when flow in the Los Angeles River at the Wardlow stream gauge station (F319-R) is less than 500 cfs.
10. The limits are based on the MCL
11. PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-10166, Arclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1245, Aroclor-1254, and Aroclor-1260.

Table F-12. Summary of Water Quality-based Effluent Limitations – Discharge Point 002

Parameter	Units	Effluent Limitations – Discharge Point 002			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants					
pH	S.U.	—	—	6.5	8.5
Temperature	°F	—	—	—	86
TSS	mg/L	—	75	—	—
	lbs/day[1]	—	425	—	—
Non-conventional Pollutants					
E. coli	CPU/100mL or MPN/100 ml	[2]			
Chronic Toxicity[3]	Pass or Fail, % Effect	--	Pass or % Effect <50	—	—
Total Dissolved Solids	mg/L	—	1,500	—	—
	lbs/day[1]	—	8507	—	—
Chloride	mg/L	—	150	—	—
	lbs/day[1]	—	851	—	—
Sulfate	mg/L	—	350	—	—
	lbs/day[1]	—	1985	—	—
Ammonia as Nitrogen[4]	mg/L	—	8.7	—	---
	lbs/day[1]	—	49	—	---
Priority Pollutants					
Arsenic, Total Recoverable[5]	µg/L	—	10	—	—
	lbs/day[1]	—	0.06	—	—
Cadmium, Total Recoverable (Wet Weather)[6,7]	µg/L	—	3.1	—	—
	lbs/day[1]	—	0.02	—	—
Chromium (VI)[8]	µg/L	—	16	—	—
	lbs/day[1]	—	0.09	—	—
Copper, Total Recoverable (Wet Weather)[6,7]	µg/L	—	17	—	—
	lbs/day[1]	—	0.1	—	—
Copper, Total Recoverable (Dry Weather)[6,9]	µg/L	—	36	—	—
	lbs/day[1]	—	0.2	—	—
Lead, Total Recoverable (Wet Weather)[6,7]	µg/L	—	62	—	—
	lbs/day[1]	—	0.35	—	—
Lead, Total Recoverable (Dry Weather)[6,9]	µg/L	—	18	—	—
	lbs/day[1]	—	0.1	—	—

Parameter	Units	Effluent Limitations – Discharge Point 002			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Mercury, Total Recoverable[8]	µg/L	—	0.102	—	—
	lbs/day[1]	—	0.0006	—	—
Nickel, Total Recoverable[10]	µg/L	—	100	—	—
	lbs/day[1]	—	0.57	—	—
Selenium, Total Recoverable[8]	µg/L	—	8.2	—	—
	lbs/day[1]	—	0.05	—	—
Thallium[10]	µg/L	—	2	—	—
	lbs/day[1]	—	0.01	—	—
Zinc, Total Recoverable (Wet Weather)[6,7]	µg/L	—	159	—	—
	lbs/day[1]	—	0.9	—	—
Cyanide[8]	µg/L	—	8.5	—	—
	lbs/day[1]	—	0.05	—	—
Pentachlorophenol[10]	µg/L	—	1	—	—
	lbs/day[1]	—	0.006	—	—
Bis(2-ethylhexyl)Phthalate[10]	µg/L	—	4	—	—
	lbs/day[1]	—	0.02	—	—
PCBs[8,11]	µg/L	—	0.00034	—	—
	lbs/day[1]	—	1.9E-06	—	—
TCDD Equivalents[8]	µg/L	—	2.8E-08	—	—
	lbs/day[1]	—	1.6E-10	—	—

1. The mass-based (lbs/day) limitations are based on a maximum discharge flow of 0.680 MGD of storm water and are calculated as follows:

   Mass (lbs/day) = 8.34 x C x Q

   where:

   C = concentration for a pollutant, in mg/L

   Q = maximum discharge flow rate in MGD for storm water.
2. The Los Angeles River Bacteria TMDL contains WLAs of zero days of allowable exceedances of the single sample target of 235/100mL *E.coli* for both dry and wet weather (defined as days with 0.1 inch of rain or greater and the three days following the rain event) and no exceedances of the geometric mean TMDL numeric target of 126/100 mL *E.coli* for general and individual NPDES permits. The calculation of the rolling 30-day geometric mean requires a statistically sufficient number of samples (generally, at least five equally spaced samples over a 30-day period).
3. The maximum daily effluent limitation (MDEL) is exceeded when a toxicity test results in a "fail," and the percent effect is greater than or equal to 0.50.
4. Effluent limitations are based Los Angeles River Nutrients TMDL.
5. Limit is based on previous Order No. R4-2010-0087-R and Title 22 maximum contaminant level (MCL).
6. Effluent limitations are based on the Los Angeles River Metals TMDL (Reach 2).
7. The wet weather limits apply when the maximum daily flow in the Los Angeles River at Wardlow gauge station (F319-R) is greater than or equal to 500 cubic feet per second (cfs).
8. Effluent limitations are based on the CTR and SIP procedures.
9. The dry weather limits are applicable when flow in the Los Angeles River at the Wardlow stream gauge station (F319-R) is less than 500 cfs.
10. The limits are based on the MCL.
11. PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-10166, Arclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1245, Aroclor-1254, and Aroclor-1260.

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of the removal of the residual chlorine limitation for the discharge through Discharge Point 001, and the acute toxicity effluent limitations, chromium total, silver, and the average monthly effluent limitations for the discharges through Discharge Points 001 and 002. As discussed below, the relaxation of effluent limitations for the discharges through Discharge Points 001 and 002 is consistent with the anti-backsliding exceptions allowed in the CWA and federal regulations.

The federal anti-backsliding provisions allow for relaxation of effluent limitations when new information (other than revised regulations, guidance, or test methods) is available that was not available at the time of permit issuance which would have justified a less stringent effluent limitation.

The residual chlorine limitation was removed because the fire protection test water is no longer discharged through Discharge Point 001. The fire protection test water is either routed to the basement closed loop recirculation system or pumped into a container for offsite disposal. Therefore, the removal of the residual chlorine limitation is consistent with the exceptions to the anti-backsliding requirements of the CWA and federal regulations based on new information (i.e., fire protection test water is no longer discharged through Discharge Point 001).

In accordance with the Basin Plan, the acute toxicity objective for discharges dictates that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Order No. R4-2010-0087-R contains acute toxicity limitations based on the objectives in the Basin Plan. Data collected on January 24, 2013, and February 26, 2014, yielded exceedances of the acute toxicity limit. The acute toxicity limit only addresses the mortality endpoint.

Chronic toxicity is a more stringent requirement than acute toxicity. A chemical at a low concentration can have chronic effects but no acute effects. The chronic toxicity limit addresses the mortality endpoint and as well as changes in species growth and reproduction. Because discharge from the Facility may include a number of chemicals, which individually may not be present in toxic concentrations while exhibiting aggregated toxic effects as a whole, this Order prescribes a chronic toxicity effluent limitation and requires chronic toxicity monitoring for the effluent at Discharge Points 001 and 002. The acute toxicity effluent limitations have been removed. The removal of the acute toxicity effluent limitations for discharges through Discharge Points 001 and 002 is consistent with the exceptions to the anti-backsliding requirements of the CWA and federal regulations since it has been replaced with the more stringent chronic toxicity limit.

The reasonable potential analysis of the monitoring data (4th Quarter 2010 through 3rd Quarter 2015) for chromium total and silver did not indicate reasonable potential to exceed water quality standards. Therefore, the effluent limitations for these pollutants were removed. The removal of the effluent limitations for these pollutants is consistent with the exceptions to the anti-backsliding requirements of the CWA and federal

regulations since the data did not demonstrate reasonable potential to exceed water quality standards. Monitoring for these pollutants is required in this permit.

The average monthly effluent limitations for discharges through Discharge Points 001 and 002 were removed based on new information submitted by Owens indicating that the facility discharges storm water only and it occurs infrequently. The removal of the average monthly effluent limitations for discharges through Discharge Points 001 and 002 is consistent with the exceptions to the anti-backsliding requirements of the CWA and federal regulations based on the new information (i.e., only storm water is discharged).

2. Antidegradation Policies

40 C.F.R. section 131.12 requires that the state water quality standards include an anti-degradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

This NPDES permit includes effluent limitations to ensure that the discharge does not adversely impact the beneficial uses of the Los Angeles River or degrade water quality. Daily maximum effluent limitations are included for discharges through Discharge Points 001 and 002 and are consistent with permits recently issued to facilities with similar discharges within this Region. The inclusion of the effluent limitations and prohibitions in the NPDES permit, which ensure that any discharge would not result in the lowering of water quality, coupled with the fact that the discharge occurs infrequently, support the conclusion that no degradation will arise as a result of reissuing this Order.

This Order does not provide for an increase in the permitted design flow or allow for a reduction in the level of treatment. The effluent limitations in this Order hold the Discharger to performance levels that will not cause or contribute to water quality impairments or water quality degradation. The effluent limitations, receiving water limitations, and monitoring requirements ensure that excursions in excess of the water quality limits that are designed to protect beneficial uses will be apparent and addressed immediately. Further, compliance with these requirements will result in the use of best practicable treatment or control of the discharge. Therefore, the permitted discharge is consistent with the state's antidegradation policy.

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD, oil and grease, turbidity, total suspended solids, phenols, sulfides, and settleable solids. Restrictions on these pollutants are discussed in section IV.B of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

WQBELs have been derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 C.F.R. Section 131.38. The procedures for calculating the individual water quality-based effluent limitations for

priority pollutants are based on the CTR implemented by the SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 C.F.R. section 131.21(c)(1).

4. Mass-Based Effluent Limitations

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

This Order included mass-based limitations calculated based on the new storm water discharge flow rates submitted by the Discharger.

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)

5. Summary of Final Effluent Limitations

a. Summary of Final Effluent Limitations - Discharge Point 001

Table F-13. Summary of Final Effluent Limitations – Discharge Point 001

Parameter	Units	Effluent Limitations – Discharge Point 001				Basis [1]
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Conventional Pollutants						
pH	S.U.	—	—	6.5	8.5	P; BP
BOD_5 20°C	mg/L	—	30	—	—	P; BPJ
	lbs/day[2]	—	41	—	—	
Total Suspended Solids	mg/L	—	75	—	—	P; BPJ
	lbs/day[2]	—	102	—	—	
Oil & Grease	mg/L	—	15	—	—	P; BPJ
	lbs/day[2]	—	20	—	—	
Non-conventional Pollutants						
E. coli	CFU/100 ml or MPN/100 ml	[3]				TMDL
Temperature	°F	—	—	—	86	P, BP, TP
Settleable Solids	mL/L	—	0.3	—	—	P; BPJ
Turbidity	NTU	—	75	—	—	P; BPJ

