

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

320 West 4th Street, Suite 200, Los Angeles, California 90013

(213) 576-6600 • Fax (213) 576-6640

Los Angeles Regional Water Quality Control Board

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

**WATER QUALITY ORDER R4-2022-00XX
NPDES NO. CA0059188, CI NUMBER 6610**

**WASTE DISCHARGE REQUIREMENTS
FOR THE CALIFORNIA DEPARTMENT OF WATER RESOURCES
WILLIAM E. WARNE POWER PLANT**

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

Table 1. Discharger Information

Discharger:	California Department of Water Resources
Name of Facility:	William E. Warne Power Plant
Facility Address:	Highway 99 at Pyramid Lake (west of Interstate 5 at the Smokey Bear off-ramp) Castaic, CA 91310 Los Angeles County

Table 2. Discharge Location

Discharge Point	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001 (A&B)	34.6850°	-118.7878°	Pyramid Lake
002	34.6850°	-118.7878°	Pyramid Lake

Table 3. Administrative Information

This Order was adopted on:	June 9, 2022
This Order shall become effective on:	August 1, 2022
This Order shall expire on:	July 31, 2027
The Discharger shall file a Report of Waste Discharge (ROWD) as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a NPDES permit no later than:	180 days prior to the Order expiration date
The United States Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board have classified this discharge as follows:	Major

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

Renee Purdy, Executive Officer

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1. FACILITY INFORMATION

Information describing the William E. Warne Power Plant (Facility) is summarized in Table 1 and in sections 1 and 2 of the Fact Sheet (Attachment F). Section 1 of the Fact Sheet also includes information regarding the Facility's permit application.

2. FINDINGS

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

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

THEREFORE, IT IS HEREBY ORDERED that Order No. R4-2016-0224 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Los Angeles Water Board from taking enforcement action for violations of the previous Order.

3. DISCHARGE PROHIBITIONS

- 3.1. Wastes discharged shall be limited to a maximum of 1.95 million gallons per day (MGD) of non-contact, once-through cooling water through Discharge Point 001 (A&B), and 0.020 MGD of sump water through Discharge Point 002 as described in Table 2 above.

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

4. EFFLUENT LIMITATIONS AND DISCHARGE PROHIBITIONS

4.1. Effluent Limitations - Discharge Point 001(A&B)

4.1.1. Final Effluent Limitations – Discharge Point 001(A&B)

- a. The Discharger shall maintain compliance with the following effluent limitations in Table 4 at Discharge Point 001(A&B), with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP), Attachment E:

Table 4. Effluent Limitations Discharge Point 001(A&B)

Parameter	Units	Average Monthly	Maximum Daily	Notes
Biochemical Oxygen Demand (BOD ₅ 20°C)	milligram per liter (mg/L)	---	10	---
BOD ₅ 20°C	pounds per day (lbs/day)	---	160	a
Total Suspended Solids (TSS)	mg/L	50	75	---
TSS	lbs/day	810	1,220	a
Oil and Grease	mg/L	10	15	---
Oil and Grease	lbs/day	160	240	a
pH	Standard units	---	6.5 to 8.5	b and c

Parameter	Units	Average Monthly	Maximum Daily	Notes
Temperature	degrees Fahrenheit (°F)	---	80	d
Settleable Solids	milliliter per liter (ml/L)	0.1	0.3	---
Turbidity	nephelometric turbidity unit (NTU)	5	25	c
Ammonia Nitrogen, Total (as N)	mg/L	1.75	5.2	---
Ammonia Nitrogen, Total (as N)	lbs/day	28	85	a
Boron	mg/L	1.5	3.0	---
Boron	lbs/day	24		a
Chloride	mg/L	100	---	c and e
Chloride	lbs/day	1,630	---	a
Dissolved Oxygen	mg/L	---	6.0	---
<i>E. coli</i>	MPN/100 ml	126	235	c and f
Nitrate + Nitrite as N	mg/L	6.8	---	c
Nitrate+ Nitrite as N	lbs/day	111	---	a
Chronic Toxicity	Pass or Fail, % Effect	Pass	Pass or % Effect <50	g
Copper, Total Recoverable (TR)	µg/L	34	77	h and i
Copper, TR	lbs/day	0.56	1.25	a
Mercury, TR	µg/L	0.05	0.1	c
Mercury, TR	lbs/day	0.00081	0.0016	a
TCDD Equivalents	µg/L	1.30E-08	2.60E-08	h and j
TCDD Equivalents	lbs/day	2.11E-10	4.24E-10	a
Bis(2-Ethylhexyl)Phthalate	µg/L	1.8	3.6	h
Bis(2-Ethylhexyl)Phthalate	lbs/day	0.029	0.059	a

Footnotes for Table 4

- The mass (lbs/day) limitations are based on a maximum flow of 1.95 MGD and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.
- The effluent limitations for pH are 6.5 as an Instantaneous Minimum and 8.5 as an Instantaneous Maximum.

- c. Intake water credits are included for pH, turbidity, chloride, *E. coli*, nitrate plus nitrite and mercury. If the intake water pollutant concentration does not exceed the average monthly limitation, then the limitations are applied as noted in the table. If the intake water pollutant concentration exceeds the average monthly limitation, but does not exceed the maximum daily limitation, then compliance with the average monthly limitation will be determined based on intake water credit (intake water concentration) and compliance with the maximum daily limitation is applied as noted in the table. If the intake water pollutant concentration exceeds the maximum daily limitation, then compliance will be determined based on the intake water credit (intake water concentration). When determining compliance based on intake water credit, the pollutant effluent limitation is equal to the maximum pollutant concentration in the intake water.

When grab samples are taken, the timing and location of intake water and effluent samples shall reflect the travel time of water in the Facility. The intake water sample shall directly correspond to the effluent sample.

- d. The effluent limitation for temperature is 80°F based on the water quality objective in the Basin Plan for temperature that is applicable to inland surface waters with WARM beneficial use designation such as Pyramid Lake.
- e. Applied as a 3-month rolling average.
- f. Average monthly effluent limit is applied as a geometric mean, and daily maximum effluent limit is applied as a single sample maximum.
- g. The average monthly is a Median Monthly Effluent Limitation (MMEL), and the MMEL shall be reported as "Pass" or "Fail." The Maximum Daily Effluent Limitation (MDEL) shall be reported as "Pass" or "Fail" and "% Effect." During a calendar month, the Discharger may conduct up to three independent toxicity tests for routine monitoring when one toxicity test results in "Fail".
- h. The effluent limitations were calculated based on the SIP procedures.
- i. The minimum dilution ratio used to calculate effluent limitations for copper for Discharge Point 001 (AS&B) is 8.2:1.
- j. TCDD equivalents shall be calculated using the following formula, where the toxicity equivalency factors (TEFs) are as provided in the table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. The TCDD equivalents are calculated as follows: Dioxin-TEQ (TCDD equivalents) = Sum of Concentration of dioxin or furan congener_x (C_x) X Toxicity Equivalency Factors (TEFs) for congener_x. The TEFs are listed in the Table Below.

Toxicity Equivalency Factors

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

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

End of Footnotes for Table 4

4.2. Effluent Limitations - Discharge Point 002

4.2.1. Final Effluent Limitations – Discharge Point 002

- a. The Discharger shall maintain compliance with the following effluent limitations in Table 5 at Discharge Point 002, with compliance measured at Monitoring Location EFF-002 as described in the Monitoring and Reporting Program (MRP), Attachment E:

Table 5. Effluent Limitations Discharge Point 002

Parameter	Units	Average Monthly	Maximum Daily	Notes
BOD ₅ 20°C	mg/L	---	10	---
BOD ₅ 20°C	lbs/day	---	1.7	a
TSS	mg/L	50	75	---
TSS	lbs/day	8.3	13	a
Oil and Grease	mg/L	10	15	---
Oil and Grease	lbs/day	1.7	2.5	a
pH	Standard unit	---	6.5 to 8.5	b and c
Temperature	°F	---	80	d
Settleable Solids	mL/L	0.1	0.3	---
Turbidity	NTU	5	25	c

Parameter	Units	Average Monthly	Maximum Daily	Notes
Ammonia Nitrogen, Total (as N)	mg/L	1.75	5.2	---
Ammonia Nitrogen, Total (as N)	lbs/day	0.29	0.87	a
Chlorine, Total Residual	mg/L	---	0.1	---
Chlorine, Total Residual	lbs/day	---	0.017	a
Boron	mg/L	1.5	3.0	---
Boron	lbs/day	0.25	0.50	a
Chloride	mg/L	100	---	c and e
Chloride	lbs/day	17	---	a
Dissolved Oxygen	mg/L	---	6.0	f
<i>E. coli</i>	MPN/100 ml	126	235	c and f
Nitrate + Nitrite as N	mg/L	6.8	---	c
Nitrate+ Nitrite as N	lbs/day	1.1	---	a
Chronic Toxicity	Pass or Fail, % Effect	Pass	Pass or % Effect <50	g
Copper, TR	µg/L	29	77	h and i
Copper, TR	lbs/day	0.005	0.013	a
Lead, TR	µg/L	8	23	h and i
Lead, TR	lbs/day	0.0013	0.004	a
Mercury, TR	µg/L	0.05	0.1	c and h
Mercury, TR	lbs/day	8.3×10^{-6}	1.7×10^{-5}	a
Zinc, TR	µg/L	303	822	h and i
Zinc, TR	lbs/day	0.051	0.137	a
Chlorodibromomethane	µg/L	17	54	h and i
Chlorodibromomethane	lbs/day	0.0028	0.0089	a
Dichlorobromomethane	µg/L	5.4	17	h and i
Dichlorobromomethane	lbs/day	0.0009	0.0029	a
Tetrachloroethylene	µg/L	2.6	5.3	h and i
Tetrachloroethylene	lbs/day	0.00044	0.00088	a
Bis(2-Ethylhexyl)Phthalate	µg/L	1.8	3.6	h
Bis(2-Ethylhexyl)Phthalate	lbs/day	0.0003	0.0006	a

Footnotes for Table 5

- a. The mass (lbs/day) limitations are based on a maximum flow of 0.02 MGD and are calculated as follows: $\text{Flow (MGD)} \times \text{Concentration (mg/L)} \times 8.34 \text{ (conversion factor)} = \text{lbs/day}$.
- b. The effluent limitations for pH are 6.5 as an Instantaneous Minimum and 8.5 as an Instantaneous Maximum.
- c. Intake water credits are included for pH, turbidity, chloride, E. coli, nitrate plus nitrite and mercury. If the intake water pollutant concentration does not exceed the average monthly limitation, then the limitations are applied as noted in the table. If the intake water pollutant concentration exceeds the average monthly limitation, but does not exceed the maximum daily limitation, then compliance with the average monthly limitation will be determined based on intake water credit (intake water concentration) and compliance with the maximum daily limitation is applied as noted in the table. If the intake water pollutant concentration exceeds the maximum daily limitation, then compliance will be determined based on the intake water credit (intake water concentration). When determining compliance based on intake water credit, the pollutant effluent limitation is equal to the maximum pollutant concentration in the intake water.

When grab samples are taken, the timing and location of intake water and effluent samples shall reflect the travel time of water in the Facility. The intake water sample shall directly correspond to the effluent sample.
- d. The effluent limitation for temperature is 80°F based on the water quality objective in the Basin Plan for temperature that is applicable to inland surface waters with WARM beneficial use designation such as Pyramid Lake.
- e. Applied as a 3-month rolling average.
- f. Average monthly effluent limit is applied as a geometric mean, and daily maximum effluent limit is applied as a single sample maximum.
- g. The average monthly is a Median Monthly Effluent Limitation (MMEL), and the MMEL shall be reported as "Pass" or "Fail." The Maximum Daily Effluent Limitation (MDEL) shall be reported "Pass" or "Fail" and "% Effect." During a calendar month, the Discharger may conduct up to three independent toxicity tests for routine monitoring when one toxicity test results in "Fail".
- h. The effluent limitations were calculated based on the SIP procedures.
- i. The minimum dilution ratio used to calculate effluent limitations for copper, lead, and zinc for Discharge Point 002 is 8.2:1. The minimum dilution ratio used to calculate effluent limitations for Chlorodibromomethane, Dichlorobromomethane, and Tetrachloroethylene are 39.7:1, 8.6:1, and 2.3:1, respectively.