Parameter	Units	Effluent Limitations – Discharge Point 001				Basis [1]
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Chronic Toxicity[4]	Pass or Fail, % Effect	--	Pass or % Effect <50	—	—	BP
Phenols	mg/L	—	1.0	—	—	P; BPJ
	lbs/day[2]	—	1.4	—	—	
Sulfides	mg/L	—	0.1	—	—	P; BPJ
	lbs/day[2]	—	0.14	—	—	
Fluoride	mg/L	—	1.0	—	—	P; BPJ
	lbs/day[2]	—	1.4	—	—	
Total Dissolved Solids	mg/L	—	1,500	—	—	P, BP
	lbs/day[2]	—	2039	—	—	
Chloride	mg/L	—	150	—	—	P; BP
	lbs/day[2]	—	204	—	—	
Sulfate	mg/L	—	350	—	—	P; BP
	lbs/day[2]	—	476	—	—	
Ammonia as Nitrogen[5]	mg/L	—	8.7	—	----	TMDL
	lbs/day[2]	—	11.83	—	----	
Priority Pollutants						
Antimony, Total Recoverable	µg/L	—	6	—	—	SIP, MCL
	lbs/day[1]	—	0.0084	—	—	
Arsenic, Total Recoverable[6]	µg/L	—	10	—	—	P, BPJ, MCL
	lbs/day[2]	—	0.014	—	—	
Cadmium, Total Recoverable (Wet Weather)[7,8]	µg/L	—	3.1	—	—	TMDL
	lbs/day[2]	—	0.004	—	—	
Chromium (VI)[9]	µg/L	—	16	—	—	CTR/SIP
	lbs/day[2]	—	0.022	—	—	
Copper, Total Recoverable (Wet Weather)[7,8]	µg/L	—	17	—	—	TMDL
	lbs/day[2]	—	0.024	—	—	
Copper, Total Recoverable (Dry Weather)[7,10]	µg/L	—	36	—	—	TMDL
	lbs/day[2]	—	0.05	—	—	
Lead, Total Recoverable (Wet Weather)[7,8]	µg/L	—	62	—	—	TMDL
	lbs/day[2]	—	0.09	—	—	
Lead, Total Recoverable (Dry Weather)[7,10]	µg/L	—	18	—	—	TMDL
	lbs/day[2]	—	0.025	—	—	
Mercury, Total Recoverable[9]	µg/L	—	0.102	—	—	CTR/SIP
	lbs/day[2]	—	0.00014	—	—	
Nickel, Total Recoverable[11]	µg/L	—	100	—	—	MCL
	lbs/day[2]	—	0.14	—	—	
Selenium, Total Recoverable[9]	µg/L	—	8.2	—	—	CTR/SIP
	lbs/day[2]	—	0.011	—	—	

Parameter	Units	Effluent Limitations – Discharge Point 001				Basis [1]
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Thallium[11]	µg/L	---	2	—	—	MCL
	lbs/day[2]	---	0.003	—	—	
Zinc, Total Recoverable (Wet Weather)[7,8]	µg/L	—	159	—	—	TMDL
	lbs/day[2]	—	0.22	—	—	
Cyanide[9]	µg/L	—	8.5	—	—	CTR/SIP
	lbs/day[2]	—	0.012	—	—	
Pentachlorophenol[11]	µg/L	—	1	—	—	MCL
	lbs/day[2]	—	0.0014	—	—	
Bis(2-ethylhexyl)Phthalate[11]	µg/L	—	4	—	—	MCL
	lbs/day[2]	—	0.006	—	—	
PCBs[9,12]	µg/L	—	0.00034	—	—	CTR/SIP
	lbs/day[2]	—	4.6E-07	—	—	
TCDD Equivalents[9]	µg/L	—	2.8E-08	—	—	CTR/SIP
	lbs/day[2]	—	3.8E-11	—	—	

1. P = Previous Order No. R4-2010-0087-R; BP: Basin Plan; BPJ = Best Professional Judgment; TP = Thermal Plan; MCL = Maximum Contaminant Level; TMDL = Total Maximum Daily Load; CTR = California Toxics Rule; SIP = State Implementation Plan.
2. The mass-based (lbs/day) limitations are based on a maximum discharge flow of 0.163 MGD of storm water and are calculated as follows:

   Mass (lbs/day) = 8.34 x C x Q
   where:
   C = concentration for a pollutant, in mg/L
   Q = maximum discharge flow rate in MGD for storm water.
3. The Los Angeles River Bacteria TMDL contains WLAs of zero days of allowable exceedances of the single sample target of 235/100mL *E.coli* for both dry and wet weather (defined as days with 0.1 inch of rain or greater and the three days following the rain event) and no exceedances of the geometric mean TMDL numeric target of 126/100 mL *E.coli* for general and individual NPDES permits. The calculation of the rolling 30-day geometric mean requires a statistically sufficient number of samples (generally, at least five equally spaced samples over a 30-day period).
4. The maximum daily effluent limitation (MDEL) is exceeded when a toxicity test results in a "fail," and the percent effect is greater than or equal to 0.50.
5. Effluent limitations are based Los Angeles River Nutrients TMDL.
6. Limit is based on previous Order No. R4-2010-0087-R and Title 22 maximum contaminant level (MCL).
7. Effluent limitations are based on the Los Angeles River Metals TMDL (Reach 2).
8. The wet weather limits apply when the maximum daily flow in the Los Angeles River at Wardlow gauge station (F319-R) is greater than or equal to 500 cubic feet per second (cfs).
9. Effluent limitations are based on the CTR and SIP procedures.
10. The dry weather limits are applicable when flow in the Los Angeles River at the Wardlow stream gauge station (F319-R) is less than 500 cfs.
11. The limits are based on the MCL
12. PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-10166, Arclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1245, Aroclor-1254, and Aroclor-1260.

b. Summary of Final Effluent Limitations - Discharge Point 002

Table F-14. Summary of Final Effluent Limitations – Discharge Point 002

Parameter	Units	Effluent Limitations – Discharge Point 002				Basis [1]
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Conventional Pollutants						
pH	S.U.	—	—	6.5	8.5	P; BP
BOD_5 20	mg/L	—	30	—	—	P; BPJ
	lbs/day[2]	—	170	—	—	
TSS	mg/L	—	75	—	—	P; BPJ
	lbs/day[2]	—	425	—	—	
Oil & Grease	mg/L	—	15	—	—	P; BPJ
	lbs/day[2]	—	85	—	—	
Non-conventional Pollutants						
E. coli	CPU/100ml or MPN/100 ml	[3]				TMDL
Temperature	°F	—	—	—	86	P, BP, TP
Settleable Solids	mL/L	—	0.3	—	—	P; BPJ
Turbidity	NTU	—	75	—	—	P; BPJ
Chronic Toxicity[4]	Pass or Fail, % Effect	--	Pass or % Effect <50	—	—	BP
Phenols	mg/L	---	1.0	—	—	P; BPJ
	lbs/day[2]	---	6	—	—	
Sulfides	mg/L	---	0.1	—	—	P; BPJ
	lbs/day[2]	---	0.6	—	—	
Fluoride	mg/L	---	1.0	—	—	P; BPJ
	lbs/day[2]	---	6	—	—	
Total Dissolved Solids	mg/L	—	1,500	—	—	P, BP
	lbs/day[2]	—	8507	—	—	
Chloride	mg/L	—	150	—	—	P; BP
	lbs/day[2]	—	851	—	—	
Sulfate	mg/L	—	350	—	—	P; BP
	lbs/day[2]	—	1985	—	—	
Ammonia as Nitrogen[5]	mg/L	—	8.7	—	--	TMDL
	lbs/day[2]	—	49	—	--	
Priority Pollutants						
Arsenic, Total Recoverable[6]	µg/L	—	10	—	—	P, BPJ, MCL
	lbs/day[2]	—	0.06	—	—	
Cadmium, Total Recoverable (Wet Weather)[7,8]	µg/L	—	3.1	—	—	TMDL
	lbs/day[2]	—	0.02	—	—	
Chromium VI[8]	µg/L	—	16	—	—	CTR/SIP
	lbs/day[2]	—	0.09	—	—	
Copper, Total Recoverable (Wet Weather)[7,8]	µg/L	—	17	—	—	TMDL
	lbs/day[2]	—	0.1	—	—	

Parameter	Units	Effluent Limitations – Discharge Point 002				Basis [1]
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Copper, Total Recoverable (Dry Weather)[7,10]	µg/L	—	36	—	—	TMDL
	lbs/day[2]	—	0.2	—	—	
Lead, Total Recoverable (Wet Weather)[7,8]	µg/L	—	62	—	—	TMDL
	lbs/day[2]	—	0.35	—	—	
Lead, Total Recoverable (Dry Weather)[7,10]	µg/L	—	18	—	—	TMDL
	lbs/day[2]	—	0.1	—	—	
Mercury, Total Recoverable[9]	µg/L	—	0.102	—	—	CTR/SIP
	lbs/day[2]	—	0.0006	—	—	
Nickel, Total Recoverable[11]	µg/L	—	100	—	—	MCL
	lbs/day[2]	—	0.57	—	—	
Selenium, Total Recoverable[9]	µg/L	—	8.2	—	—	CTR/SIP
	lbs/day[2]	—	0.05	—	—	
Thallium[11]	µg/L	---	2	—	—	MCL
	lbs/day[2]	---	0.01	—	—	
Zinc, Total Recoverable (Wet Weather)[7,8]	µg/L	—	159	—	—	TMDL
	lbs/day[2]	—	0.9	—	—	
Cyanide[9]	µg/L	—	8.5	—	—	CTR/SIP
	lbs/day[2]	—	0.05	—	—	
Pentachlorophenol[11]	µg/L	—	1	—	—	MCL
	lbs/day[2]	—	0.006	—	—	
Bis(2-ethylhexyl)Phthalate[11]	µg/L	—	4	—	—	MCL
	lbs/day[2]	—	0.02	—	—	
PCBs[9,12]	µg/L	—	0.00034	—	—	CTR/SIP
	lbs/day[2]	—	1.9E-06	—	—	
TCDD Equivalents[9]	µg/L	—	2.8E-08	—	—	CTR/SIP
	lbs/day[2]	—	1.6E-10	—	—	

1. P = Previous Order No. R4-2010-0087-R; BP: Basin Plan; BPJ = Best Professional Judgment; TP = Thermal Plan; MCL = Maximum Contaminant Level; TMDL = Total Maximum Daily Load; CTR = California Toxics Rule; SIP = State Implementation Plan.
2. The mass-based (lbs/day) limitations are based on a maximum discharge flow of 0.680 MGD of storm water, and are calculated as follows:

   Mass (lbs/day) = 8.34 x C x Q
   where: C = concentration for a pollutant, in mg/L
   Q = maximum discharge flow rate in MGD for storm water.
3. The Los Angeles River Bacteria TMDL contains WLAs of zero days of allowable exceedances of the single sample target of 235/100mL *E.coli* for both dry and wet weather (defined as days with 0.1 inch of rain or greater and the three days following the rain event) and no exceedances of the geometric mean TMDL numeric target of 126/100 mL *E.coli* for general and individual NPDES permits. The calculation of the rolling 30-day geometric mean requires a statistically sufficient number of samples (generally, at least five equally spaced samples over a 30-day period).
4. The maximum daily effluent limitation (MDEL) is exceeded when a toxicity test results in a “fail,” and the percent effect is greater than or equal to 0.50.
5. The effluent limitations are based on the LA River Nutrients TMDL.
6. Limit is based on previous Order No. R4-2010-0087-R and Title 22 maximum contaminant level (MCL).
7. Effluent limitations are based on the Los Angeles River Metals TMDL (Reach 2).

8. The wet weather limits apply when the maximum daily flow in the Los Angeles River at Wardlow gauge station (F319-R) is greater than or equal to 500 cubic feet per second (cfs).
9. Effluent limitations are based on the CTR and SIP procedures.
10. The dry weather limits are applicable when flow in the Los Angeles River at the Wardlow stream gauge station (F319-R) is less than 500 cfs.
11. The limits are based on the MCL
12. PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-10166, Arclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1245, Aroclor-1254, and Aroclor-1260.

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 this Order are based upon the water quality objectives contained in the Basin Plan. As such, they are a required part of the 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. section 123 and the previous Order. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new federal

regulations, modification in toxicity requirements, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

a. **Initial Investigation Toxicity Reduction Evaluation Workplan.** This provision is based on section 4 of the SIP, Toxicity Control Provisions.

3. Best Management Practices and Pollution Prevention

These provisions are based on section 122.44(k) and includes the requirement to develop and implement a SWPPP, BMPP and SCP or a SPCC Plan.

4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of section 122.41(e).

5. Compliance Schedules – Not Applicable

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

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

A. Influent Monitoring – Not Applicable

B. Effluent Monitoring

Monitoring for those pollutants expected to be present in the discharge from Monitoring Locations EFF-001 and EFF-002 at Discharge Points 001 and 002, respectively, is required as shown in the proposed MRP. To determine compliance with effluent limitations, the monitoring requirements for pollutants that have effluent limitations are once per discharge event. Monitoring for additional pollutants is required based on pollutants commonly associated with similar operations, and is consistent with the monitoring requirements contained in the MRP for Order No. R4-2010-0087-R. The frequency of monitoring for residual chlorine was changed from once per discharge event to annually. Monitoring for toxicity, and TCDD equivalents is annually.

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

The annual storm water monitoring is required during the first discharge event of the wet season (October 1 – May 30).

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth. A chemical at a low

concentration can have chronic effects but no acute effects. For this Order, chronic toxicity monitoring in the discharge is required. The chronic toxicity testing requirements are based on USEPA's 2010 TST hypothesis testing approach.

D. Receiving Water Monitoring

1. Surface Water

The discharge from the facility is infrequent. During the past five years, discharges to surface water occurred nine times. As established in the previous Order, R4-2010-0087-R, the Facility's discharge point is approximately 4.5 miles away from the receiving water and the storm drain system passes through approximately 10 laterals prior to reaching the Los Angeles River. Therefore, the annual receiving water sampling at station RSW-001 was removed. This action is in accordance with 40 Code of Federal Regulations (CFR) 122.62(a)(2).

The NPDES permit regulates the quality of the effluent at the end of pipe. Although the receiving water sampling was removed, compliance with the receiving water standards can still be assessed utilizing the effluent data from the outfall.

The Discharger is required to report the maximum daily flow in the Los Angeles River, at the Los Angeles County Department of Public Works' Willow Street Gage Station at Wardlow (Wardlow gauging station F319-R). This station is designated as RSW-002 in this Order. The stream flow data can be obtained by contacting LACDPW through Mr. Arthur Gotingco at (626)458-6379 or at agoting@dpw.lacounty.gov. The data for this station is downloaded once a month with a 1-2 week processing time for the provisional data. This data shall be used to determine wet weather and dry weather conditions for compliance with the effluent limitations set forth in this Order.

2. Groundwater – Not Applicable

E. Other Monitoring Requirements – Not Applicable

VIII. PUBLIC PARTICIPATION

The Regional Water Board has considered the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for Owens-Brockway Glass Container, Incorporated. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board 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. Notification was provided to all interested persons through email, and newspaper.

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 required to be submitted either in person or by mail to the Executive Office at the Regional Water Board at 320 West 4th Street, Suite 200, Los Angeles, CA 90013, or by email to losangeles@waterboards.ca.gov with a copy to 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 **February 11, 2016.**

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: **March 10, 2016**
Time: **9:00 a.m.**
Location: **Metropolitan Water District of Southern California**
700 North Alameda Street
Los Angeles, California

Interested persons were invited to attend. At the public hearing, the Regional Water Board heard testimony, if any, pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing. Oral testimony was heard; however, for accuracy of the record, important testimony was requested to be 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 (ROWD), tentative WDRs, comments received, and other supporting documents are on file and may be inspected at the Regional Water Board's office at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. 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 notification list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this Facility, and provide a name, mailing address, email address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Rosario Aston at (213) 576-6653 or at 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 Order 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 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

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 VI.A.4. below have occurred.

E. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

V. List of Significant Materials

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

VI. Description of Potential Pollutant Sources

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

1. **Industrial Processes.** Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

2. **Material Handling and Storage Areas.** Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the 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 CFR, Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (USEPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 Code of Federal Regulations [CFR], Parts 110, 117, and 302).

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

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

   All non-storm water discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the 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 of the general permit for Dischargers of Storm Water Associated with Industrial Activities (State Board Order No. 2014-0057-DWQ, NPDES No. CAS000001, adopted on April 1, 2014) 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 Conditions of the general permit for Dischargers of Storm Water Associated with Industrial Activities 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 below. The last column of Table B, "Best Management Practices", should be completed in accordance with section VIII below.

VII. Assessment of Potential Pollutant Sources

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

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

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

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

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

VIII. Storm Water Best Management Practices

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

TABLE B

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

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

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

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

A. Non-Structural BMPs

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

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

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

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

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

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

5. **Treatment.** This includes inlet controls, infiltration devices, 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 X.E., for implementing SWPPP revisions, (v) any incidents of non-compliance and the corrective actions taken, and (vi) a certification that the facility operator is in compliance with this Permit. If the above certification cannot be provided, explain in the evaluation report why the facility operator is not in compliance with this Permit. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Standard Provisions V.B.5 of Attachment D.

X. SWPPP General Requirements

A. The SWPPP shall be retained on site and made available upon request of a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.

B. The Regional Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this section. As requested by the Regional Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the 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 (µg/L) in this attachment 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
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Gamma-BHC (Lindane)	0.02

Table 2d – PESTICIDES – PCBs*	GC
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	1,12-Trichloroethane	79005	[1]
43	Trichloroethylene	79016	[1]
44	Vinyl Chloride	75014	[1]
45	2-Chlorophenol	95578	[1]
46	2,4-Dichlorophenol	120832	[1]
47	2,4-Dimethylphenol	115679	[1]

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

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
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 CFR 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 Order) 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 – RPA AND EFFLUENT LIMITATIONS CALCULATIONS

Fact Sheet Attachment J
Draft Reasonable Potential Analysis and WQBELs Calculations
Owens-Brockway Glass, Incoporated (Discharge Point 001)

					CTR Water Quality Criteria (ug/L)									REASONABLE POTENT						
					Freshwater		Saltwater		Human Health for consumption of:		LA River TMDL									
CTR#	Parameters	Units	CV	MEC	C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only	Dry Weather WLAs (Based on Chronic CTR)	Wet Weather WLAs (Based on Acute CTR)	Lowest C	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 conc (ug/L)	If all B is ND, is MDL>C?
1	Antimony	ug/L	0.6	13						4300.00			4300.00	No	No	N				
2	Arsenic	ug/L	0.6	110	340.00	150.00							150.00	No	No	N				
3	Beryllium	ug/L	0.6	No Criteria						Narrative			No Criteria	No Criteria	No Criteria	N				
4	**Cadmium (CTR)**	**ug/L**	**0.6**	**55**	**13.73**	**5.34**				**Narrative**			**5.34**	**Yes**	**Yes**	**N**				
4	**Cadmium (TMDL Wet Weather)**	**ug/L**	**0.6**	**55**								**3.10**	**3.10**	**Yes**	**Yes, TMDL**	**N**				
5a	Chromium (III)	ug/L	0.6	260	3893.32	464.06				Narrative			464.06	No	No	N				
5b	Chromium (VI)	ug/L	0.6	30	16.29	11.43				Narrative			11.43	Yes	Yes	N				
6	**Copper (CTR)**	**ug/L**	**0.6**	**110**	**35.44**	**21.66**							**21.66**	**Yes**	**Yes**	**N**				
6	**Copper (TMDL Dry Weather)**	**ug/L**	**0.6**	**110**							**22.00**		**22.00**	**Yes**	**Yes, TMDL**	**N**				
6	Copper (TMDL Wet Weather)	**ug/L**	**0.6**	**110**								**17.00**	**17.00**	**Yes**	**Yes, TMDL**	**N**				
7	**Lead (CTR)**	**ug/L**	**0.6**	**430**	**286.38**	**11.16**				**Narrative**			**11.16**	**Yes**	**Yes**	**N**				
7	**Lead (TMDL Dry Weather)**	**ug/L**	**0.6**	**430**							**11.00**		**11.00**	**Yes**	**Yes, TMDL**	**N**				
7	**Lead TMDL Wet Weather)**	**ug/L**	**0.6**	**430**								**62.00**	**62.00**	**Yes**	**Yes, TMDL**	**N**				
8	Mercury	ug/L	0.6	0.16	Reserved	Reserved				0.051			0.051	Yes	Yes	N				
9	Nickel	ug/L	0.6	180	1080.28	120.11				4600.00			120.11	Yes	Yes	N				
10	Selenium	ug/L	0.6	4900	20.00	5.00				Narrative			5.00	Yes	Yes	N				
11	Silver	ug/L	0.6	2.9	22.12								22.12	No	No	N				
12	Thallium	ug/L	0.6	11						6.30			6.30	Yes	Yes	N				
13	**Zinc (CTR)**	**ug/L**	**0.6**	**3600**	**276.23**	**276.23**							**276.23**	**Yes**	**Yes**	**N**				
13	**Zinc (TMDL Wet Weather)**	**ug/L**	**0.6**	**3600**								**159.00**	**159.00**	**Yes**	**Yes, TMDL**	**N**				
14	Cyanide	ug/L	0.6	5.9	22.00	5.20				220000.00			5.20	Yes	Yes	N				
15	Asbestos	Fibers	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
16	2,3,7,8 TCDD	ug/L	0.6	9.27E-06						0.000000014			0.000000014	Yes	Yes	N				
17	Acrolein	ug/L	0.6	0.44						780			780	No	No	N				
18	Acrylonitrile	ug/L	0.6	0.27						0.66			0.660	No	No	N				
19	Benzene	ug/L	0.6	0.23						71			71.0	No	No	N				
20	Bromoform	ug/L	0.6	0.23						360			360.0	No	No	N				
21	Carbon Tetrachloride	ug/L	0.6	0.32						4.4			4.40	No	No	N				
22	Chlorobenzene	ug/L	0.6	0.21						21000			21000	No	No	N				
23	Chlorodibromomethane	ug/L	0.6	0.29						34			34.00	No	No	N				
24	Chloroethane	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
25	2-Chloroethylvinyl ether	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
26	Chloroform	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
27	Dichlorobromomethane	ug/L	0.6	0.28						46			46.00	No	No	N				
28	1,1-Dichloroethane	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
29	1,2-Dichloroethane	ug/L	0.6	0.24						99			99.00	No	No	N				
30	1,1-Dichloroethylene	ug/L	0.6	0.34						3.2			3.200	No	No	N				
31	1,2-Dichloropropane	ug/L	0.6	0.18						39			39.00	No	No	N				
32	1,3-Dichloropropylene	ug/L	0.6	0.51						1700			1700	No	No	N				
33	Ethylbenzene	ug/L	0.6	0.17						29000			29000	No	No	N				
34	Methyl Bromide	ug/L	0.6	0.12						4000			4000	No	No	N				
35	Methyl Chloride	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
36	Methylene Chloride	ug/L	0.6	0.25						1600			1600.0	No	No	N				
37	1,1,2,2-Tetrachloroethane	ug/L	0.6	0.18						11			11.00	No	No	N				
38	Tetrachloroethylene	ug/L	0.6	0.27						8.85			8.9	No	No	N				
39	Toluene	ug/L	0.6	0.22						200000			200000	No	No	N				
40	1,2-Trans-Dichloroethylene	ug/L	0.6	0.23						140000			140000	No	No	N				
41	1,1,1-Trichloroethane	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
42	1,1,2-Trichloroethane	ug/L	0.6	0.25						42			42.0	No	No	N				
43	Trichloroethylene	ug/L	0.6	0.35						81			81.0	No	No	N				
44	Vinyl Chloride	ug/L	0.6	0.33						525			525	No	No	N				
45	2-Chlorophenol	ug/L	0.6	0.28						400			400	No	No	N				
46	2,4-Dichlorophenol	ug/L	0.6	0.26						790			790	No	No	N				
47	2,4-Dimethylphenol	ug/L	0.6	0.3						2300			2300	No	No	N				
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L	0.6	0.33						765			765.0	No	No	N				
49	2,4-Dinitrophenol	ug/L	0.6	1.6						14000			14000	No	No	N				
50	2-Nitrophenol	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
51	4-Nitrophenol	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
53	Pentachlorophenol	ug/L	0.6	5.2	14.42	11.06				8.2			8.20	No	No	N				
54	Phenol	ug/L	0.6	0.16						4600000			4600000	No	No	N				
55	2,4,6-Trichlorophenol	ug/L	0.6	0.22						6.5			6.5	No	No	N				
56	Acenaphthene	ug/L	0.6	0.31						2700			2700	No	No	N				
57	Acenaphthylene	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
58	Anthracene	ug/L	0.6	0.28						110000			110000	No	No	N				