End of Footnotes for Table 5

4.3. Land Discharge Specifications – Not Applicable

4.4. Recycling Specifications - Not Applicable

5. RECEIVING WATER LIMITATIONS

5.1. Surface Water Limitations

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

- 5.1.1. The pH of the receiving water shall not be depressed below 6.5 or raised above 8.5 as a result of the discharge. Ambient pH levels shall not be changed more

than 0.5 units from natural conditions as a result of waste discharge. Natural conditions shall be determined on a case-by-case basis.

- 5.1.2. The water temperature shall not be altered by more than 5 °F above the natural temperature. At no time shall the temperature be raised above 80 °F as a result of waste discharges.
- 5.1.3. 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. *E. coli* density shall not exceed 126 per 100 ml, as a geometric mean.
 - b. *E. coli* density shall not exceed 235 per 100 ml, as a single sample maximum.
- 5.1.4. The dissolved oxygen content of all surface waters designated as COLD shall not be depressed below 6.0 mg/L as a result of waste discharges.
- 5.1.5. Total ammonia (as N) concentrations shall not exceed the four-day average concentration of unionized ammonia of 0.035 mg/L and the one-hour average concentration of 0.233 mg/L.
- 5.1.6. The wastes discharged shall not result in visible floating particulates including deposited macroscopic particulate matter, foams, or oil and grease in the receiving waters.
- 5.1.7. Where natural turbidity is between 0 to 50 NTU, increases in turbidity shall not exceed 20%. Where natural turbidity is greater than 50 NTU, increases in turbidity shall not exceed 10%.
- 5.1.8. Discharges shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.
- 5.1.9. Waters shall not contain suspended or settleable materials, chemical substances, or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
- 5.1.10. Waters shall not contain toxic or other deleterious substances in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
- 5.1.11. Toxic pollutants shall not be present at levels that will cause accumulation of bottom deposits or aquatic growths.
- 5.1.12. Waters shall not contain biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
- 5.1.13. Waters shall be free of substances that result in increases of BOD that adversely affect beneficial uses.
- 5.1.14. Waters shall not contain 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.

- 5.1.15. Waters shall not cause alteration of turbidity, or apparent color beyond present natural background levels.
- 5.1.16. Waters shall not cause damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.
- 5.1.17. Waters shall not cause the degradation of surface water communities and populations including vertebrate, invertebrate, and plant species.
- 5.1.18. The wastes shall not cause problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
- 5.1.19. The wastes shall not cause the creation of nuisance conditions, or adversely affect beneficial uses of the receiving water.

5.2. Groundwater Limitations – Not Applicable

6. PROVISIONS

6.1. Standard Provisions

- 6.1.1. The Discharger shall comply with all Standard Provisions included in Attachment D.
- 6.1.2. The Discharger shall comply with the following provisions. If there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:
 - a. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of wastewater and stormwater to storm drain systems or other water courses under their jurisdiction, including applicable requirements in municipal stormwater management programs developed to comply with NPDES permits issued by the Los Angeles Water Board to local agencies.
 - b. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 318, 405, and 423 of the federal CWA and amendments thereto.
 - c. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable, they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.
 - d. Oil or oily material, chemicals, refuse, or other wastes that constitute a condition of pollution or nuisance shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
 - e. A copy of these waste discharge requirements shall be maintained at the discharge facility so as to be available at all times to operating personnel.

- f. In the event of any change in name, ownership, or control of these waste disposal facilities, the Discharger shall notify the Los Angeles Water Board of such change 30 days prior to taking effect and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Los Angeles Water Board.
- g. If there is any storage of hazardous or toxic materials or hydrocarbons at this Facility and if the Facility is not staffed at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
- h. Violation of any of the provisions of this Order may subject the violator to any of the civil liability or penalties described herein, or any combination thereof, at the discretion of the prosecuting authority, except that only one kind of liability or penalty may be applied for each kind of violation.
- i. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to the planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include.
 - i. Name and general composition of the chemical,
 - ii. Frequency of use,
 - iii. Quantities to be used,
 - iv. Proposed discharge concentrations, and
 - v. U.S. EPA registration number, if applicable
- j. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this Facility, may subject the Discharger to administrative or civil liabilities, civil or criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- k. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Los Angeles 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 Los Angeles Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and prevent recurrence including, where applicable, a schedule of implementation. The written notification shall also be submitted via email with reference to NPDES No. CA0059188, CI-6610 to losangeles@waterboards.ca.gov. Other noncompliance requires written notification as above at the time of the normal monitoring report
- l. The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.

- m. Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities or penalties to which the Discharger is or may be subject to under section 311 of the CWA.
- n. The Discharger shall make diligent, proactive efforts to reduce Facility infrastructure vulnerability to current and future impacts resulting from climate change, including but not limited to extreme wet weather events, flooding, storm surges, wildfires and projected sea level rise when the facility is located near the ocean or discharges to the ocean.

6.2. Monitoring and Reporting Program (MRP) Requirements

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

6.3. Special Provisions

6.3.1. Reopener Provisions

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

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

- b. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the federal CWA, and amendments thereto, the Los Angeles Water Board may revise and modify this Order in accordance with such more stringent standards.
- c. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the reasonable potential analysis (RPA).
- d. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new minimum levels (MLs).
- e. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for Pyramid Lake.
- f. This Order may also be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order, endangerment to human health or the environment resulting from the permitted activity, or acquisition of

newly obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation and issuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

- 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 include, 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.
- h. If an applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Los Angeles Water Board may institute proceedings under these regulations to modify or revoke and reissue the Orders to conform to the toxic effluent standard or prohibition.
- i. This Order will be reopened and modified to the extent necessary, to be consistent with new policies, new state-wide plans, new laws, or new regulations.

6.3.2. Special Studies, Technical Papers and Additional Monitoring Requirements

a. Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan

The Discharger shall submit to the Los Angeles Water Board an updated Initial Investigation TRE workplan (1-2 pages) within **90 days** of the effective date of this Order. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected. See section 5.8 of the Monitoring and Reporting Program (Attachment E) for an overview of TRE requirements.

b. Evaluation of Drainage Sump for Discharge Point 002 and its Pollutant Removal Potential

Within 90 days of the effective date of this Order, the Discharger shall submit to the Los Angeles Water Board a work plan that evaluates the water quality of the influent and effluent of the drainage sump and its pollutant removal efficiency, the appropriateness of the dilution credits to the pollutants, the volume of the drainage sump and retention time, and the latest available technology to treat or reduce the pollutant concentration in the discharge.

6.3.3. Best Management Practices and Pollution Prevention

a. Storm Water Pollution Prevention Plan (SWPPP)

Within 90 days of the effective date of this Order, the Discharger is required to update and submit the SWPPP for the Facility using Attachment G of this Order as guidance. An updated SWPPP that describes site-specific management practices for minimizing contamination of stormwater runoff and for preventing contaminated stormwater runoff from being discharged directly

to waters of the State. The SWPPP shall accurately reflect current facility conditions and incorporate changes in discharge practices.

b. Best Management Practices Plan (BMPP)

Within 90 days of the effective date of this Order, the Discharger is required to update and submit the BMPP for the Facility using Attachment G of this Order as guidance. An updated 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 stormwater discharges from the Facility would neither cause, nor contribute to the exceedance of water quality standards and objectives, nor create conditions of nuisance in the receiving water, and that unauthorized discharges (i.e., spills) to the receiving water have been effectively prohibited. In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material discharge to surface waters.

c. Spill Contingency Plan (SCP)

Within 90 days of the effective date of this Order, the Discharger is required to update and submit the SCP for the Facility, 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 stormwater runoff and the discharge of hazardous waste/material; and address the feasibility of containment and/or treatment of stormwater. The plans shall be reviewed annually and at the same time.

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

6.3.4. Construction, Operation and Maintenance Specifications

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

6.3.5 Climate Change Effects Vulnerability Assessment and Mitigation Plan.

The Discharger shall consider the impacts of climate change as they affect the operation of the facility due to flooding, wildfire, or other climate-related changes. The Discharger shall develop a Climate Change Effects Vulnerability

Assessment and Mitigation Plan (Climate Change Plan) to assess and manage climate change-related effects that may impact the facility's operation, water supplies, and water quality and beneficial uses. For facilities that discharge to the ocean including desalination plants, the Climate Change Plan shall also include the impacts from sea level rise. The Climate Change Plan is due 12 months after the effective date of this Order.

6.3.6. Compliance Schedules – Not Applicable

7. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section 4 of this Order will be determined as specified below:

7.1. Single Constituent Effluent Limitation

If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML) (see Reporting Requirement 1.9 of the MRP), then the Discharger is out of compliance.

7.2. Effluent Limitations Expressed as a Sum of Several Constituents

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

7.3. Effluent Limitations Expressed as a Median

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

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

$$=X_{(n+1)/2}$$

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

$$= [X_{n/2} + X_{(n/2)+1}]/2, \text{ i.e. the midpoint between the } n/2 \text{ and } n/2+1 \text{ data points.}$$

7.4. 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:

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

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

the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

7.5. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsection 7.3 and 7.4 above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation for the purpose of calculating mandatory minimum penalties, though the Discharger may be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month)) for the purpose of calculating discretionary administrative civil liabilities. However, an alleged violation of the AMEL will be considered one violation for the purpose of assessing mandatory minimum penalties. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. If multiple samples are taken the Discharger will only be considered out of compliance for days when the discharge occurs. For 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:

- 7.5.1. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for that constituent, the Discharger has demonstrated compliance with the AMEL for each day of the month for that parameter.
- 7.5.2. 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 same calendar 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 ML (see Reporting Requirement 1.10 of the MRP), the numerical average of the analytical results of these five samples will be used for compliance determination.

When one or more sample results are reported as "Not-Detected (ND)" or "Detected, but Not Quantified (DNQ)" (see Reporting Requirement I.1 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.

- 7.5.3. 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.
- 7.5.4. 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.

7.6. Maximum Daily Effluent Limitation (MDEL)

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

7.7. Instantaneous Minimum Effluent Limitation

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

7.8. Instantaneous Maximum Effluent Limitation

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

7.9. Median Monthly Effluent Limitation (MMEL)

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

7.10. Chronic Toxicity

The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, Table A-1, and Appendix B, Table B-1. The null hypothesis (H_0) for the TST statistical approach is: Mean discharge In-stream Waste Concentration (IWC) response $\leq 0.75 \times$ Mean control response. A test result that rejects this null hypothesis is reported as "Pass." A test result that does not reject this null hypothesis is reported as "Fail." The relative "Percent Effect" at the discharge IWC is defined and reported as: $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$. This is a t-test (formally Student's t-Test), a statistical analysis comparing two sets of replicate observations - in the case of Whole Effluent Toxicity (WET), only two test

concentrations (i.e., a control and IWC). The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving water concentration differs from the control (the test result is “Pass” or “Fail”). The Welch’s t-test employed by the TST statistical approach is an adaptation of Student’s t-test and is used with two samples having unequal variances.

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

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”. The MMEL for chronic toxicity shall only apply when there is a discharge on more than one day in a calendar month period. During such calendar months, up to three independent toxicity tests may be conducted when one toxicity test results in “Fail.”