					CTR Water Quality Criteria (ug/L)									REASONABLE POTENT						
					Freshwater		Saltwater		Human Health for consumption of:		LA River TMDL									
CTR#	Parameters	Units	CV	MEC	C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only	Dry Weather WLAs (Based on Chronic CTR)	Wet Weather WLAs (Based on Acute CTR)	Lowest C	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 conc (ug/L)	If all B is ND, is MDL>C?
59	Benzidine	ug/L	0.6							0.00054			0.00054			N				
60	Benzo(a)Anthracene	ug/L	0.6							0.049			0.0490			N				
61	Benzo(a)Pyrene	ug/L	0.6							0.049			0.0490			N				
62	Benzo(b)Fluoranthene	ug/L	0.6							0.049			0.0490			N				
63	Benzo(ghi)Perylene	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
64	Benzo(k)Fluoranthene	ug/L	0.6							0.049			0.0490			N				
65	Bis(2-Chloroethoxy)Methane	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
66	Bis(2-Chloroethyl)Ether	ug/L	0.6	0.27						1.4			1.400	No	No	N				
67	Bis(2-Chloroisopropyl)Ether	ug/L	0.6	0.38						170000			170000	No	No	N				
68	Bis(2-Ethylhexyl)Phthalate	ug/L	0.6	7.6						5.9			5.9	Yes	Yes	N				
69	4-Bromophenyl Phenyl Ether	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
70	Butylbenzyl Phthalate	ug/L	0.6	3						5200			5200	No	No	N				
71	2-Chloronaphthalene	ug/L	0.6	0.26						4300			4300	No	No	N				
72	4-Chlorophenyl Phenyl Ether	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
73	Chrysene	ug/L	0.6							0.049			0.0490			N				
74	Dibenzo(a,h)Anthracene	ug/L	0.6							0.049			0.0490			N				
75	1,2-Dichlorobenzene	ug/L	0.6	0.3						17000			17000	No	No	N				
76	1,3-Dichlorobenzene	ug/L	0.6	0.36						2600			2600	No	No	N				
77	1,4-Dichlorobenzene	ug/L	0.6	0.32						2600			2600	No	No	N				
78	3,3 Dichlorobenzidine	ug/L	0.6							0.077			0.08			N				
79	Diethyl Phthalate	ug/L	0.6	3.2						120000			120000	No	No	N				
80	Dimethyl Phthalate	ug/L	0.6	1.9						2900000			2900000	No	No	N				
81	Di-n-Butyl Phthalate	ug/L	0.6	1.2						12000			12000	No	No	N				
82	2,4-Dinitrotoluene	ug/L	0.6	0.18						9.10			9.10	No	No	N				
83	2,6-Dinitrotoluene	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
84	Di-n-Octyl Phthalate	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
85	1,2-Diphenylhydrazine	ug/L	0.6	0.25						0.54			0.540	No	No	N				
86	Fluoranthene	ug/L	0.6	0.16						370			370	No	No	N				
87	Fluorene	ug/L	0.6	0.2						14000			14000	No	No	N				
88	Hexachlorobenzene	ug/L	0.6							0.00077			0.00077			N				
89	Hexachlorobutadiene	ug/L	0.6	0.41						50			50.00	No	No	N				
90	Hexachlorocyclopentadiene	ug/L	0.6	1.5						17000			17000	No	No	N				
91	Hexachloroethane	ug/L	0.6	0.36						8.9			8.9	No	No	N				
92	Indeno(1,2,3-cd)Pyrene	ug/L	0.6							0.049			0.0490			N				
93	Isophorone	ug/L	0.6	0.21						600			600.0	No	No	N				
94	Naphthalene	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
95	Nitrobenzene	ug/L	0.6	0.36						1900			1900	No	No	N				
96	N-Nitrosodimethylamine	ug/L	0.6	0.14						8.10			8.10000	No	No	N				
97	N-Nitrosodi-n-Propylamine	ug/L	0.6	0.26						1.40			1.400	No	No	N				
98	N-Nitrosodiphenylamine	ug/L	0.6	0.19						16			16.0	No	No	N				
99	Phenanthrene	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
100	Pyrene	ug/L	0.6	0.16						11000			11000	No	No	N				
101	1,2,4-Trichlorobenzene	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
102	Aldrin	ug/L	0.6		3.00					0.00014			0.00014			N				
103	alpha-BHC	ug/L	0.6	0.0018						0.013			0.0130	No	No	N				
104	beta-BHC	ug/L	0.6	0.0031						0.046			0.046	No	No	N				
105	gamma-BHC	ug/L	0.6	0.0021	0.95					0.063			0.063	No	No	N				
106	delta-BHC	ug/L	0.6	No Criteria									No Criteria	No Criteria	No Criteria	N				
107	Chlordane	ug/L	0.6		2.4	0.0043				0.00059			0.00059			N				
108	4,4'-DDT	ug/L	0.6		1.1	0.001				0.00059			0.00059			N				
109	4,4'-DDE (linked to DDT)	ug/L	0.6							0.00059			0.00059			N				
110	4,4'-DDD	ug/L	0.6							0.00084			0.00084			N				
111	Dieldrin	ug/L	0.6		0.24	0.056				0.00014			0.00014			N				
112	alpha-Endosulfan	ug/L	0.6	0.0017	0.22	0.056				240			0.0560	No	No	N				
113	beta-Endolsulfan	ug/L	0.6	0.0019	0.22	0.056				240			0.0560	No	No	N				
114	Endosulfan Sulfate	ug/L	0.6	0.008						240			240	No	No	N				
115	Endrin	ug/L	0.6	0.0028	0.086	0.036				0.81			0.0360	No	No	N				
116	Endrin Aldehyde	ug/L	0.6	0.003						0.81			0.81	No	No	N				
117	Heptachlor	ug/L	0.6		0.52	0.0038				0.00021			0.00021			N				
118	Heptachlor Epoxide	ug/L	0.6		0.52	0.0038				0.00011			0.00011			N				
119-125	**PCBs sum (2)**	ug/L	0.6	0.72		0.014				0.00017			0.00017	Yes	Yes	N				
126	Toxaphene	ug/L	0.6		0.73	0.0002				0.00075			0.0002			N				

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

		TIAL ANALYSIS (RPA)				HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS								
						Organisms only			Saltwater / Freshwater / Basin Plan								
CTR#	Parameters	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?	Reason	AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life
1	Antimony	No detected value of B, Step 7		No	Ud;MEC<C & no B												
2	Arsenic	No detected value of B, Step 7		No	Ud;MEC<C & no B												
3	Beryllium	No Criteria	No Criteria	Uc	No Criteria												
4	**Cadmium (CTR)**	**No detected value of B, Step 7**		**Yes**	**MEC>=C**		**2.01**		**0.32**	**0.00**	**0.53**	**2.82**	**0.00**	**1.55**	**0.00**	**3.11**	**0.00**
4	**Cadmium (TMDL Wet Weather)**	**No detected value of B, Step 7**		**Yes**	**MEC>=C**		**2.01**		**0.32**	1.00			**1.00**	**1.55**	**1.55**	**3.11**	**3.10**
5a	Chromium (III)	No detected value of B, Step 7		No	Ud;MEC<C & no B												
5b	Chromium (VI)	No detected value of B, Step 7		Yes	MEC>=C		2.01		0.32	5.23	0.53	6.03	5.23	1.55	8.12	3.11	16.3
6	**Copper (CTR)**	**No detected value of B, Step 7**		**Yes**	**MEC>=C**		**2.01**		**0.32**	**0.00**	**0.53**	**11.42**	**0.00**	**1.55**	**0.00**	**3.11**	**0.0**
6	**Copper (TMDL Dry Weather)**	**No detected value of B, Step 7**		**Yes**	**MEC>=C**						**0.53**	**11.60**	**11.60**	**1.55**	**18.01**	**3.11**	**36.14**
6	Copper (TMDL Wet Weather)	**No detected value of B, Step 7**		**Yes**	**MEC>=C**		**2.01**		**0.32**	5.46			**5.46**	**1.55**	**8.47**	**3.11**	**17.00**
7	**Lead (CTR)**	**No detected value of B, Step 7**		**Yes**	**MEC>=C**		**2.01**		**0.32**	**0.00**	**0.53**	**5.89**	**0.00**	**1.55**	**0.00**	**3.11**	**0.0**
7	**Lead (TMDL Dry Weather)**	**No detected value of B, Step 7**		**Yes**	**MEC>=C**						**0.53**	**5.80**	**5.80**	**1.55**	**9.01**	**3.11**	**18.07**
7	**Lead TMDL Wet Weather)**	**No detected value of B, Step 7**		**Yes**	**MEC>=C**		**2.01**		**0.32**	19.91			**19.91**	**1.55**	**30.90**	**3.11**	**62.00**
8	Mercury	No detected value of B, Step 7		Yes	MEC>=C	0.051	2.01	0.10232						1.55		3.11	
9	Nickel	No detected value of B, Step 7		Yes	MEC>=C	4600	2.01	9228.47012	0.32	362.13	0.53	66.13	66.13	1.55	102.67	3.11	206.0
10	Selenium	No detected value of B, Step 7		Yes	MEC>=C		2.01		0.32	6.42	0.53	2.64	2.64	1.55	4.09	3.11	8.2
11	Silver	No detected value of B, Step 7		No	Ud;MEC<C & no B		2.01										
12	Thallium	No detected value of B, Step 7		Yes	MEC>=C	6.3	2.01	12.63899						1.55		3.11	
13	**Zinc (CTR)**	**No detected value of B, Step 7**		**Yes**	**MEC>=C**		**2.01**		**0.32**	**0.00**	**0.53**	**145.69**	**0.00**	**1.55**	**0.00**	**3.11**	**0.0**
13	**Zinc (TMDL Wet Weather)**	**No detected value of B, Step 7**		**Yes**	**MEC>=C**		**2.01**		**0.32**	51.05			**51.05**	**1.55**	**79.25**	**3.11**	**159.00**
14	Cyanide	No detected value of B, Step 7		Yes	MEC>=C	220000	2.01	441361.615	0.32	7.06	0.53	2.74	2.74	1.55	4.26	3.11	8.5419
15	Asbestos	No Criteria	No Criteria	Uc	No Criteria												
16	2,3,7,8 TCDD	No detected value of B, Step 7		Yes	MEC>=C	0.000000014	2.01	0.0000000281						1.55		3.11	
17	Acrolein	No detected value of B, Step 7		No	Ud;MEC<C & no B												
18	Acrylonitrile	No detected value of B, Step 7		No	Ud;MEC<C & no B												
19	Benzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
20	Bromoform	No detected value of B, Step 7		No	Ud;MEC<C & no B												
21	Carbon Tetrachloride	No detected value of B, Step 7		No	Ud;MEC<C & no B												
22	Chlorobenzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
23	Chlorodibromomethane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
24	Chloroethane	No Criteria	No Criteria	Uc	No Criteria												
25	2-Chloroethylvinyl ether	No Criteria	No Criteria	Uc	No Criteria												
26	Chloroform	No Criteria	No Criteria	Uc	No Criteria												
27	Dichlorobromomethane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
28	1,1-Dichloroethane	No Criteria	No Criteria	Uc	No Criteria												
29	1,2-Dichloroethane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
30	1,1-Dichloroethylene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
31	1,2-Dichloropropane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
32	1,3-Dichloropropylene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
33	Ethylbenzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
34	Methyl Bromide	No detected value of B, Step 7		No	Ud;MEC<C & no B												
35	Methyl Chloride	No Criteria	No Criteria	Uc	No Criteria												
36	Methylene Chloride	No detected value of B, Step 7		No	Ud;MEC<C & no B												
37	1,1,2,2-Tetrachloroethane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
38	Tetrachloroethylene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
39	Toluene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
40	1,2-Trans-Dichloroethylene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
41	1,1,1-Trichloroethane	No Criteria	No Criteria	Uc	No Criteria												
42	1,1,2-Trichloroethane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
43	Trichloroethylene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
44	Vinyl Chloride	No detected value of B, Step 7		No	Ud;MEC<C & no B												
45	2-Chlorophenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
46	2,4-Dichlorophenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
47	2,4-Dimethylphenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	No detected value of B, Step 7		No	Ud;MEC<C & no B												
49	2,4-Dinitrophenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
50	2-Nitrophenol	No Criteria	No Criteria	Uc	No Criteria												
51	4-Nitrophenol	No Criteria	No Criteria	Uc	No Criteria												
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	No Criteria	No Criteria	Uc	No Criteria												
53	Pentachlorophenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
54	Phenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
55	2,4,6-Trichlorophenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
56	Acenaphthene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
57	Acenaphthylene	No Criteria	No Criteria	Uc	No Criteria												
58	Anthracene	No detected value of B, Step 7		No	Ud;MEC<C & no B												

		TIAL ANALYSIS (RPA)				HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS								
						Organisms only			Saltwater / Freshwater / Basin Plan								
CTR#	Parameters	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?	Reason	AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life
59	Benzidine	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
60	Benzo(a)Anthracene	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
61	Benzo(a)Pyrene	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
62	Benzo(b)Fluoranthene	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
63	Benzo(ghi)Perylene	No Criteria	No Criteria	Uc	No Criteria												
64	Benzo(k)Fluoranthene	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
65	Bis(2-Chloroethoxy)Methane	No Criteria	No Criteria	Uc	No Criteria												
66	Bis(2-Chloroethyl)Ether	No detected value of B, Step 7		No	Ud;MEC<C & no B												
67	Bis(2-Chloroisopropyl)Ether	No detected value of B, Step 7		No	Ud;MEC<C & no B												
68	Bis(2-Ethylhexyl)Phthalate	No detected value of B, Step 7		Yes	MEC>=C	5.9	2.01	11.83652						1.55		3.11	
69	4-Bromophenyl Phenyl Ether	No Criteria	No Criteria	Uc	No Criteria												
70	Butylbenzyl Phthalate	No detected value of B, Step 7		No	Ud;MEC<C & no B												
71	2-Chloronaphthalene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
72	4-Chlorophenyl Phenyl Ether	No Criteria	No Criteria	Uc	No Criteria												
73	Chrysene	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
74	Dibenzo(a,h)Anthracene	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
75	1,2-Dichlorobenzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
76	1,3-Dichlorobenzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
77	1,4-Dichlorobenzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
78	3,3 Dichlorobenzidine	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
79	Diethyl Phthalate	No detected value of B, Step 7		No	Ud;MEC<C & no B												
80	Dimethyl Phthalate	No detected value of B, Step 7		No	Ud;MEC<C & no B												
81	Di-n-Butyl Phthalate	No detected value of B, Step 7		No	Ud;MEC<C & no B												
82	2,4-Dinitrotoluene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
83	2,6-Dinitrotoluene	No Criteria	No Criteria	Uc	No Criteria												
84	Di-n-Octyl Phthalate	No Criteria	No Criteria	Uc	No Criteria												
85	1,2-Diphenylhydrazine	No detected value of B, Step 7		No	Ud;MEC<C & no B												
86	Fluoranthene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
87	Fluorene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
88	Hexachlorobenzene	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
89	Hexachlorobutadiene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
90	Hexachlorocyclopentadiene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
91	Hexachloroethane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
92	Indeno(1,2,3-cd)Pyrene	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
93	Isophorone	No detected value of B, Step 7		No	Ud;MEC<C & no B												
94	Naphthalene	No Criteria	No Criteria	Uc	No Criteria												
95	Nitrobenzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
96	N-Nitrosodimethylamine	No detected value of B, Step 7		No	Ud;MEC<C & no B												
97	N-Nitrosodi-n-Propylamine	No detected value of B, Step 7		No	Ud;MEC<C & no B												
98	N-Nitrosodiphenylamine	No detected value of B, Step 7		No	Ud;MEC<C & no B												
99	Phenanthrene	No Criteria	No Criteria	Uc	No Criteria												
100	Pyrene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
101	1,2,4-Trichlorobenzene	No Criteria	No Criteria	Uc	No Criteria												
102	Aldrin	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
103	alpha-BHC	No detected value of B, Step 7		No	Ud;MEC<C & no B												
104	beta-BHC	No detected value of B, Step 7		No	Ud;MEC<C & no B												
105	gamma-BHC	No detected value of B, Step 7		No	Ud;MEC<C & no B												
106	delta-BHC	No Criteria	No Criteria	Uc	No Criteria												
107	Chlordane	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
108	4,4'-DDT	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
109	4,4'-DDE (linked to DDT)	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
110	4,4'-DDD	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
111	Dieldrin	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
112	alpha-Endosulfan	No detected value of B, Step 7		No	Ud;MEC<C & no B												
113	beta-Endolsulfan	No detected value of B, Step 7		No	Ud;MEC<C & no B												
114	Endosulfan Sulfate	No detected value of B, Step 7		No	Ud;MEC<C & no B												
115	Endrin	No detected value of B, Step 7		No	Ud;MEC<C & no B												
116	Endrin Aldehyde	No detected value of B, Step 7		No	Ud;MEC<C & no B												
117	Heptachlor	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
118	Heptachlor Epoxide	No detected value of B, Step 7		No	UD;Effluent ND,MDL												
119-125	**PCBs sum (2)**	No detected value of B, Step 7		Yes	MEC>=C	0.00017	2.01	0.00034	0.32		0.53	0.01	0.01	1.55	0.01146	3.11	0.02300
126	Toxaphene	No detected value of B, Step 7		No	UD;Effluent ND,MDL												

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

CTR#	Parameters	LIMITS			Recommendation	Comment
		RPA				
		Lowest AMEL	Lowest MDEL	Title 22 (MCL) or Previous Limit		
1	Antimony			6.00	MCL	Based on MCL
2	Arsenic			10.00	Previous Permit Limit	Based on MCL
3	Beryllium				No Limit	
4	Cadmium (CTR)	0.0	0.0	5.00		
4	Cadmium (TMDL Wet Weather)	1.5	3.1		TMDL Wet Weather	TMDL-Based WQBEL
5a	Chromium (III)				No Limit	
5b	Chromium (VI)	8.1	16.3		CTR	CTR-Based WQBEL
6	Copper (CTR)	0.0	0.0			
6	Copper (TMDL Dry Weather)	18.0	36.1		TMDL Dry Weather	TMDL-Based WQBEL
6	Copper (TMDL Wet Weather)	8.5	17.0		TMDL Wet Weather	TMDL-Based WQBEL
7	Lead (CTR)	0.0	0.0			
7	Lead (TMDL Dry Weather)	9.0	18.1		TMDL Dry Weather	TMDL-Based WQBEL
7	Lead TMDL Wet Weather)	30.9	62.0		TMDL Wet Weather	TMDL-Based WQBEL
8	Mercury	0.051	0.102	2.00	CTR	CTR-Based WQBEL
9	Nickel	102.7	206.0	100.00	MCL	Based on MCL
10	Selenium	4.1	8.2	50.00	CTR	CTR-Based WQBEL
11	Silver			50.00	Previous Limit	Previous Limit
12	Thallium	6.3	12.6	2.00	MCL	Based on MCL
13	Zinc (CTR)	0.0	0.0			
13	Zinc (TMDL Wet Weather)	79.3	159.0		TMDL Wet Weather	TMDL-Based WQBEL
14	Cyanide	4.3	8.5	200.00	CTR	CTR-Based WQBEL
15	Asbestos				No Limit	
16	2,3,7,8 TCDD	0.000000014	0.000000028	0.00000003	CTR	CTR-Based WQBEL
17	Acrolein				No Limit	
18	Acrylonitrile				No Limit	
19	Benzene				No Limit	
20	Bromoform				No Limit	
21	Carbon Tetrachloride				No Limit	
22	Chlorobenzene				No Limit	
23	Chlorodibromomethane				No Limit	
24	Chloroethane				No Limit	
25	2-Chloroethylvinyl ether				No Limit	
26	Chloroform				No Limit	
27	Dichlorobromomethane				No Limit	
28	1,1-Dichloroethane				No Limit	
29	1,2-Dichloroethane				No Limit	
30	1,1-Dichloroethylene				No Limit	
31	1,2-Dichloropropane				No Limit	
32	1,3-Dichloropropylene				No Limit	
33	Ethylbenzene				No Limit	
34	Methyl Bromide				No Limit	
35	Methyl Chloride				No Limit	
36	Methylene Chloride				No Limit	
37	1,1,2,2-Tetrachloroethane				No Limit	
38	Tetrachloroethylene				No Limit	
39	Toluene				No Limit	
40	1,2-Trans-Dichloroethylene				No Limit	
41	1,1,1-Trichloroethane				No Limit	
42	1,1,2-Trichloroethane				No Limit	
43	Trichloroethylene				No Limit	
44	Vinyl Chloride				No Limit	
45	2-Chlorophenol				No Limit	
46	2,4-Dichlorophenol				No Limit	
47	2,4-Dimethylphenol				No Limit	
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)				No Limit	
49	2,4-Dinitrophenol				No Limit	
50	2-Nitrophenol				No Limit	
51	4-Nitrophenol				No Limit	
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)				No Limit	
53	Pentachlorophenol			1.00	MCL	Based on MCL
54	Phenol				No Limit	
55	2,4,6-Trichlorophenol				No Limit	
56	Acenaphthene				No Limit	
57	Acenaphthylene				No Limit	
58	Anthracene				No Limit	