The chronic toxicity MDEL and MMEL are set at the IWC for the discharge (100% effluent) and expressed in units of the TST statistical approach (“Pass” or “Fail”, “Percent Effect”). All NPDES effluent compliance monitoring for the chronic toxicity MDEL and MMEL shall be reported using only the 100% effluent concentration and negative control, expressed in units of the TST. The TST hypothesis (H_0) (see above) is statistically analyzed using the IWC and a negative control. Effluent toxicity tests shall be run using a multi-concentration test design when required by Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (U.S. EPA 2002, EPA-821-R-02-013). The Los Angeles Water Board’s review of reported toxicity test results will include review of concentration-response patterns as appropriate (see Fact Sheet discussion at 4.3.6.f). As described in the bioassay laboratory audit correspondence from the State Water Resources Control Board dated August 7, 2014, and from the U.S. EPA dated December 24, 2013, the Percent Minimum Significant Difference (PMSD) criteria only apply to compliance reporting for the No Observable Effect Concentration (NOEC) and the sublethal statistical endpoints of the NOEC, and therefore are not used to interpret TST results. Standard Operating Procedures used by the toxicity testing laboratory to identify and report valid, invalid, anomalous, or inconclusive effluent (and receiving water) toxicity test measurement results from the TST statistical approach, including those that incorporate a consideration of concentration-response patterns, must be submitted to the Los Angeles Water Board (40 CFR section 122.41(h)). The Los Angeles Water Board will make a final determination as to whether a toxicity test result is valid, and may consult with the Permittee, the U.S. EPA, the State Water Board’s Quality Assurance Officer, or the State Water Board’s Environmental Laboratory Accreditation Program (ELAP) as needed. The Board may consider the results of any TIE/TRE studies in an enforcement action.

7.11. Mass and Concentration Limitations

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be ND or DNQ,

the corresponding mass emission rate determined from that sample concentration shall also be reported as ND or DNQ.

7.12. **Bacterial Standards and Analysis**

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

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

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

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

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

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)

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

Average Monthly Effluent Limitation (AMEL)

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

Best Management Practices (BMPs)

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

Bioaccumulative

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

Carcinogenic

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

Coefficient of Variation (CV)

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

Daily Discharge

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

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

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

Detected, but Not Quantified (DNQ)

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

Dilution Credit

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

EC25

EC25 is a point estimate of the toxicant concentration that would cause an observable adverse effect (e.g., death, immobilization, or serious incapacitation) in 25 percent of the test organisms.

Effluent Concentration Allowance (ECA)

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

Enclosed Bays

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

Estimated Chemical Concentration

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

Estuaries

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

Inland Surface Waters

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

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

Maximum Daily Effluent Limitation (MDEL)

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

Median

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

Median Monthly Effluent Limitation (MMEL)

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

Method Detection Limit (MDL)

MDL is the minimum concentration of a substance that can be reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 CFR part 136, Attachment B.

Minimum Level (ML)

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

Mixing Zone

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

Not Detected (ND)

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

PCBs (polychlorinated biphenyls) as Aroclors

The sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

PCBs as Congeners

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

Persistent Pollutants

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

Pollutant Minimization Program (PMP)

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

Pollution Prevention

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

Reporting Level (RL)

The RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Los Angeles Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper

application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Source of Drinking Water

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

Standard Deviation (σ)

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

Statistical Threshold Value (STV)

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

Toxicity Reduction Evaluation (TRE)

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

Trash

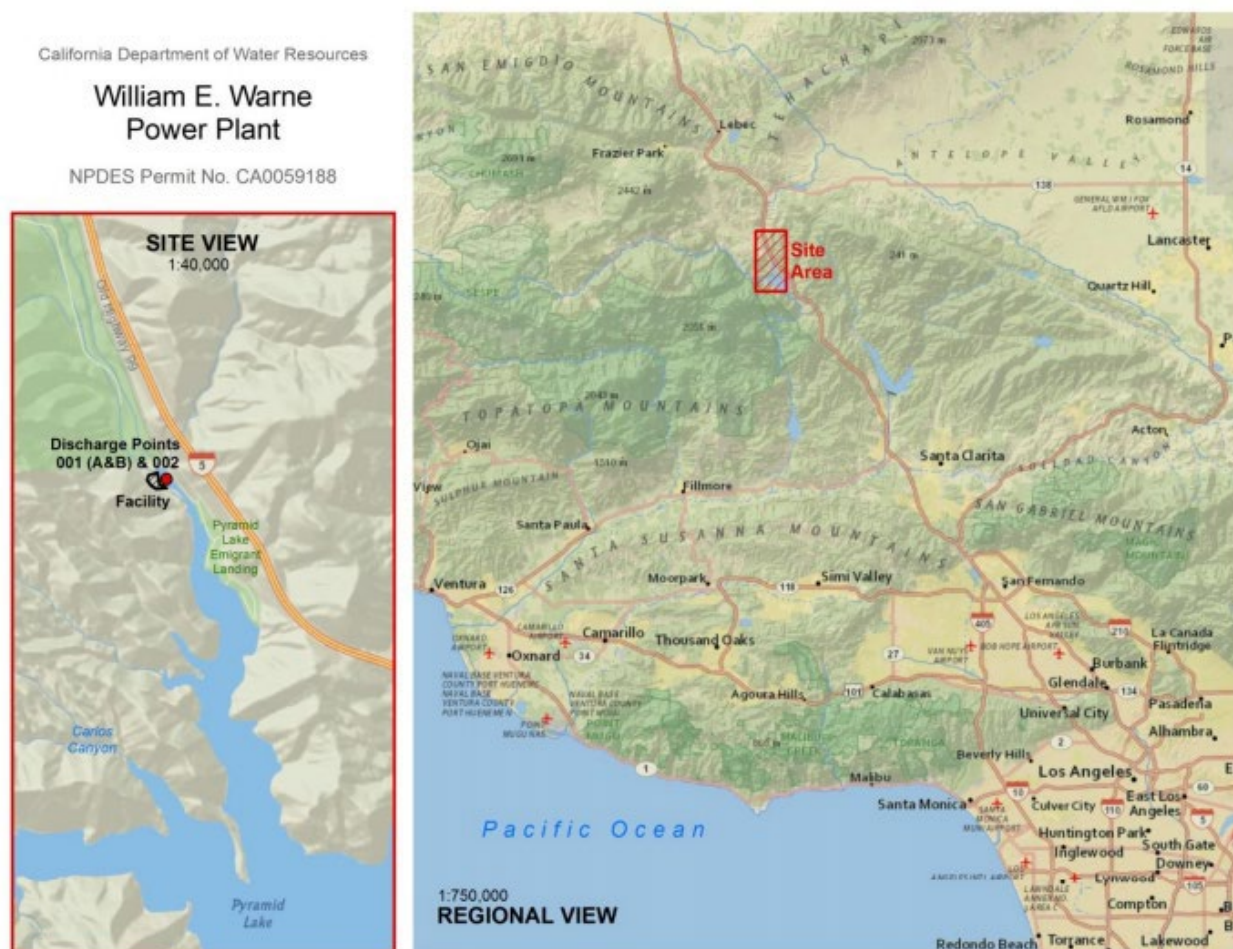
All improperly discarded solid material from any production, manufacturing, or processing operation including, but not limited to, products, product packaging, or containers constructed of plastic, steel, aluminum, glass, paper, or other synthetic or natural materials.

ACRONYMS AND ABBREVIATIONS

AMEL	Average Monthly Effluent Limit
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	<i>Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i>
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20°C
BPT	Best Practicable Treatment Control Technology
C	Water Quality Objective
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	California Water Code
Discharger	California Department of Water Resources
DMR	Discharge Monitoring Report
DNQ	Detected but Not Quantified
ELAP	State Water Resources Control Board, Drinking Water Division, Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Facility	William E. Warne Power Plant
gpd	gallons per day
IC	Inhibition Coefficient
IC15	Concentration at which the organism is 15% inhibited
IC25	Concentration at which the organism is 25% inhibited
IC40	Concentration at which the organism is 40% inhibited
IC50	Concentration at which the organism is 50% inhibited
IWC	In-stream Waste Concentration
LA	Load Allocations
LOEC	Lowest Observed Effect Concentration
µg/L	micrograms per Liter
MGD	Million Gallons Per Day
mg/L	milligrams per Liter
ML	Minimum Level
MDEL	Maximum Daily Effluent Limitation
MMEL	Median Monthly Effluent Limitation
MPN	Most Probable Number
MRP	Monitoring and Reporting Program
ND	Not Detected
ng/L	nanograms per liter

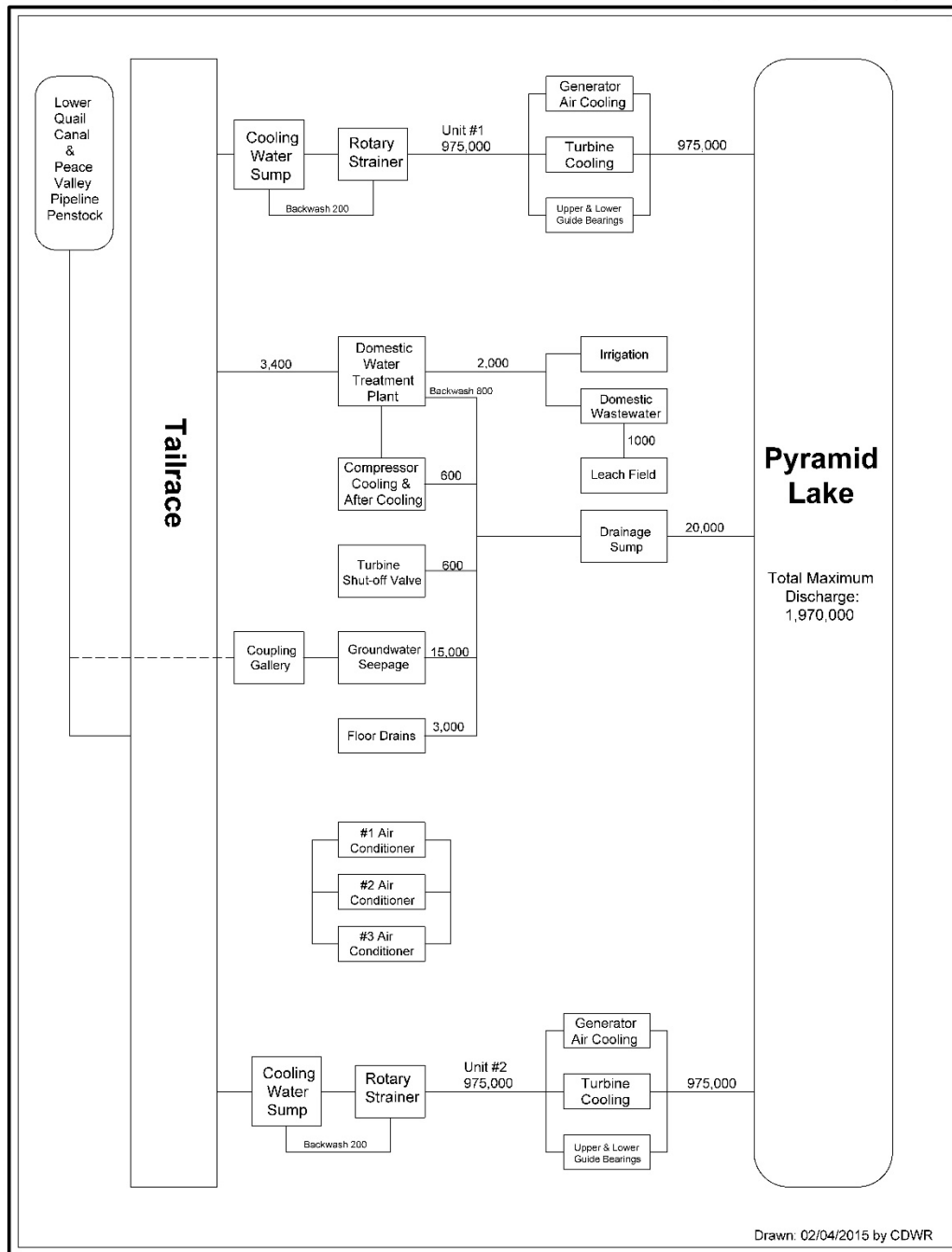
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NTR	National Toxics Rule
OAL	Office of Administrative Law
pCi/L	picocuries per Liter
PMEL	Proposed Maximum Daily Effluent Limitation
PMP	Pollutant Minimization Plan
POTW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

ATTACHMENT B – SITE LOCATION MAP



ATTACHMENT C – FLOW SCHEMATIC

William E. Warne Powerplant, Schematic of Maximum Daily Flows (G.P.D.)