CTR#	Parameters	LIMITS			Recommendation	Comment
		RPA				
		Lowest AMEL	Lowest MDEL	Title 22 (MCL) or Previous Limit		
59	Benzidine				No Limit	
60	Benzo(a)Anthracene				No Limit	
61	Benzo(a)Pyrene				No Limit	
62	Benzo(b)Fluoranthene				No Limit	
63	Benzo(ghi)Perylene				No Limit	
64	Benzo(k)Fluoranthene				No Limit	
65	Bis(2-Chloroethoxy)Methane				No Limit	
66	Bis(2-Chloroethyl)Ether				No Limit	
67	Bis(2-Chloroisopropyl)Ether				No Limit	
68	Bis(2-Ethylhexyl)Phthalate	**5.9**	**12**	**4.00**	**MCL**	**Based on MCL**
69	4-Bromophenyl Phenyl Ether				No Limit	
70	Butylbenzyl Phthalate				No Limit	
71	2-Chloronaphthalene				No Limit	
72	4-Chlorophenyl Phenyl Ether				No Limit	
73	Chrysene				No Limit	
74	Dibenzo(a,h)Anthracene				No Limit	
75	1,2-Dichlorobenzene				No Limit	
76	1,3-Dichlorobenzene				No Limit	
77	1,4-Dichlorobenzene				No Limit	
78	3,3 Dichlorobenzidine				No Limit	
79	Diethyl Phthalate				No Limit	
80	Dimethyl Phthalate				No Limit	
81	Di-n-Butyl Phthalate				No Limit	
82	2,4-Dinitrotoluene				No Limit	
83	2,6-Dinitrotoluene				No Limit	
84	Di-n-Octyl Phthalate				No Limit	
85	1,2-Diphenylhydrazine				No Limit	
86	Fluoranthene				No Limit	
87	Fluorene				No Limit	
88	Hexachlorobenzene				No Limit	
89	Hexachlorobutadiene				No Limit	
90	Hexachlorocyclopentadiene				No Limit	
91	Hexachloroethane				No Limit	
92	Indeno(1,2,3-cd)Pyrene				No Limit	
93	Isophorone				No Limit	
94	Naphthalene				No Limit	
95	Nitrobenzene				No Limit	
96	N-Nitrosodimethylamine				No Limit	
97	N-Nitrosodi-n-Propylamine				No Limit	
98	N-Nitrosodiphenylamine				No Limit	
99	Phenanthrene				No Limit	
100	Pyrene				No Limit	
101	1,2,4-Trichlorobenzene				No Limit	
102	Aldrin				No Limit	
103	alpha-BHC				No Limit	
104	beta-BHC				No Limit	
105	gamma-BHC				No Limit	
106	delta-BHC				No Limit	
107	Chlordane				No Limit	
108	4,4'-DDT				No Limit	
109	4,4'-DDE (linked to DDT)				No Limit	
110	4,4'-DDD				No Limit	
111	Dieldrin				No Limit	
112	alpha-Endosulfan				No Limit	
113	beta-Endolsulfan				No Limit	
114	Endosulfan Sulfate				No Limit	
115	Endrin				No Limit	
116	Endrin Aldehyde				No Limit	
117	Heptachlor				No Limit	
118	Heptachlor Epoxide				No Limit	
119-125	**PCBs sum (2)**	**0.00017**	**0.00034**	**0.50**	**CTR**	**CTR-Based WQBEL**
126	Toxaphene				No Limit	

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

Fact Sheet Attachment J
Reasonable Potential Analysis and WQBELs Calculations
Owens-Brockway Glass, Incoporated (Discharge Point 002)

					CTR Water Quality Criteria (ug/L)									REASONABLE POTE						
					Freshwater		Saltwater		Human Health for consumption of:		LA River TMDL									
CTR#	Parameters	Units	CV	MEC	C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only	Dry Weather WLAs (Based on Chronic CTR)	Wet Weather WLAs (Based on Acute CTR)	Lowest C	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 conc (ug/L)	If all B is ND, is MDL>C?
1	Antimony	ug/L	0.6	3						4300.00			4300.00	No	No	N				
2	Arsenic	ug/L	0.6	17	340.00	150.00							150.00	No	No	N				
3	Beryllium	ug/L	0.6	No Criteria						Narrative			No Criteria	No Criteri	No Criteria	N				
4	Cadmium (CTR)	ug/L	0.6	7.1	13.73	5.34				Narrative			5.34	Yes	Yes	N				
4	Cadmium (TMDL Wet Weather)	ug/L	0.6	7.1								3.10	3.10	Yes	Yes, TMDL	N				
5a	Chromium (III)	ug/L	0.6	28	3893.32	464.06				Narrative			464.06	No	No	N				
5b	Chromium (VI)	ug/L	0.6	6.6	16.29	11.43				Narrative			11.43	No	No	N				
6	Copper (CTR)	ug/L	0.6	81	35.44	21.66							21.66	Yes	Yes	N				
6	Copper (TMDL Dry Weather)	ug/L	0.6	81							22.00		22.00	Yes	Yes, TMDL	N				
6	Copper (TMDLWet Weather)	ug/L	0.6	81								17.00	17.00	Yes	Yes, TMDL	N				
7	Lead (CTR)	ug/L	0.6	220	286.38	11.16				Narrative			11.16	Yes	Yes	N				
7	Lead (TMDL Dry Weather)	ug/L	0.6	220							11.00		11.00	Yes	Yes, TMDL	N				
7	Lead (TMDL Wet Weather)	ug/L	0.6	220								62.00	62.00	Yes	Yes, TMDL	N				
8	Mercury	ug/L	0.6	0.12	Reserved	Reserved				0.051			0.051	Yes	Yes	N				
9	Nickel	ug/L	0.6	12	1080.28	120.11				4600.00			120.11	No	No	N				
10	Selenium	ug/L	0.6	530	20.00	5.00				Narrative			5.00	Yes	Yes	N				
11	Silver	ug/L	0.6	0.41	22.12								22.12	No	No	N				
12	Thallium	ug/L	0.6	0.29						6.30			6.30	No	No	N				
13	Zinc (CTR)	ug/L	0.6	2000	276.23	276.23							276.23	Yes	Yes	N				
13	Zinc (TMDL Wet Weather)	ug/L	0.6	2000								159.00	159.00	Yes	Yes, TMDL	N				
14	Cyanide	ug/L	0.6	2.7	22.00	5.20				220000.00			5.20	No	No	N				
15	Asbestos	Fibers/l	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
16	2,3,7,8 TCDD	ug/L	0.6	0.0000090200						0.0000000140			0.0000000140	Yes	Yes	N				
17	Acrolein	ug/L	0.6	0.44						780			780	No	No	N				
18	Acrylonitrile	ug/L	0.6	0.27						0.66			0.660	No	No	N				
19	Benzene	ug/L	0.6	0.23						71			71.0	No	No	N				
20	Bromoform	ug/L	0.6	0.23						360			360.0	No	No	N				
21	Carbon Tetrachloride	ug/L	0.6	0.32						4.4			4.40	No	No	N				
22	Chlorobenzene	ug/L	0.6	0.21						21000			21000	No	No	N				
23	Chlorodibromomethane	ug/L	0.6	0.29						34			34.00	No	No	N				
24	Chloroethane	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
25	2-Chloroethylvinyl ether	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
26	Chloroform	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
27	Dichlorobromomethane	ug/L	0.6	0.28						46			46.00	No	No	N				
28	1,1-Dichloroethane	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
29	1,2-Dichloroethane	ug/L	0.6	0.24						99			99.00	No	No	N				
30	1,1-Dichloroethylene	ug/L	0.6	0.34						3.2			3.200	No	No	N				
31	1,2-Dichloropropane	ug/L	0.6	0.18						39			39.00	No	No	N				
32	1,3-Dichloropropylene	ug/L	0.6	0.51						1700			1700	No	No	N				
33	Ethylbenzene	ug/L	0.6	0.17						29000			29000	No	No	N				
34	Methyl Bromide	ug/L	0.6	0.12						4000			4000	No	No	N				
35	Methyl Chloride	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
36	Methylene Chloride	ug/L	0.6	0.25						1600			1600.0	No	No	N				
37	1,1,2,2-Tetrachloroethane	ug/L	0.6	0.18						11			11.00	No	No	N				
38	Tetrachloroethylene	ug/L	0.6	0.27						8.85			8.9	No	No	N				
39	Toluene	ug/L	0.6	0.22						200000			200000	No	No	N				
40	1,2-Trans-Dichloroethylene	ug/L	0.6	0.23						140000			140000	No	No	N				
41	1,1,1-Trichloroethane	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
42	1,1,2-Trichloroethane	ug/L	0.6	0.25						42			42.0	No	No	N				
43	Trichloroethylene	ug/L	0.6	0.35						81			81.0	No	No	N				
44	Vinyl Chloride	ug/L	0.6	0.33						525			525	No	No	N				
45	2-Chlorophenol	ug/L	0.6	0.28						400			400	No	No	N				
46	2,4-Dichlorophenol	ug/L	0.6	0.26						790			790	No	No	N				
47	2,4-Dimethylphenol	ug/L	0.6	0.3						2300			2300	No	No	N				
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L	0.6	0.33						765			765.0	No	No	N				
49	2,4-Dinitrophenol	ug/L	0.6	1.6						14000			14000	No	No	N				
50	2-Nitrophenol	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
51	4-Nitrophenol	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
53	Pentachlorophenol	ug/L	0.6	1.1	14.42	11.06				8.2			8.20	No	No	N				
54	Phenol	ug/L	0.6	0.16						4600000			4600000	No	No	N				
55	2,4,6-Trichlorophenol	ug/L	0.6	0.22						6.5			6.5	No	No	N				
56	Acenaphthene	ug/L	0.6	0.31						2700			2700	No	No	N				
57	Acenaphthylene	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
58	Anthracene	ug/L	0.6	0.28						110000			110000	No	No	N				
59	Benzidine	ug/L	0.6							0.00054			0.00054			N				
60	Benzo(a)Anthracene	ug/L	0.6							0.049			0.0490			N				
61	Benzo(a)Pyrene	ug/L	0.6							0.049			0.0490			N				

Fact Sheet Attachment J
Reasonable Potential Analysis and WQBELs Calculations
Owens-Brockway Glass, Incoporated (Discharge Point 002)

					CTR Water Quality Criteria (ug/L)									REASONABLE POTE						
					Freshwater		Saltwater		Human Health for consumption of:		LA River TMDL									
CTR#	Parameters	Units	CV	MEC	C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only	Dry Weather WLAs (Based on Chronic CTR)	Wet Weather WLAs (Based on Acute CTR)	Lowest C	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 conc (ug/L)	If all B is ND, is MDL>C?
62	Benzo(b)Fluoranthene	ug/L	0.6							0.049			0.0490			N				
63	Benzo(ghi)Perylene	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
64	Benzo(k)Fluoranthene	ug/L	0.6							0.049			0.0490			N				
65	Bis(2-Chloroethoxy)Methane	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
66	Bis(2-Chloroethyl)Ether	ug/L	0.6	0.27						1.4			1.400	No	No	N				
67	Bis(2-Chloroisopropyl)Ether	ug/L	0.6	0.38						170000			170000	No	No	N				
68	Bis(2-Ethylhexyl)Phthalate	ug/L	0.6	5.1						5.9			5.9	No	No	N				
69	4-Bromophenyl Phenyl Ether	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
70	Butylbenzyl Phthalate	ug/L	0.6	1.3						5200			5200	No	No	N				
71	2-Chloronaphthalene	ug/L	0.6	0.26						4300			4300	No	No	N				
72	4-Chlorophenyl Phenyl Ether	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
73	Chrysene	ug/L	0.6							0.049			0.0490			N				
74	Dibenzo(a,h)Anthracene	ug/L	0.6							0.049			0.0490			N				
75	1,2-Dichlorobenzene	ug/L	0.6	0.3						17000			17000	No	No	N				
76	1,3-Dichlorobenzene	ug/L	0.6	0.36						2600			2600	No	No	N				
77	1,4-Dichlorobenzene	ug/L	0.6	0.32						2600			2600	No	No	N				
78	3,3 Dichlorobenzidine	ug/L	0.6							0.077			0.08			N				
79	Diethyl Phthalate	ug/L	0.6	0.65						120000			120000	No	No	N				
80	Dimethyl Phthalate	ug/L	0.6	0.18						2900000			2900000	No	No	N				
81	Di-n-Butyl Phthalate	ug/L	0.6	0.073						12000			12000	No	No	N				
82	2,4-Dinitrotoluene	ug/L	0.6	0.18						9.10			9.10	No	No	N				
83	2,6-Dinitrotoluene	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
84	Di-n-Octyl Phthalate	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
85	1,2-Diphenylhydrazine	ug/L	0.6	0.25						0.54			0.540	No	No	N				
86	Fluoranthene	ug/L	0.6	0.16						370			370	No	No	N				
87	Fluorene	ug/L	0.6	0.2						14000			14000	No	No	N				
88	Hexachlorobenzene	ug/L	0.6							0.00077			0.00077			N				
89	Hexachlorobutadiene	ug/L	0.6	0.41						50			50.00	No	No	N				
90	Hexachlorocyclopentadiene	ug/L	0.6	1.5						17000			17000	No	No	N				
91	Hexachloroethane	ug/L	0.6	0.36						8.9			8.9	No	No	N				
92	Indeno(1,2,3-cd)Pyrene	ug/L	0.6							0.049			0.0490			N				
93	Isophorone	ug/L	0.6	0.21						600			600.0	No	No	N				
94	Naphthalene	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
95	Nitrobenzene	ug/L	0.6	0.36						1900			1900	No	No	N				
96	N-Nitrosodimethylamine	ug/L	0.6	0.14						8.10			8.10000	No	No	N				
97	N-Nitrosodi-n-Propylamine	ug/L	0.6	0.26						1.40			1.400	No	No	N				
98	N-Nitrosodiphenylamine	ug/L	0.6	0.19						16			16.0	No	No	N				
99	Phenanthrene	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
100	Pyrene	ug/L	0.6	0.16						11000			11000	No	No	N				
101	1,2,4-Trichlorobenzene	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
102	Aldrin	ug/L	0.6		3.00					0.00014			0.00014			N				
103	alpha-BHC	ug/L	0.6	0.0018						0.013			0.0130	No	No	N				
104	beta-BHC	ug/L	0.6	0.0031						0.046			0.046	No	No	N				
105	gamma-BHC	ug/L	0.6	0.0021	0.95					0.063			0.063	No	No	N				
106	delta-BHC	ug/L	0.6	No Criteria									No Criteria	No Criteri	No Criteria	N				
107	Chlordane	ug/L	0.6		2.4	0.0043				0.00059			0.00059			N				
108	4,4'-DDT	ug/L	0.6		1.1	0.001				0.00059			0.00059			N				
109	4,4'-DDE (linked to DDT)	ug/L	0.6							0.00059			0.00059			N				
110	4,4'-DDD	ug/L	0.6							0.00084			0.00084			N				
111	Dieldrin	ug/L	0.6		0.24	0.056				0.00014			0.00014			N				
112	alpha-Endosulfan	ug/L	0.6	0.0017	0.22	0.056				240			0.0560	No	No	N				
113	beta-Endolsulfan	ug/L	0.6	0.0019	0.22	0.056				240			0.0560	No	No	N				
114	Endosulfan Sulfate	ug/L	0.6	0.008						240			240	No	No	N				
115	Endrin	ug/L	0.6	0.0028	0.086	0.036				0.81			0.0360	No	No	N				
116	Endrin Aldehyde	ug/L	0.6	0.003						0.81			0.81	No	No	N				
117	Heptachlor	ug/L	0.6		0.52	0.0038				0.00021			0.00021			N				
118	Heptachlor Epoxide	ug/L	0.6		0.52	0.0038				0.00011			0.00011			N				
119-125	**PCBs sum (2)**	ug/L	0.6	0.17		0.014				0.00017			0.00017	Yes	Yes	N				
126	Toxaphene	ug/L	0.6		0.73	0.0002				0.00075			0.0002			N				

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

Fact Sheet Attachment J
Reasonable Potential Analysis and WQBELs Calculations
Owens-Brockway Glass, Incoporated (Discharge Point 002)

		NTIAL ANALYSIS (RPA)				HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS								
						Organisms only			Saltwater / Freshwater / Basin Plan								
CTR#	Parameters	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?	Reason	AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life
1	Antimony	No detected value of B, Step 7		No	Ud;MEC<C & no B												
2	Arsenic	No detected value of B, Step 7		No	Ud;MEC<C & no B												
3	Beryllium	No Criteria	No Criteria	Uc	No Criteria												
4	Cadmium (CTR)	No detected value of B, Step 7		Yes	MEC>=C		2.01		0.32	0.00	0.53	2.93	0.00	1.55	0.00	3.11	0.00
4	Cadmium (TMDL Wet Weather)	No detected value of B, Step 7		Yes	MEC>=C, TMDL		2.01		0.32	1.00	0.53		1.00	1.55	1.55	3.11	3.10
5a	Chromium (III)	No detected value of B, Step 7		No	Ud;MEC<C & no B												
5b	Chromium (VI)	No detected value of B, Step 7		No	Ud;MEC<C & no B												
6	Copper (CTR)	No detected value of B, Step 7		Yes	MEC>=C		2.01		0.32	0.00	0.53	11.40	0.00	1.55	0.0	3.11	0.0
6	Copper (TMDL Dry Weather)	No detected value of B, Step 7		Yes	MEC>=C, TMDL		2.01		0.32		0.53	11.60	11.60	1.55	18.01	3.11	36.14
6	Copper (TMDLWet Weather)	No detected value of B, Step 7		Yes	MEC>=C, TMDL		2.01		0.32	5.46	0.53		5.46	1.55	8.47	3.11	17.00
7	Lead (CTR)	No detected value of B, Step 7		Yes	MEC>=C		2.01		0.32	0.00	0.53	32.70	0.00	1.55	0.0	3.11	0.0
7	Lead (TMDL Dry Weather)	No detected value of B, Step 7		Yes	MEC>=C, TMDL		2.01		0.32		0.53	5.80	5.80	1.55	9.01	3.11	18.07
7	Lead (TMDL Wet Weather)	No detected value of B, Step 7		Yes	MEC>=C, TMDL		2.01		0.32	19.91	0.53		19.91	1.55	30.90	3.11	62.00
8	Mercury	No detected value of B, Step 7		Yes	MEC>=C	0.051	2.01	0.10232						1.55		3.11	
9	Nickel	No detected value of B, Step 7		No	Ud;MEC<C & no B												
10	Selenium	No detected value of B, Step 7		Yes	MEC>=C		2.01		0.32	6.42	0.53	2.64	2.64	1.55	4.09	3.11	8.2
11	Silver	No detected value of B, Step 7		No	Ud;MEC<C & no B												
12	Thallium	No detected value of B, Step 7		No	Ud;MEC<C & no B												
13	Zinc (CTR)	No detected value of B, Step 7		Yes	MEC>=C		2.01		0.32	0.00	0.53	83.86	0.00	1.55	0.0	3.11	0.0
13	Zinc (TMDL Wet Weather)	No detected value of B, Step 7		Yes	MEC>=C, TMDL		2.01		0.32	51.05	0.53		51.05	1.55	79.25	3.11	159.00
14	Cyanide	No detected value of B, Step 7		No	Ud;MEC<C & no B												
15	Asbestos	No Criteria	No Criteria	Uc	No Criteria												
16	2,3,7,8 TCDD	No detected value of B, Step 7		Yes	MEC>=C	0.0000000140	2.0061891571	0.0000000281						1.5524246138		3.1144574274	
17	Acrolein	No detected value of B, Step 7		No	Ud;MEC<C & no B												
18	Acrylonitrile	No detected value of B, Step 7		No	Ud;MEC<C & no B												
19	Benzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
20	Bromoform	No detected value of B, Step 7		No	Ud;MEC<C & no B												
21	Carbon Tetrachloride	No detected value of B, Step 7		No	Ud;MEC<C & no B												
22	Chlorobenzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
23	Chlorodibromomethane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
24	Chloroethane	No Criteria	No Criteria	Uc	No Criteria												
25	2-Chloroethylvinyl ether	No Criteria	No Criteria	Uc	No Criteria												
26	Chloroform	No Criteria	No Criteria	Uc	No Criteria												
27	Dichlorobromomethane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
28	1,1-Dichloroethane	No Criteria	No Criteria	Uc	No Criteria												
29	1,2-Dichloroethane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
30	1,1-Dichloroethylene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
31	1,2-Dichloropropane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
32	1,3-Dichloropropylene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
33	Ethylbenzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
34	Methyl Bromide	No detected value of B, Step 7		No	Ud;MEC<C & no B												
35	Methyl Chloride	No Criteria	No Criteria	Uc	No Criteria												
36	Methylene Chloride	No detected value of B, Step 7		No	Ud;MEC<C & no B												
37	1,1,2,2-Tetrachloroethane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
38	Tetrachloroethylene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
39	Toluene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
40	1,2-Trans-Dichloroethylene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
41	1,1,1-Trichloroethane	No Criteria	No Criteria	Uc	No Criteria												
42	1,1,2-Trichloroethane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
43	Trichloroethylene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
44	Vinyl Chloride	No detected value of B, Step 7		No	Ud;MEC<C & no B												
45	2-Chlorophenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
46	2,4-Dichlorophenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
47	2,4-Dimethylphenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	No detected value of B, Step 7		No	Ud;MEC<C & no B												
49	2,4-Dinitrophenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
50	2-Nitrophenol	No Criteria	No Criteria	Uc	No Criteria												
51	4-Nitrophenol	No Criteria	No Criteria	Uc	No Criteria												
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	No Criteria	No Criteria	Uc	No Criteria												
53	Pentachlorophenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
54	Phenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
55	2,4,6-Trichlorophenol	No detected value of B, Step 7		No	Ud;MEC<C & no B												
56	Acenaphthene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
57	Acenaphthylene	No Criteria	No Criteria	Uc	No Criteria												
58	Anthracene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
59	Benzidine	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
60	Benzo(a)Anthracene	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
61	Benzo(a)Pyrene	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												

Fact Sheet Attachment J
Reasonable Potential Analysis and WQBELs Calculations
Owens-Brockway Glass, Incoporated (Discharge Point 002)