ATTACHMENT D – STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply

- 1.1.1. The Discharger must comply with all the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (Title 40 of the Code of Federal Regulations (40 CFR) § 122.41(a); California Water Code (CWC), §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)
- 1.1.2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR § 122.41(a)(1).)

1.2. Need to Halt or Reduce Activity Not a Defense

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

1.3. Duty to Mitigate

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

1.4. Proper Operation and Maintenance

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

1.5. Property Rights

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

1.6. Inspection and Entry

The Discharger shall allow the Los Angeles Water Board, State Water Board, U.S. EPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may

be required by law, to (33 U.S.C. § 1318(a)(B); 40 CFR § 122.41(i); CWC, §§ 13267, 13383):

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

1.7. Bypass

1.7.1. Definitions

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

1.7.2. **Bypass not exceeding limitations.** The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance 1.7.3, 1.7.4, and 1.7.5 below. (40 CFR § 122.41(m)(2).)

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

- a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 122.41(m)(4)(i)(A));
- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during

normal periods of equipment downtime or preventive maintenance (40 CFR § 122.41(m)(4)(i)(B)); and

- c. The Discharger submitted notice to the Los Angeles Water Board as required under Standard Provisions – Permit Compliance 1.7.5 below. (40 CFR § 122.41(m)(4)(i)(C).)

1.7.4. The Los Angeles Water Board may approve an anticipated bypass, after considering its adverse effects, if the Los Angeles Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance 1.7.3 above. (40 CFR § 122.41(m)(4)(ii).)

1.7.5. **Notice**

- a. **Anticipated bypass.** If the Discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass. As of December 21, 2023, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 below. Notices shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(m)(3)(i).)
- b. **Unanticipated bypass.** The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting 5.5 below (24-hour notice). As of December 21, 2023, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 below. Notices shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(m)(3)(ii).)

1.8. **Upset**

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

1.8.1. **Effect of an upset.** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance 1.8.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR § 122.41(n)(2).)

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

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

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

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

2. STANDARD PROVISIONS – PERMIT ACTION

2.1. General

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

2.2. Duty to Reapply

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

2.3. Transfers

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

3. STANDARD PROVISIONS – MONITORING

- 3.1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR § 122.41(j)(1).)
- 3.2. Monitoring must be conducted according to test procedures approved under 40 CFR part 136 for the analyses of pollutants unless another method is required under 40 CFR chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 CFR part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:
 - 3.2.1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is

high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

- 3.2.2. The method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter 1, subchapter N for the measured pollutant or pollutant parameter. In the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR part 136 or otherwise required under 40 CFR chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 CFR §§ 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)

4. STANDARD PROVISIONS – RECORDS

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

4.2. Records of monitoring information shall include:

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

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

- 4.3.1. The name and address of any permit applicant or Discharger (40 CFR § 122.7(b)(1)); and
- 4.3.2. Permit applications and attachments, permits and effluent data. (40 CFR § 122.7(b)(2).)

5. STANDARD PROVISIONS – REPORTING

5.1. Duty to Provide Information

The Discharger shall furnish to the Los Angeles Water Board, State Water Board, or U.S. EPA within a reasonable time, any information which the Los Angeles Water Board, State Water Board, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Los

Angeles Water Board, State Water Board, or U.S. EPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); CWC, §§ 13267, 13383.)

5.2. Signatory and Certification Requirements

- 5.2.1. All applications, reports, or information submitted to the Los Angeles Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting 5.2.2, 5.2.3, 5.2.4, 5.2.5, and 5.2.6 below. (40 CFR § 122.41(k).)
- 5.2.2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA). (40 CFR § 122.22(a)(3).)
- 5.2.3. All reports required by this Order and other information requested by the Los Angeles Water Board, State Water Board, or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting 5.2.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting 5.2.2 above (40 CFR § 122.22(b)(1));
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR § 122.22(b)(2)); and
 - c. The written authorization is submitted to the Los Angeles Water Board and State Water Board. (40 CFR § 122.22(b)(3).)
- 5.2.4. If an authorization under Standard Provisions – Reporting 5.2.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting 5.2.3 above must be submitted to the Los Angeles Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR § 122.22(c).)
- 5.2.5. Any person signing a document under Standard Provisions – Reporting 5.2.2 or 5.2.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who

manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 CFR § 122.22(d).)

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

5.3. Monitoring Reports

- 5.3.1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.41(l)(4).)
- 5.3.2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Los Angeles Water Board or State Water Board. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 and comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(l)(4)(i).)
- 5.3.3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR part 136, or another method required for an industry-specific waste stream under 40 CFR chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Los Angeles Water Board or State Water Board. (40 CFR § 122.41(l)(4)(ii).)
- 5.3.4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR § 122.41(l)(4)(iii).)

5.4. Compliance Schedules

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

5.5. Twenty-Four Hour Reporting

- 5.5.1. The Discharger shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (i.e., combined sewer overflow, sanitary sewer overflow, or bypass event), type of overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volume untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the event, and whether the noncompliance was related to wet weather.

As of December 21, 2023, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 The reports shall comply with 40 CFR part 3, 40 C.F.R. section 122.22, and 40 CFR part 127. The Los Angeles Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 CFR § 122.41(l)(6)(i).)

5.5.2. The following shall be included as information that must be reported within 24 hours:

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

5.5.3. The Los Angeles Water Board may waive the above required written report on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR § 122.41(l)(6)(ii)(B).)

5.6. Planned Changes

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

- 5.6.1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR § 122.41(l)(1)(i)); or
- 5.6.2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR § 122.41(l)(1)(ii).)
- 5.6.3. The alteration or addition results in a significant change 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 7.1.1). (40 CFR § 122.41(l)(1)(ii).)

5.7. Anticipated Noncompliance

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

5.8. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting 5.3, 5.4, and 5.5 above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting 5.5 above. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting 5.5 and the applicable required data in appendix A to 40 CFR part 127. The Los Angeles Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 CFR § 122.41(l)(7).)

5.9. Other Information

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

5.10. Initial Recipient for Electronic Reporting Data

The owner, operator, or the duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 CFR part 127 to the initial recipient defined in 40 CFR section 127.2(b). U.S. EPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 CFR section 127.2(c)]. U.S. EPA will update and maintain this listing. (40 CFR § 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

- 6.1. The Los Angeles Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13268, 13385, 13386, and 13387.
- 6.2. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the CWA, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more

than two years, or both. Any person who *knowingly* violates such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who *knowingly* violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions (40 CFR § 122.41(a)(2); CWC section 13385 and 13387).

- 6.3. Any person may be assessed an administrative penalty by the Administrator of U.S. EPA, the Los Angeles Water Board, or State Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000. (40 CFR § 122.41(a)(3))
- 6.4. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both. (40 CFR § 122.41(j)(5)).
- 6.5. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both. (40 CFR § 122.41(k)(2)).

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

7.1. Non-Municipal Facilities

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

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

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) (CI NO. 6610)

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) CI NO. 9544

Section 308(a) of the federal Clean Water Act (CWA) and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of title 40 of the Code of Federal Regulations (40 CFR) require that all NPDES permits specify monitoring and reporting requirements. Water Code section 13383 also authorizes the Los Angeles Water Board to establish monitoring, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and California laws and/or regulations.

1. GENERAL MONITORING PROVISIONS

- 1.1. Effluent sampling stations shall be established for Discharge Points No. 001 (A&B) and 002 and shall be located where representative samples of that effluent can be obtained.
- 1.2. Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.
- 1.3. The Los Angeles Water Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
- 1.4. Pollutants shall be analyzed using the analytical methods described in 40 CFR sections 136.3, 136.4, and 136.5; or where no methods are specified for a given pollutant, by methods approved by this Los Angeles Water Board or the State Water Resources Control Board (State Water Board).
- 1.5. **Laboratory Certification.** Laboratories analyzing monitoring samples shall be certified by the State Water Board, Division of Drinking Water, Environmental Laboratory Accreditation Program (ELAP) in accordance with the provision of Water Code section 13176, or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) 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.
- 1.6. For any analyses performed for which no procedure is specified in the United States Environmental Protection Agency (U.S. EPA) guidelines, or in the MRP, the constituent or parameter analyzed, and the method or procedure used must be specified in the monitoring report.
- 1.7. Each monitoring report must affirm in writing that *“all analyses were conducted at a laboratory certified for such analyses by the State Water Resources Control Board, Division of Drinking Water, or approved by the Executive Officer and in accordance with current U.S. EPA guideline procedures or as specified in this Monitoring and Reporting Program.”*
- 1.8. The monitoring reports shall specify the analytical method used, the Method Detection Limit (MDL), and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:
 - a. An actual numerical value for sample results greater than or equal to the ML; or

- b. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML; or,
- c. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

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

Current MLs are those published by the State Water Board in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP), February 24, 2005, Appendix 4.

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

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

- a. When the pollutant under consideration is not included in Appendix 4 of the SIP;
- b. When the Discharger and Los Angeles Water Board agree to include in the permit a test method that is more sensitive than that specified in part 136 (revised August 28, 2017);
- c. When the Discharger agrees to use an ML that is lower than that listed in Appendix 4 of the SIP;
- d. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix 4 of the SIP, and proposes an appropriate ML for their matrix; or,
- e. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the U.S.

EPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, the Los Angeles Water Board, and the State Water Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

- 1.11. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR section 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Los Angeles Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.
- 1.12. Field analyses with short sample holding time such as pH, total chlorine residual, and temperature, may be performed using properly calibrated and maintained portable instruments by trained personnel acting on the Discharger's behalf, using methods in accordance with 40 CFR part 136. All field instruments must be calibrated 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 Los Angeles 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 Los Angeles Water Board as part of the corresponding regular monitoring report.
- 1.13. All analyses shall be accompanied by the chain of custody, including but not limited to date and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.
- 1.14. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments to ensure accuracy of measurements or shall insure that both equipment activities will be conducted.
- 1.15. For parameters for which both average monthly and daily maximum limits are specified and the monitoring frequency is less than four times a month, the following shall apply. If an analytical result is greater than the average monthly limit, the Discharger shall collect four additional samples at approximately equal intervals during the month, until compliance with the average monthly limit has been demonstrated. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. In the event of noncompliance with an average monthly effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the average monthly effluent limitation has been demonstrated. The Discharger shall provide for the approval of the Executive Officer a program to ensure future compliance with the average monthly limit.
- 1.16. In the event wastes are transported to a different disposal site during the reporting period, the following shall be reported in the monitoring report:

- a. Types of wastes and quantity of each type;
- b. Name and address for each hauler of wastes (or method of transport if other than by hauling); and
- c. Location of the final point(s) of disposal for each type of waste. If no wastes are transported off-site during the reporting period, a statement to that effect shall be submitted.

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

2. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
---	INF-001	The influent sampling station shall be located where representative samples of the intake water can be obtained at Penstock Pipeline prior to entry into the Facility.
001	EFF-001(A&B)	The effluent sampling station shall be located where representative samples of effluent can be obtained from Discharge Point Number 001(A&B) prior to entry into the power plant tailrace to Pyramid Lake. Latitude: 34.6850° Longitude: -118.7878°
002	EFF-002	The effluent sampling station shall be located where representative samples of effluent can be obtained from Discharge Point Number 002 prior to entry into the power plant tailrace to Pyramid Lake. Latitude: 34.6850° Longitude: -118.7878°
---	RSW-001	A receiving water sampling station shall be established where a representative sample of receiving water can be obtained at Pyramid Lake Inlet. The sampling location shall be outside the influence of the discharge or located a minimum of 100 feet from the discharge, whichever is a greater distance.

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

3. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to continue to screen potential constituents that may be present in the effluent of the groundwater treatment system.

3.1. Monitoring Location INF-001

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Turbidity	NTU	Grab	1/Month	a and b
Chloride	mg/L	Grab	1/Month	a and b
Nitrate plus nitrite (as N)	mg/L	Grab	1/Quarter	a and b
E. coli	MPN/100 ml	Grab	5/Quarter	a, b, and c
Mercury, Total Recoverable	µg/L	Grab	1/Month	a, b, and d
TCDD Equivalents	µg/L	Grab	2/Year	e
Asbestos	Fibers/L	Grab	2/Year	f
Remaining Priority Pollutants	µg/L	Grab	1/Year	b, g, and h

Footnotes for Table E-2

- Intake water credits are provided for these constituents. Sampling location and timing of intake water and effluent shall be designed so that the intake water sample directly corresponds to the effluent samples. The sampling protocol shall reflect the travel time of water in the Facility and detect any Facility contributions to the discharge.
- Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; for priority pollutants, the methods must meet the lowest MLs specified in Appendix 4 of the SIP. Where no methods are specified for a given pollutant, the methods must be approved by the Los Angeles Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select a sufficiently sensitive method from the listed methods and corresponding ML necessary to demonstrate compliance with applicable effluent limitations.
- Generally not less than five (5) samples should be taken equally spaced over a 30-day period with the first sample taken in the monitoring month (February, May, August, or November) for the required quarter. The results will provide sufficient data for the calculation of the geometric mean values.
- Mercury shall be analyzed using EPA method 1631E, per 40 CFR part 136.
- TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.

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

where: C_x = concentration of dioxin or furan congener x

TEF_x = TEF for congener x

Toxicity Equivalency Factors

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

- f. Asbestos shall be analyzed using EPA method 100.2, per 40 CFR part 136.
- g. Samples must be collected in glass sample containers to avoid interference for the analyses of the following parameters: bis(2-ethylhexyl)phthalate and volatile and semi-volatile organics. In addition, grab sample type is required for bis(2-ethylhexyl)phthalate and volatile and semi-volatile organics.
- h. Priority Pollutants are those constituents referred to in 40 CFR section 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423.

End of Footnotes for Table E-2

4. EFFLUENT MONITORING REQUIREMENTS

4.1. Monitoring Location EFF-001

The Discharger shall monitor the discharge of non-contact, once through cooling water at Monitoring Location EFF-001 as follows. The Discharger shall conduct monitoring on a composite sample consisting of two flow-weighted grab samples from two discharges from units 1 and 2, respectively, if discharges from two units occurred concurrently at the sampling time. 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-3. Effluent Monitoring EFF-001 (A&B)

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Flow	gallons per day (gpd)	Meter	1/Day	a
Biochemical Oxygen Demand @20°C (BOD ₅ 20°C)	mg/L	Grab	1/Month	a
Oil and Grease	mg/L	Grab	1/Quarter	b
pH	standard unit	Grab	1/Month	b and c
Total Suspended Solids (TSS)	mg/L	Grab	1/Quarter	b
Ammonia, Total (as N)	mg/L	Grab	1/Quarter	b
Boron	mg/L	Grab	1/Month	b
Chloride	mg/L	Grab	1/Month	b and c
Chronic Toxicity	Pass or Fail and % Effect	Grab	1/Year	d
Dissolved Oxygen	mg/L	Grab	1/Month	b
<i>E. coli</i>	MPN or cfu/100 ml	Grab	5/Quarter	b, c and e
Hardness	mg/L	Grab	1/Quarter	b
Iron, TR	mg/L	Grab	2/Year	b
Nitrate + Nitrite as N	mg/L	Grab	1/Quarter	b and c
Settleable Solids	ml/L	Grab	1/Quarter	b
Sulfate	mg/L	Grab	2/Year	b
Temperature	degree F	Grab	1/Month	b
Total Dissolved Solids (TDS)	mg/L	Grab	2/Year	b
Turbidity	NTU	Grab	1/Month	b and c
Calcium	mg/L	Grab	2/Year	b
Sodium	mg/L	Grab	2/Year	b
Magnesium	mg/L	Grab	2/Year	b
Sodium Adsorption Ratio	mg/L	Calculated	2/year	f
Aluminum, TR	µg/L	Grab	1/Year	b
Barium, TR	µg/L	Grab	1/Year	b
Radioactivity, Gross Alpha	pCi/L	Grab	1/Year	g
Radioactivity, Gross Beta	pCi/L	Grab	1/Year	g
Copper, TR	µg/L	Grab	1/Month	b
Mercury, TR	µg/L	Grab	1/Month	c and h

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Bis(2-Ethylhexyl) Phthalate	µg/L	Grab	1/Month	b
Asbestos	Fibers/L	Grab	2/Year	b and i
Remaining Priority Pollutants	µg/L	Grab	2/Year	b, j, and k
TCDD Equivalents	µg/L	Grab	1/Month	b and l

Footnotes for Table E-3

- a. Flow shall be recorded daily during each period of discharge. Periods of no flow shall also be reported.
- b. Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; for priority pollutants, the methods must meet the lowest MLs specified in Appendix 4 of the SIP. Where no methods are specified for a given pollutant, the methods must be approved by the Los Angeles Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select a sufficiently sensitive method from the listed methods and corresponding ML necessary to demonstrate compliance with applicable effluent limitations.
- c. Intake water credits are provided for these constituents. Sampling location and timing of intake water and effluent shall be designed so that the intake water sample directly corresponds to the effluent samples. The sampling protocol shall reflect the travel time of water in the Facility and detect any Facility contributions to the discharge.
- d. Refer to section 5 below, Chronic Whole Effluent Toxicity Testing Requirements. More frequent monitoring is required during species sensitivity screening.
- e. Generally not less than five (5) samples should be taken equally spaced over a 30-day period with the first sample taken in the monitoring month (February, May, August, or November) for the required quarter. The results will provide sufficient data for the calculation of the geometric mean values.
- f. Sodium Adsorption Ratio (SAR) = $\text{Na}^+ \div \sqrt{(\text{Ca}^{++} + \text{Mg}^{++}) \div 2}$
- g. Gross Alpha and Gross Beta Radioactivity shall be analyzed using EPA method 900.0.
- h. Mercury shall be analyzed using EPA method 1631E, per 40 CFR part 136.
- i. Asbestos shall be analyzed using EPA method 100.2, per 40 CFR part 136.
- j. Priority Pollutants are those constituents referred to in 40 CFR section 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423.
- k. Samples must be collected in glass sample containers to avoid interference for the analyses of the following parameters: bis(2-ethylhexyl)phthalate and volatile and semi-volatile organics. In addition, grab sample type is required for bis(2-ethylhexyl)phthalate and volatile and semi-volatile organics.
- l. TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.

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

$$\text{TEF}_x = \text{TEF for congener x}$$

Toxicity Equivalency Factors

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

End of Footnotes for Table E-3

4.2. Monitoring Location EFF-002

The Discharger shall monitor the discharge of drainage sump water at Monitoring Location EFF-002 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding minimum level:

Table E-4. Effluent Monitoring EFF-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
Flow	gpd	Meter	1/Day	a
Flow Duration	hours, days	Meter	---	---
BOD ₅ 20°C	mg/L	Grab	1/Month	b
Oil and Grease	mg/L	Grab	1/Quarter	b
pH	standard unit	Grab	1/Month	b and c
TSS	mg/L	Grab	1/Quarter	b
Ammonia, Total (as N)	mg/L	Grab	1/Quarter	b
Boron	mg/L	Grab	1/Month	b
Chloride	mg/L	Grab	1/Month	b and c
Chlorine, Total Residual	mg/L	Grab	1/Month	b
Chronic Toxicity	Pass or Fail	Grab	1/Year	d

Parameter	Units	Sample Type	Minimum Sampling Frequency	Notes
	and % Effect			
Dissolved Oxygen	mg/L	Grab	1/Month	b
<i>E. coli</i>	MPN or cfu/100 ml	Grab	5/Quarter	b, c and e
Hardness	mg/L	Grab	1/Quarter	b
Iron, TR	mg/L	Grab	2/Year	b
Nitrate + Nitrite as N	mg/L	Grab	1/Month	b and c
Settleable Solids	mg/L	Grab	1/Quarter	b
Sulfate	mg/L	Grab	2/Year	b
Temperature	degree F	Grab	1/Month	b
TDS	mg/L	Grab	2/Year	b
Turbidity	NTU	Grab	1/Month	b and c
Calcium	mg/L	Grab	2/Year	b
Sodium	mg/L	Grab	2/Year	b
Magnesium	mg/L	Grab	2/Year	b
Sodium Adsorption Ratio	mg/L	Calculated	2/year	f
Aluminum, TR	µg/L	Grab	1/Year	b
Barium, TR	µg/L	Grab	1/Year	b
Radioactivity, Gross Alpha	pCi/L	Grab	1/Year	g
Radioactivity, Gross Beta	pCi/L	Grab	1/Year	g
Copper, TR	µg/L	Grab	1/Month	b
Lead, TR	µg/L	Grab	1/Month	b
Mercury, TR	µg/L	Grab	1/Month	c and h
Zinc, TR	µg/L	Grab	1/Month	b
Chloroform	µg/L	Grab	1/Month	b
Chlorodibromomethane	µg/L	Grab	1/Month	b
Dichlorobromomethane	µg/L	Grab	1/Month	b
Total Trihalomethanes	µg/L	Calculated	1/Month	i
Tetrachloroethylene	µg/L	Grab	1/Month	b
Bis(2-Ethylhexyl) Phthalate	µg/L	Grab	1/Month	b
Asbestos	Fibers/L	Grab	2/Year	b and j
Remaining Priority Pollutants	µg/L	Grab	2/Year	b, k and l
TCDD Equivalents	µg/L	Grab	1/Month	b and m

Footnotes for Table E-4

- a. Flow shall be recorded daily during each period of discharge. Periods of no flow shall also be reported.
- b. Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; for priority pollutants, the methods must meet the lowest MLs specified in Appendix 4 of the SIP. Where no methods are specified for a given pollutant, the methods must be approved by the Los Angeles Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select a sufficiently sensitive method from the listed methods and corresponding ML necessary to demonstrate compliance with applicable effluent limitations.
- c. Intake water credits are provided for these constituents. Sampling location and timing of intake water and effluent shall be designed so that the intake water sample directly corresponds to the effluent samples. The sampling protocol shall reflect the travel time of water in the Facility and detect any Facility contributions to the discharge.
- d. Refer to section 5 below, Chronic Whole Effluent Toxicity Testing Requirements.
- e. Generally not less than five (5) samples should be taken equally spaced over a 30-day period with the first sample taken in the monitoring month (February, May, August, or November) for the required quarter. The results will provide sufficient data for the calculation of the geometric mean values.
- f. Sodium Adsorption Ratio (SAR) = $Na^+ \div \sqrt{(Ca^{++} + Mg^{++}) \div 2}$
- g. Gross Alpha and Gross Beta Radioactivity shall be analyzed using EPA method 900.0.
- h. Mercury shall be analyzed using EPA method 1631E, per 40 CFR part 136.
- i. The Discharger shall monitor for bromoform, bromodichloromethane, chloroform, and dibromochloromethane and report the individual results as well as the sum of concentrations of these constituents. For summing of total trihalomethanes, the Discharger shall set the concentrations below the MLs to zero.
- j. Asbestos shall be analyzed using EPA method 100.2, per 40 CFR part 136.
- k. Priority Pollutants are those constituents referred to in 40 CFR section 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423.
- l. Samples must be collected in glass sample containers to avoid interference for the analyses of the following parameters: bis(2-ethylhexyl)phthalate and volatile and semi-volatile organics. In addition, grab sample type is required for bis(2-ethylhexyl)phthalate and volatile and semi-volatile organics.
- m. TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.
Dioxin-TEQ (TCDD equivalents) = $\sum (C_x \times TEF_x)$
where: C_x = concentration of dioxin or furan congener x

$$TEF_x = \text{TEF for congener x}$$

Toxicity Equivalency Factors

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

End of Footnotes for Table E-4

5. CHRONIC WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

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

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

5.2. Sample Volume and Holding Time

The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. Sufficient sample volume shall also be collected for subsequent TIE studies, if necessary, at each sampling event. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.