		NTIAL ANALYSIS (RPA)				HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS								
						Organisms only			Saltwater / Freshwater / Basin Plan								
CTR#	Parameters	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?	Reason	AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life
62	Benzo(b)Fluoranthene	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
63	Benzo(ghi)Perylene	No Criteria	No Criteria	Uc	No Criteria												
64	Benzo(k)Fluoranthene	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
65	Bis(2-Chloroethoxy)Methane	No Criteria	No Criteria	Uc	No Criteria												
66	Bis(2-Chloroethyl)Ether	No detected value of B, Step 7		No	Ud;MEC<C & no B												
67	Bis(2-Chloroisopropyl)Ether	No detected value of B, Step 7		No	Ud;MEC<C & no B												
68	Bis(2-Ethylhexyl)Phthalate	No detected value of B, Step 7		No	Ud;MEC<C & no B												
69	4-Bromophenyl Phenyl Ether	No Criteria	No Criteria	Uc	No Criteria												
70	Butylbenzyl Phthalate	No detected value of B, Step 7		No	Ud;MEC<C & no B												
71	2-Chloronaphthalene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
72	4-Chlorophenyl Phenyl Ether	No Criteria	No Criteria	Uc	No Criteria												
73	Chrysene	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
74	Dibenzo(a,h)Anthracene	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
75	1,2-Dichlorobenzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
76	1,3-Dichlorobenzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
77	1,4-Dichlorobenzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
78	3,3 Dichlorobenzidine	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
79	Diethyl Phthalate	No detected value of B, Step 7		No	Ud;MEC<C & no B												
80	Dimethyl Phthalate	No detected value of B, Step 7		No	Ud;MEC<C & no B												
81	Di-n-Butyl Phthalate	No detected value of B, Step 7		No	Ud;MEC<C & no B												
82	2,4-Dinitrotoluene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
83	2,6-Dinitrotoluene	No Criteria	No Criteria	Uc	No Criteria												
84	Di-n-Octyl Phthalate	No Criteria	No Criteria	Uc	No Criteria												
85	1,2-Diphenylhydrazine	No detected value of B, Step 7		No	Ud;MEC<C & no B												
86	Fluoranthene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
87	Fluorene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
88	Hexachlorobenzene	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
89	Hexachlorobutadiene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
90	Hexachlorocyclopentadiene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
91	Hexachloroethane	No detected value of B, Step 7		No	Ud;MEC<C & no B												
92	Indeno(1,2,3-cd)Pyrene	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
93	Isophorone	No detected value of B, Step 7		No	Ud;MEC<C & no B												
94	Naphthalene	No Criteria	No Criteria	Uc	No Criteria												
95	Nitrobenzene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
96	N-Nitrosodimethylamine	No detected value of B, Step 7		No	Ud;MEC<C & no B												
97	N-Nitrosodi-n-Propylamine	No detected value of B, Step 7		No	Ud;MEC<C & no B												
98	N-Nitrosodiphenylamine	No detected value of B, Step 7		No	Ud;MEC<C & no B												
99	Phenanthrene	No Criteria	No Criteria	Uc	No Criteria												
100	Pyrene	No detected value of B, Step 7		No	Ud;MEC<C & no B												
101	1,2,4-Trichlorobenzene	No Criteria	No Criteria	Uc	No Criteria												
102	Aldrin	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
103	alpha-BHC	No detected value of B, Step 7		No	Ud;MEC<C & no B												
104	beta-BHC	No detected value of B, Step 7		No	Ud;MEC<C & no B												
105	gamma-BHC	No detected value of B, Step 7		No	Ud;MEC<C & no B												
106	delta-BHC	No Criteria	No Criteria	Uc	No Criteria												
107	Chlordane	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
108	4,4'-DDT	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
109	4,4'-DDE (linked to DDT)	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
110	4,4'-DDD	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
111	Dieldrin	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
112	alpha-Endosulfan	No detected value of B, Step 7		No	Ud;MEC<C & no B												
113	beta-Endolsulfan	No detected value of B, Step 7		No	Ud;MEC<C & no B												
114	Endosulfan Sulfate	No detected value of B, Step 7		No	Ud;MEC<C & no B												
115	Endrin	No detected value of B, Step 7		No	Ud;MEC<C & no B												
116	Endrin Aldehyde	No detected value of B, Step 7		No	Ud;MEC<C & no B												
117	Heptachlor	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
118	Heptachlor Epoxide	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												
119-125	**PCBs sum (2)**	No detected value of B, Step 7		Yes	MEC>=C	0.00017	2.01	0.00034	0.32		0.53	0.01	0.01	1.55	0.01146	3.11	0.02300
126	Toxaphene	No detected value of B, Step 7		No	UD;Effluent ND,MDL>C												

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

Fact Sheet Attachment J
Reasonable Potential Analysis and WQBELs Calculations
Owens-Brockway Glass, Incoporated (Discharge Point 002)

CTR#	Parameters	LIMITS			Recommendation	Comment
		RPA				
		Lowest AMEL	Lowest MDEL	Title 22 (MCL) or Previous Limits		
1	Antimony			6.00	No Limit	
2	Arsenic			10.00	Previous Permit Limit	Based on MCL
3	Beryllium				No Limit	
4	Cadmium (CTR)	0	0	5.00		
4	Cadmium (TMDL Wet Weather)	1.5	3.1		TMDL Wet Weather	TMDL-Based WQBEL
5a	Chromium (III)				No Limit	
5b	Chromium (VI)				No Limit	
6	Copper (CTR)	0.0	0.0			
6	Copper (TMDL Dry Weather)	18.0	36.1		TMDL Dry Weather	TMDL-Based WQBEL
6	Copper (TMDLWet Weather)	8.5	17.0		TMDL Wet Weather	TMDL-Based WQBEL
7	Lead (CTR)	0.0	0.0			
7	Lead (TMDL Dry Weather)	9.0	18.1		TMDL Dry Weather	TMDL-Based WQBEL
7	Lead (TMDL Wet Weather)	30.9	62.0		TMDL Wet Weather	TMDL-Based WQBEL
8	Mercury	0.051	0.102	2.00	CTR	CTR Based WQBEL
9	Nickel			100.00	MCL	Trigger 3
10	Selenium	4.1	8.2	50.00	CTR	CTR Based WQBEL
11	Silver			50.00	Previous Permit Limit	Previous Permit Limit
12	Thallium			2.00	MCL	Trigger 3
13	Zinc (CTR)	0	0			
13	Zinc (TMDL Wet Weather)	79.3	159.0		TMDL Wet Weather	TMDL-Based WQBEL
14	Cyanide			200.00	CTR	Trigger 3
15	Asbestos				No Limit	
16	2,3,7,8 TCDD	0.0000000140	0.0000000281	0.00000003	CTR	CTR Based WQBEL
17	Acrolein				No Limit	
18	Acrylonitrile				No Limit	
19	Benzene				No Limit	
20	Bromoform				No Limit	
21	Carbon Tetrachloride				No Limit	
22	Chlorobenzene				No Limit	
23	Chlorodibromomethane				No Limit	
24	Chloroethane				No Limit	
25	2-Chloroethylvinyl ether				No Limit	
26	Chloroform				No Limit	
27	Dichlorobromomethane				No Limit	
28	1,1-Dichloroethane				No Limit	
29	1,2-Dichloroethane				No Limit	
30	1,1-Dichloroethylene				No Limit	
31	1,2-Dichloropropane				No Limit	
32	1,3-Dichloropropylene				No Limit	
33	Ethylbenzene				No Limit	
34	Methyl Bromide				No Limit	
35	Methyl Chloride				No Limit	
36	Methylene Chloride				No Limit	
37	1,1,2,2-Tetrachloroethane				No Limit	
38	Tetrachloroethylene				No Limit	
39	Toluene				No Limit	
40	1,2-Trans-Dichloroethylene				No Limit	
41	1,1,1-Trichloroethane				No Limit	
42	1,1,2-Trichloroethane				No Limit	
43	Trichloroethylene				No Limit	
44	Vinyl Chloride				No Limit	
45	2-Chlorophenol				No Limit	
46	2,4-Dichlorophenol				No Limit	
47	2,4-Dimethylphenol				No Limit	
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)				No Limit	
49	2,4-Dinitrophenol				No Limit	
50	2-Nitrophenol				No Limit	
51	4-Nitrophenol				No Limit	
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)				No Limit	
53	Pentachlorophenol			1.00	MCL	Based on MCL
54	Phenol				No Limit	
55	2,4,6-Trichlorophenol				No Limit	
56	Acenaphthene				No Limit	
57	Acenaphthylene				No Limit	
58	Anthracene				No Limit	
59	Benzidine				No Limit	
60	Benzo(a)Anthracene				No Limit	
61	Benzo(a)Pyrene				No Limit	

CTR#	Parameters	LIMITS			Recommendation	Comment
		RPA				
		Lowest AMEL	Lowest MDEL	Title 22 (MCL) or Previous Limits		
62	Benzo(b)Fluoranthene				No Limit	
63	Benzo(ghi)Perylene				No Limit	
64	Benzo(k)Fluoranthene				No Limit	
65	Bis(2-Chloroethoxy)Methane				No Limit	
66	Bis(2-Chloroethyl)Ether				No Limit	
67	Bis(2-Chloroisopropyl)Ether				No Limit	
68	Bis(2-Ethylhexyl)Phthalate			**4.00**	**MCL**	**Based on MCL**
69	4-Bromophenyl Phenyl Ether				No Limit	
70	Butylbenzyl Phthalate				No Limit	
71	2-Chloronaphthalene				No Limit	
72	4-Chlorophenyl Phenyl Ether				No Limit	
73	Chrysene				No Limit	
74	Dibenzo(a,h)Anthracene				No Limit	
75	1,2-Dichlorobenzene				No Limit	
76	1,3-Dichlorobenzene				No Limit	
77	1,4-Dichlorobenzene				No Limit	
78	3,3 Dichlorobenzidine				No Limit	
79	Diethyl Phthalate				No Limit	
80	Dimethyl Phthalate				No Limit	
81	Di-n-Butyl Phthalate				No Limit	
82	2,4-Dinitrotoluene				No Limit	
83	2,6-Dinitrotoluene				No Limit	
84	Di-n-Octyl Phthalate				No Limit	
85	1,2-Diphenylhydrazine				No Limit	
86	Fluoranthene				No Limit	
87	Fluorene				No Limit	
88	Hexachlorobenzene				No Limit	
89	Hexachlorobutadiene				No Limit	
90	Hexachlorocyclopentadiene				No Limit	
91	Hexachloroethane				No Limit	
92	Indeno(1,2,3-cd)Pyrene				No Limit	
93	Isophorone				No Limit	
94	Naphthalene				No Limit	
95	Nitrobenzene				No Limit	
96	N-Nitrosodimethylamine				No Limit	
97	N-Nitrosodi-n-Propylamine				No Limit	
98	N-Nitrosodiphenylamine				No Limit	
99	Phenanthrene				No Limit	
100	Pyrene				No Limit	
101	1,2,4-Trichlorobenzene				No Limit	
102	Aldrin				No Limit	
103	alpha-BHC				No Limit	
104	beta-BHC				No Limit	
105	gamma-BHC				No Limit	
106	delta-BHC				No Limit	
107	Chlordane				No Limit	
108	4,4'-DDT				No Limit	
109	4,4'-DDE (linked to DDT)				No Limit	
110	4,4'-DDD				No Limit	
111	Dieldrin				No Limit	
112	alpha-Endosulfan				No Limit	
113	beta-Endolsulfan				No Limit	
114	Endosulfan Sulfate				No Limit	
115	Endrin				No Limit	
116	Endrin Aldehyde				No Limit	
117	Heptachlor				No Limit	
118	Heptachlor Epoxide				No Limit	
119-125	**PCBs sum (2)**	**0.00017**	**0.00034**	**0.50**	**CTR**	**CTR Based WQBEL**
126	Toxaphene				No Limit	

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