5.3. Chronic Freshwater Species and Test Methods

If effluent samples are collected from outfalls discharging to receiving waters with salinity <1 ppt, the Discharger shall conduct the following chronic toxicity tests on effluent samples at the in-stream waste concentration for the discharge in accordance with species and test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR part 136). In no case shall these species be substituted with another test species unless written authorization from the Executive Officer is received.

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

5.3.2 A static renewal toxicity test with the daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.01).

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

5.4. Species Sensitivity Screening

Species sensitivity screening shall be conducted during this permit's first required sample collection. The Discharger shall collect a single effluent sample to initiate and concurrently conduct three toxicity tests using the fish, an invertebrate, and the alga species previously referenced. If the result of all three species is "Pass", then the species that exhibits the highest "Percent Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit cycle. If only one species fails, then that species shall be used for routine monitoring during the permit cycle. If two or more species result in "Fail," then the species that exhibits the highest "Percent Effect" at the discharge IWC during the suite of species sensitivity screening shall be used for routine monitoring during the permit cycle, until a rescreening is required.

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

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

5.5. Quality Assurance and Additional Requirements

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

- a. The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, Table A-1 and Appendix B, Table B-1. The null hypothesis (H_0) for the TST approach is: Mean discharge IWC response $\leq 0.75 \times$ Mean control response. A test result that rejects this null hypothesis is reported as "Pass." A test result that does not reject this null hypothesis is reported as "Fail." The relative "Percent Effect" at the discharge IWC is defined and reported as: $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$.

- b. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (U.S. EPA 2002, EPA-821-R-02-013) (See Table E.3, below) , then the Discharger must re-sample and re-test at the subsequent discharge event.

Table E-5. U.S. EPA Methods and Test Acceptability Criteria

Species & U.S. EPA Test Method Number	Test Acceptability Criteria
Fathead Minnow, <i>Pimephales promelas</i> , Larval Survival and Growth Test Method 1000.0. (Table 1 of Test Method)	80% or greater survival in controls; average dry weight per surviving organism in control chambers equals or exceeds 0.25 mg. (required)
Daphnid, <i>Ceriodaphnia dubia</i> , Survival and Reproduction Test Method 1002.0. Table 3 of Test Method)	80% or greater survival of all control organisms and an average of 15 or more young per surviving female in the control solutions. 60% of the surviving control females must produce three broods. (required)
Green Alga, <i>Selenastrum capricornutum</i> , Growth Toxicity Test Method 1003.0. (Table 3 of Test Method)	Mean cell density as least 1×10^6 cells/mL in the controls; and variability (CV%) among control replicates less than or equal to 20%. (required)

- c. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.). Monthly reference toxicant testing is sufficient.
- d. All reference toxicant test results should be reviewed and reported according to EPA guidance on the evaluation of concentration-response relationships found in *Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing* (40 CFR part 136) (EPA 821-B-00-004, 2000).
- e. The Discharger shall perform toxicity tests on final effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of the Monitoring and Reporting Program and the rationale is explained in the Fact Sheet (Attachment F).

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

The Maximum Daily single result shall be used to determine if accelerated testing needs to be conducted.

Once the Discharger becomes aware of this result, the Discharger shall implement an accelerated monitoring schedule within five calendar days of the receipt of the result. However, if the sample is contracted out to a commercial laboratory, the Discharger shall ensure that the first of five accelerated monitoring tests is initiated within seven calendar days of the Discharger becoming aware of the result. The accelerated monitoring schedule shall consist of a five concentration dilution series which includes

the control with five dilutions, one of which must be the IWC, conducted at approximately two-week intervals, over an eight-week period; in preparation for the TRE process and associated reporting. If each of the accelerated toxicity tests results in "Pass," the Discharger shall return to routine monitoring for the next monitoring period. If one of the accelerated toxicity tests results in "Fail," the Discharger shall immediately implement the TRE Process conditions set forth below.

5.7. Preparation of an Initial Investigation TRE Work Plan

The Discharger shall prepare and submit a copy of the Discharger's initial investigation TRE work plan to the Executive Officer of the Los Angeles Water Board for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the work plan within 60 days, the work plan shall become effective. The Discharger shall use U.S. EPA manual EPA/833B-99/002 (municipal) as guidance, or most current version, or EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, April 1989). This work plan shall describe the steps that the Discharger intends to follow if toxicity is detected. At a minimum, the work plan shall include:

- 5.7.1. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
- 5.7.2. A description of the Facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the Facility.
- 5.7.3. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

5.8. Toxicity Identification Evaluation (TIE)

During the TRE Process, monthly effluent monitoring shall resume and TST results ("Pass" or "Fail", "Percent Effect") for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL and MMEL.

5.8.1. Preparation and Implementation of Detailed TRE Work Plan. The Discharger shall immediately initiate a TRE using, according to the type of treatment facility, EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989) and, within 30 days, submit to the Executive Officer a Detailed TRE Work Plan, which shall follow the generic Initial Investigation TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the Executive Officer:

- i. Further actions by the Discharger to investigate, identify, and correct the causes of toxicity.
- ii. Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.
- iii. A schedule for these actions, progress reports, and the final report

5.8.2. TIE Implementation. A toxicity test sample is immediately subject to TIE procedures to identify the toxic chemical(s), if a chronic toxicity test shows "Fail and % Effect value ≥ 50 ". The Discharger shall initiate a TIE using as guidance,

U.S. EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Chronic TIE Manual: Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I* (EPA/600/6-91/005F, 1992); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.

- 5.8.3. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.
- 5.8.4. The Discharger shall continue to conduct routine effluent monitoring for compliance determination purposes while the TIE and/or TRE process is taking place. Additional accelerated monitoring and TRE work plans are not required once a TRE has begun.
- 5.8.5. The Los Angeles Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.
- 5.8.6. The Board may consider the results of any TIE/TRE studies in an enforcement action.

5.9. Reporting

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

- 5.9.1 The valid toxicity test results for the TST statistical approach, reported as "Pass" or "Fail" and "Percent Effect" at the chronic toxicity IWC for the discharge. All toxicity test results (whether identified as valid or otherwise) conducted during the calendar month shall be reported on the SMR due date specified in **Table E-7**.
- 5.9.2 A summary of water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).
- 5.9.3 The statistical analysis used in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010) Appendix A, Figure A-1, Table A-1, and Appendix B, Table B-1.

- 5.9.4. TRE/TIE results. The Los Angeles Water Board Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses. Prior to the completion of the final TIE/TRE report, the Discharger shall provide status updates in the monthly monitoring reports, indicating which TIE/TRE steps are underway and which steps have been completed.
- 5.9.5. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.
- 5.9.6. Any additional QA/QC documentation or any additional chronic toxicity-related information, upon request from the Los Angeles Water Board.

6. LAND DISCHARGE MONITORING REQUIREMENTS - (NOT APPLICABLE)

7. RECYCLING MONITORING REQUIREMENTS - (NOT APPLICABLE)

8. RECEIVING WATER MONITORING REQUIREMENTS

8.1. Surface Water - Monitoring Location RSW-001

8.1.1. The Discharger shall monitor Pyramid Lake at RSW-001 as follows:

Table E-6. Receiving Water Monitoring Requirements-RSW-001

Parameter	Units (Note b)	Sample Type	Minimum Sampling Frequency	Notes
pH	standard unit	Grab	1/Quarter	a and b
Temperature	degree F	Grab	1/Quarter	a and b
Dissolved Oxygen	mg/L	Grab	1/Quarter	b
Turbidity	NTU	Grab	1/Quarter	b
Hardness	mg/L	Grab	1/Quarter	b
Ammonia, Total (as N)	mg/L	Grab	1/Quarter	a and b
Nitrate + Nitrite as N	mg/L	Grab	1/Quarter	b
Chloride	mg/L	Grab	1/Month	b
<i>E. coli</i>	MPN or cfu/100 ml	Grab	5/Quarter	b and c
Boron	mg/L	Grab	2/Year	b
Iron, TR	mg/L	Grab	2/Year	b
Sulfate	mg/L	Grab	2/Year	b
TDS	mg/L	Grab	2/Year	b
Calcium	mg/L	Grab	2/Year	b
Sodium	mg/L	Grab	2/Year	b
Magnesium	mg/L	Grab	2/Year	b
Sodium Adsorption Ratio	---	Calculated	2/year	d
Aluminum, TR	µg/L	Grab	1/Year	b
Barium, TR	µg/L	Grab	1/Year	b
Radioactivity, Gross Alpha	pCi/L	Grab	1/Year	e

Parameter	Units (Note b)	Sample Type	Minimum Sampling Frequency	Notes
Radioactivity, Gross Beta	pCi/L	Grab	1/Year	e
Copper, TR	µg/L	Grab	1/Quarter	a and b
Lead, TR	µg/L	Grab	1/Quarter	a and b
Mercury, TR	µg/L	Grab	1/Quarter	a and b
Zinc, TR	µg/L	Grab	1/Quarter	a and b
Chloroform	µg/L	Grab	1/Quarter	a and b
Chlorodibromomethane	µg/L	Grab	1/Quarter	a and b
Dichlorobromomethane	µg/L	Grab	1/Quarter	a and b
Total Trihalomethanes	µg/L	Calculated	1/Quarter	f
Tetrachloroethylene	µg/L	Grab	1/Quarter	b
Asbestos	Fibers/L	Grab	2/Year	b and g
Remaining Priority Pollutants	µg/L	Grab	2/Year	a, b, h and i

Footnotes for Table E-6

- a. Receiving water samples for pH, temperature, hardness, ammonia, and priority pollutants must be collected at the same time. A hand-held field meter may be used for pH and temperature, provided the meter utilizes an EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.
- b. Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; for priority pollutants, the methods must meet the lowest MLs specified in Appendix 4 of the SIP. Where no methods are specified for a given pollutant, the methods must be approved by the Los Angeles Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select a sufficiently sensitive method from the listed methods and corresponding ML necessary to demonstrate compliance with applicable effluent limitations.
- c. Generally not less than five (5) samples should be taken equally spaced over a 30-day period with the first sample taken in the monitoring month (February, May, August, or November) for the required quarter. The results will provide sufficient data for the calculation of the geometric mean values.
- d. Sodium Adsorption Ratio (SAR) = $\text{Na}^+ \div \sqrt{(\text{Ca}^{++} + \text{Mg}^{++}) \div 2}$
- e. Gross Alpha and Gross Beta Radioactivity shall be analyzed using EPA method 900.0.
- f. The Discharger shall monitor for bromoform, bromodichloromethane, chloroform, and dibromochloromethane and report the individual results as well as the sum of concentrations of these constituents. For summing of total trihalomethanes, the Discharger shall set the concentrations below the MLs to zero.
- g. Asbestos shall be analyzed using EPA method 100.2, per 40 CFR part 136.
- h. Glass sample bottles must be used for collection of following parameters: bis(2-ethylhexyl)phthalate and volatile and semi-volatile organics.

- i. Priority Pollutants are those constituents referred to in 40 CFR section 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423.

End of Footnotes for Table E-6

8.2. Groundwater Monitoring – Not applicable.

9. REPORTING REQUIREMENTS

9.1. General Monitoring and Reporting Requirements

- 9.1.1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
- 9.1.2. If there is no discharge during any reporting period, the Discharger shall indicate under the statement of perjury that no effluent was discharged to surface water during the reporting period in the corresponding monitoring report.
- 9.1.3. Each monitoring report shall contain a separate section titled “Summary of Non-Compliance” which discusses the compliance record and the 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 discharge requirements, as well as all excursions of effluent limitations.
- 9.1.4. Quarterly analyses shall be performed during the months of February, May, August, and November. Semiannual analyses shall be performed during the months of February and August. Annual analyses shall be performed during the month of August. Should there be instances when monitoring could not be done during these specified months, the Discharger must notify the Los Angeles Water Board, state the reason why the monitoring could not be conducted, and provide an alternate schedule. Results of semiannual and annual analyses shall be reported in the quarterly monitoring report following the analysis.
- 9.1.5. The Discharger shall inform the Los Angeles Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.
- 9.1.6. The Discharger shall report the results of chronic toxicity testing, TRE and TIE as required in the Attachment E, Monitoring and Reporting, section 5.

9.2. Self-Monitoring Reports (SMRs)

- 9.2.1. The Discharger shall electronically submit SMRs using the State Water Board’s California Integrated Water Quality System (CIWQS) Program website: http://www.waterboards.ca.gov/water_issues/programs/ciwqs/.
The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
- 9.2.2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections 4 through 8. The Discharger shall submit quarterly SMRs including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this Order. SMRs

are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors (other than for process/operational control, startup, research, or equipment testing) any pollutant more frequently than required by this Order using approved analytical methods, the results of those monitoring shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with limitations set forth in this Order.

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

Table E-7. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Daily	Permit Effective Date	(Midnight through 11:59 PM or any 24-hour period) that reasonably represents a calendar day for purposes of sampling.	Submit with corresponding quarterly SMR
Monthly	Permit Effective Date	First day of calendar month through last day of calendar month.	Submit with corresponding quarterly SMR
Quarterly	Permit Effective Date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
Biannually	Permit Effective Date	January 1 through June 30 July 1 through December 31	Submit with corresponding quarterly SMR for August 1 and February 1
Annually	Permit Effective Date	January 1 through December 31	Submit with corresponding quarterly SMR for February 1

- 9.2.4. **Reporting Protocols.** The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR part 136. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

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

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

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

9.2.5. **Compliance Determination.** Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment A. For purposes of reporting and administrative enforcement by the Los Angeles Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

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

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

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

- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is

not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

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

9.3. Discharge Monitoring Reports (DMRs) - Not Applicable

9.4. Other Reports

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

- a. Initial Investigation TRE workplan
- b. Evaluation of Drainage Sump for Discharge Point 002 and its Pollutant Removal Potential
- c. An updated SWPPP
- d. An updated BMPP
- e. An updated Spill Control Plan (SCP) or SPCC Plan

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

- 9.4.2. **Climate Change Effects Vulnerability Assessment and Mitigation Plan**
Within 12 months from the effective date of this Order, the Discharger is required to submit a Climate Change Effects Vulnerability Assessment and Mitigation Plan (Climate Change Plan) to assess and manage climate change related-effects associated with the Facility's operation, water supplies, water quality and beneficial uses.

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ATTACHMENT F – FACT SHEET

As described in section 2.2 of this Order, the Los Angeles Water Board incorporates this Fact Sheet as findings of the Los Angeles Water Board supporting the issuance of this Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

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

1. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4A190805002
Discharger	California Department of Water Resources
Name of Facility	William E. Warne Power Plant
Facility Address	Highway 99 at Pyramid Lake (west of Interstate 5 at the Smokey Bear off-ramp) Castaic, CA 91310 Los Angeles County
Facility Contact, Title and Phone	Brian Ford, Chief Operator (661) 944-8650
Authorized Person to Sign and Submit Reports	Gerald Snow, Chief, Environmental Assessment Branch (916) 653-7213
Mailing Address	P.O. Box 1187 Pearblossom, CA 93553
Billing Address	P.O. Box 942836 Sacramento, CA 94236-0001
Type of Facility	Hydroelectric Generating Station
Major or Minor Facility	Major
Threat to Water Quality	3
Complexity	C
Pretreatment Program	Not Applicable
Recycling Requirements	Not Applicable
Facility Permitted Flow	1.95 million gallons per day (MGD) – Discharge Point 001 (A&B) 0.020 MGD – Discharge Point 002
Facility Design Flow	1.95 MGD – Discharge Point 001 (A&B) 0.020 MGD – Discharge Point 002
Watershed	Santa Clara River Watershed
Receiving Water	Pyramid Lake
Receiving Water Type	Inland surface water

- 1.1. The California Department of Water Resources (hereinafter Discharger or Permittee) is the operator of William E. Warne Power Plant Facility, a hydroelectric generating station (hereinafter 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.

- 1.2. The Facility discharges wastewater to Pyramid Lake, a water of the United States. The discharge was previously regulated by Order No. R4-2016-0224 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0059188 adopted on June 9, 2016, and which expired on June 30, 2021.
- 1.3. Regulations at 40 CFR section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, Table 3 of this Order limits the duration of the discharge authorization. However, pursuant to California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all federal NPDES requirements for continuation of expired permits. The Discharger filed a report of waste discharge (ROWD) and applied for reissuance of its WDRs and NPDES permit on January 19, 2021. The application was deemed complete on February 4, 2021. A site visit was conducted on March 24, 2022 to observe operations and collect additional data to develop permit limitations and conditions. The terms and conditions of Order No. R4-2016-0224 have been automatically continued and remain in effect until the new waste discharge requirements (WDRs) and NPDES permit are adopted pursuant to this Order.

2. FACILITY DESCRIPTION

The Discharger is the owner and operator of the William E. Warne Power Plant, a hydroelectric generating station, which is located ten miles south of Gorman, California, just west of Interstate 5 at the Smokey Bear Road off-ramp, in Los Angeles County. The Facility, shown in Attachment B, produces power as an offset for requirements of the California State Water Project (SWP), a water and power development and conveyance system. The SWP waters originate from northern California watersheds and travel down through the Sacramento-San Joaquin Delta, where the waters commingle with waters from some smaller river systems before traveling down the West Branch of the SWP, and through the William E. Warne Power Plant to Pyramid Lake.

The Facility operates two hydroelectric generating turbine units that generate up to 78 megawatts of electricity. The two turbine units are operated either simultaneously or independently, and each generating unit may operate either continuously or intermittently, depending on scheduled water deliveries.

Water for power generation (generated water) is obtained from the SWP at Quail Lake. From the terminus of Lower Quail Canal, the water is conveyed to the William E. Warne Power Plant via the 12-foot diameter and 5-mile-long Peace Valley Pipeline, which serves as penstock (a pipe or conduit for carrying water to a water wheel or turbine) for the power plant. The William E. Warne Power Plant uses two Pelton wheel generators, each with the capacity of producing forty megawatts of electricity and generating an outflow of 800 cfs. During operation, the penstock water is concentrated and directed at each Pelton wheel by

six large needle valves. The water exiting the power plant turbines after it has been used to generate power enters the tailrace (the channel or conduit below the water wheel or turbine through which the water flows after striking the Pelton wheel) and is discharged into Pyramid Lake. Since the generated water does not contact any areas of the Facility with pollutants and no pollutants are added to the discharge, the discharge of the generated water is not regulated by an NPDES permit.

A portion of the generated water is withdrawn from the tailrace of the generating units, before being discharged into Pyramid Lake, and used as once-through cooling water. The once-through cooling water comprises less than two tenths of one percent (0.2%) of the total generated water flow. Occasionally, source water used for once-through cooling water is withdrawn from Pyramid Lake when the units are shut down. Up to a total of 1.95 million gallons per day (MGD) of generator air, turbine, and upper and lower guide bearing cooling waters (all once-through) and rotary strainer backwash (the rotary strainer removes particulates from cooling water and the backwash is used to clean the strainer) are discharged through Discharge Point 001 (A&B).

An on-site 50 gallons per minute (gpm) domestic water treatment plant uses the processes of chlorination (using sodium hypochlorite) and ultra-filtration to provide a potable water supply for the Facility. The source water for the water treatment plant is the power plant's fire-sump which is fed from the Unit 1 tailrace water. The water in the tailrace is penstock water when the unit is operating, and lake water from Pyramid Lake when the unit is shut down. The potable water treatment plant operates automatically on demand and is programmed to backwash every 60 minutes of runtime. An average daily runtime is approximately 30 minutes per day; therefore, it backwashes about once every two days. Backwash from the domestic water treatment plant enters a sump where it combines with compressor cooling and after cooling water, turbine shutoff valve water, ground water seepage that accumulates in the coupling gallery located below ground level, and floor drains from within the Facility. The drainage sump water is discharged when the drainage sump fills to 3.1 meters, occurring approximately every 1 to 2 days during normal conditions. The Facility discharges a maximum of 0.020 MGD of drainage sump water through Discharge Point 002. In addition, approximately once per year, the Facility will shut down Units 1 and 2 for maintenance. In these instances, residual intake water is pumped from the Pelton wheel housing structure to the drainage sump.

Discharge Point 001 (A&B) and Discharge Point 002 are located immediately adjacent to each other and located at the point where water exists the Facility through the tailrace and discharges into Pyramid Lake. The effluent monitoring locations are located inside the Facility and samples are collected through a sample port.

2.1. Description of Wastewater and Biosolids Treatment and Controls

With the exception of the domestic (potable) water treatment plant, the Facility does not employ treatment, nor does it provide any chemical addition to the once-through cooling water or drainage sump water. The domestic water treatment plant receives 3,400 gpd of water from the tailrace and discharges 800 gpd of backwash water and 600 gpd of compressor cooling and after cooling water to the drainage sump. The remaining 2,000 gpd is used for irrigation and 1,000 gpd for domestic water. The domestic wastewater from sinks and bathrooms is ejected into a sewer vault and then sent to a leach field. The leach field is not regulated under this Order and is waived from waste discharge

requirements under Tier 0 for existing onsite wastewater treatment system (OWTS) according to the OWTS Policy.

The discharge water is comprised of a maximum of 1.95 MGD of generator air cooling water, turbine cooling water, upper and lower guide bearing cooling water and rotary strainer backwash water through Discharge Point 1 (A&B) and a maximum of 0.020 MGD of drainage sump water through Discharge Point 002.

2.2. Discharge Points and Receiving Waters

Similar effluents (cooling waters) are being discharged from two identical generating units and the outfalls for these two units are approximately 35 feet apart. As such, the two outfalls are collectively referred to as Discharge Point 001 (A&B) in this permit. Discharge Point 002 is located in the same area as Discharge Point 001 (A&B). 1.95 MGD of cooling and backwash water; and 0.020 MGD of drainage sump water is discharged through Discharge Points 001 (A&B) and 002, respectively, and co-located at latitude 34.6850° North, longitude 118.7878° West; and subsequently discharged to Canada de las Alamos Creek, which flows to Pyramid Lake, a water of the United States.

Pyramid Lake is a tributary to the Santa Clara River via Piru Creek, Lake Piru, Castaic Lake, and Castaic Creek, all waters of the United States. Water from Pyramid Lake flows through the Angeles Tunnel to turn the Castaic Lake Power Plant turbines. Water releases from Castaic Lake flow south to Castaic Creek, and from there, to Reach 5 of the Santa Clara River. During summer months, water is also released from Pyramid Lake to support flows in Piru Creek (Santa Clara River Reach 11). The creek below Pyramid Dam contains scattered riffle-pool formations until reaching Lake Piru, behind Santa Felicia Dam. The creek continues to meander through Piru Canyon until merging with the Santa Clara River Reach 4. Releases may be diverted from Piru Creek to recharge the Piru Spreading Grounds, a 44-acre recharge basin located near the confluence of Piru Creek and the Santa Clara River.

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

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

2.3.1. Effluent limitations and discharge specifications contained in Order No. R4-2016-0224 and monitoring data for discharges from Discharge Point 001 (A&B) (Monitoring Location EFF-001) from July 2016 through May 2021 are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data EFF-001 (A&B)

Parameter	Units	Average Monthly Limit	Maximum Daily Limit	Highest Reported Concentration	Notes
Biochemical Oxygen Demand (BOD) 5-day @ 20°C	mg/L	---	10	12	---
Oil and Grease	mg/L	10	15	<0.76	---
pH	s.u.	---	---	9.5	a

Parameter	Units	Average Monthly Limit	Maximum Daily Limit	Highest Reported Concentration	Notes
Total Suspended Solids (TSS)	mg/L	50	75	12	---
Ammonia N	mg/L	1.75	5.2	0.11	---
Boron	mg/L	---	---	200	b
Chloride	mg/L	100	---	120	c and d
Chronic Toxicity	Pass or Fail Effect (TST)	Pass	Pass or % Effect <50	Pass	---
Dissolved Oxygen	mg/L	---	5	6	--
<i>E. coli</i>	MPN/100 ml	---	---	50	d and f
Nitrate + Nitrite (as Nitrogen)	mg/L	6.8	---	0.83	d
Settleable Solids	ml/L	0.1	0.3	0.1	---
Sulfate	mg/L	---	---	56	b
Temperature	°F		86	82.6	g
Total Dissolved Solids	mg/L	---	---	290	---
Turbidity	NTU	5	25	13	d
Copper, Total Recoverable (TR)	µg/L	36	94	22	---
Mercury, TR	µg/L	0.050	0.10	<0.017	d

Footnotes for Table F-2

- The effluent limitations for pH are 6.5 instantaneous minimum and 8.5 instantaneous maximum.
- The reported concentration for this pollutant exceeds the applicable water quality objective and does not currently have a limit in Order No. R4-2016-0224.
- The effluent limitation for chloride is applied as a 3-month rolling average.
- Intake water credits are included for chloride, *E. coli*, nitrate plus nitrite, turbidity, and mercury. If the intake water pollutant concentration does not exceed the average monthly limitation, then the limitations are applied as noted in the table. If the intake water pollutant concentration exceeds the average monthly limitation, but does not exceed the maximum daily limitation, then compliance with the average monthly limitation will be determined based on intake water credit (intake water concentration) and compliance with the maximum daily limitation is applied as noted in the table. If the intake water pollutant concentration exceeds the maximum daily limitation, then compliance with both the average monthly and maximum daily limitation will be determined based on intake water credit (intake water concentration). When determining compliance based on intake water credit, the pollutant effluent limitation is equal to the maximum pollutant concentration in the intake water. When grab samples are taken, the timing and location of intake water and effluent samples shall reflect the travel time of water in the Facility. The intake water sample shall directly correspond to the effluent sample.
- The effluent limitation for dissolved oxygen was 5.0 as an Instantaneous Minimum.

- f. The effluent limitations for *E. coli* are 126 as a geometric mean and 235 as a single sample maximum.
- g. The effluent limitation for temperature was 86°F as an Instantaneous Maximum.

End of Footnotes for Table F-2

2.3.2. Effluent limitations and discharge specifications contained in Order No. R4-2016-0224 and monitoring data for discharges from Discharge Point 002 (Monitoring Location EFF-002) from July 2016 through May 2021 are as follows:

Table F-3. Historic Effluent Limitations and Monitoring Data EFF-002

Parameter	Units	Average Monthly Limit	Maximum Daily Limit	Highest Reported Concentration	Notes
BOD 5-day @ 20°C	mg/L	---	10	200	a
Oil and Grease	mg/L	10	15	3.2	---
pH	s.u.	---	---	9.5	b
TSS	mg/L	50	75	26	---
Ammonia N	mg/L	1.75	5.2	0.23	---
Boron	mg/L	---	---	200	c
Chloride	mg/L	100	---	120	d and e
Chlorine, Total Residual	mg/L	---	0.10	0.1	---
Chronic Toxicity	Pass or Fail Effect (TST)	Pass	Pass or % Effect <50	Pass	---
Dissolved Oxygen	mg/L	---	5	1.92	f
<i>E. coli</i>	MPN/100 ml	---	---	110	e and g
Nitrate + Nitrite (as Nitrogen)	mg/L	6.8	---	0.74	e
Settleable Solids	ml/L	0.1	0.3	<0.1	---
Sulfate	mg/L	---	---	53	c
Temperature	°F		86	77.7	h
Total Dissolved Solids	mg/L	---	---	320	---
Turbidity	NTU	5	25	25	e
Copper, Total Recoverable (TR)	µg/L	24	79	79	---
Lead, TR	µg/L	13	41	8.5	---
Mercury, TR	µg/L	0.050	0.10	<0.05	e
Zinc, TR	µg/L	320	1023	140	---
TCDD Equivalents	µg/L	---	---	0.00000033	b
Bromoform	µg/L	8.0	26	1.6	---

Parameter	Units	Average Monthly Limit	Maximum Daily Limit	Highest Reported Concentration	Notes
Chlorodibromomethane	µg/L	9.1	26	9.3	---
Dichlorobromomethane	µg/L	4.6	12	9.6	---
Tetrachloroethylene	µg/L	2.4	4.9	0.99	---
Bis(2-Ethylhexyl) Phthalate	µg/L	---	---	38	b

Footnotes for Table F-3

- Two values for BOD well exceeded the effluent limitation (200 mg/L on 3/31/2016 and 110 mg/L on 8/31/2016); however, the next highest value was 13 mg/L.
- The effluent limitations for pH are 6.5 instantaneous minimum and 8.5 instantaneous maximum.
- The reported concentration for this pollutant exceeds the applicable water quality objective and does not currently have a limit in Order No. R4-2016-0224.
- The effluent limitation for chloride is applied as a 3-month rolling average.
- Intake water credits are included for pH, turbidity, chloride, *E. coli*, nitrate plus nitrite and mercury. If the intake water pollutant concentration does not exceed the average monthly limitation, then the limitations are applied as noted in the table. If the intake water pollutant concentration exceeds the average monthly limitation, but does not exceed the maximum daily limitation, then compliance with the average monthly limitation will be determined based on intake water credit (intake water concentration) and compliance with the maximum daily limitation is applied as noted in the table. If the intake water pollutant concentration exceeds the maximum daily limitation, then compliance will be determined based on the intake water credit (intake water concentration). When determining compliance based on intake water credit, the pollutant effluent limitation is equal to the maximum pollutant concentration in the intake water.
When grab samples are taken, the timing and location of intake water and effluent samples shall reflect the travel time of water in the Facility. The intake water sample shall directly correspond to the effluent sample.
- The effluent limitation for dissolved oxygen was 5.0 as an Instantaneous Minimum.
- The effluent limitations for *E. coli* are 126 as a geometric mean and 235 as a single sample maximum.
- The effluent limitation for temperature was 86°F as an Instantaneous Maximum.

End of Footnotes for Table F-3

2.4. Compliance Summary

Data submitted to the Los Angeles Water Board during the effective term of Order No. R4-2016-0224 (from July 2016 through July 2021) indicate that the Discharger has exceeded numeric effluent limitations for discharges from Discharge Point 001 (A&B) (Monitoring Location EFF-001) and Discharge Point 002 (Monitoring Location EFF-002) as outlined in the table below:

Table F-4. Effluent Limitation Violations for EFF-001 (A&B)

Violation Date	Type of Limitation	Parameter	Unit	Effluent Limitation	Result
01/31/2018	Daily Maximum	Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	10	12
9/30/2016	Instantaneous Maximum	pH	s.u.	8.5	8.8
3/31/2018	Instantaneous Maximum	pH	s.u.	8.5	8.8
5/31/2018	Instantaneous Maximum	pH	s.u.	8.5	8.8
7/31/2018	Instantaneous Maximum	pH	s.u.	8.5	8.9
7/26/2018	Instantaneous Maximum	pH	s.u.	8.5	8.9
2/27/2020	Instantaneous Maximum	pH	s.u.	8.5	8.6
5/27/2020	Instantaneous Maximum	pH	s.u.	8.5	8.6
6/3/2020	Instantaneous Maximum	pH	s.u.	8.5	8.8
7/30/2020	Instantaneous Maximum	pH	s.u.	8.5	9.5
8/20/2020	Instantaneous Maximum	pH	s.u.	8.5	8.7
11/23/2020	Instantaneous Maximum	pH	s.u.	8.5	8.6
12/17/2020	Instantaneous Maximum	pH	s.u.	8.5	8.6
2/18/2021	Instantaneous Maximum	pH	s.u.	8.5	8.7
5/26/2021	Instantaneous Maximum	pH	s.u.	8.5	8.7
12/17/2020	Instantaneous Maximum	pH	s.u.	8.5	8.7

Table F-5. Effluent Limitation Violations (EFF-002)

Violation Date	Type of Limitation	Parameter	Unit	Effluent Limitation	Result
03/31/2016	Daily Maximum	BOD	mg/L	10	200
08/31/2016	Daily Maximum	BOD	mg/L	10	110
01/25/2018	Daily Maximum	BOD	mg/L	10	13
08/31/2016	Instantaneous Minimum	Dissolved Oxygen	mg/L	5.0	3.1
03/31/2017	Instantaneous Minimum	Dissolved Oxygen	mg/L	5.0	1.92
02/29/2016	Instantaneous Minimum	pH	s.u.	6.5	4.6
06/03/2020	Instantaneous Maximum	pH	s.u.	8.5	8.8
07/30/2020	Instantaneous Maximum	pH	s.u.	8.5	9.5
12/17/2020	Instantaneous Maximum	pH	s.u.	8.5	8.6
07/22/2021	Instantaneous Maximum	pH	s.u.	8.5	8.6

For the violations in Tables F-4 and F-5, the Los Angeles Water Board issued Settlement Offers R4-2016-0182, R4-2017-0066, R4-2018-0137, and R4-2020-0071 on May 25, 2016, March 18, 2017, October 23, 2018, and July 30, 2020 respectively. The Discharger agreed to these Settlement Offers and delivered to the Los Angeles Water Board signed letters of Acceptance of Conditional Resolution and Waiver of Right to Hearing. The required mandatory minimum penalty was received by the Los Angeles Water Board on September 19, 2016, June 14, 2017, March 27, 2019, and October 27, 2020, respectively.

2.5. Planned Changes

The Discharger indicated at the time of permit development that there were no planned changes at the Facility.

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

3.1. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. EPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in section 2.2 above subject to the WDRs in this Order.

3.2. California Environmental Quality Act (CEQA)

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

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

3.3.1. Water Quality Control Plan. The Water Quality Control Plan for the Los Angeles Region (Basin Plan) designates beneficial uses, establishes water quality objectives (WQOs), and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan. Beneficial uses applicable to Pyramid Lake are as follows:

Table F-6. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001(A&B) and 002	Pyramid Lake	<p><u>Existing:</u> Municipal and Domestic Water supply (MUN); Industrial Service Supply (IND); Industrial Process Supply (PROC); Agricultural Supply (AGR); Groundwater Recharge (GWR), Hydropower Generation (POW), Water Contact Recreation (REC-1), Non-contact Water Recreation (REC-2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Wildlife Habitat (Wild) and Rare, Threatened or Endangered Species (RARE).</p> <p><u>Potential:</u> Freshwater Replenishment (FRSH)</p>

3.3.2. National Toxics Rule (NTR) and California Toxics Rule (CTR). U.S. EPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, U.S. EPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. The CTR contains water quality criteria for priority pollutants applicable to all surface waters in California. Requirements of this Order implement these criteria.

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

3.3.4. Domestic Water Quality. In compliance with Water Code section 106.3, 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 implemented by the Basin Plan that are designed to protect human health and ensure that water is safe for domestic use.

- 3.3.5. **Alaska Rule.** On March 30, 2000, U.S. EPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes (40 CFR section 131.21, 65 Federal Register 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to U.S. EPA after May 30, 2000, must be approved by U.S. EPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to U.S. EPA by May 30, 2000, may be used for CWA purposes, whether or not approved by U.S. EPA.
- 3.3.6. **Antidegradation Policy.** CWA section 303 and federal regulation 40 CFR section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16 ("Statement of Policy with Respect to Maintaining High Quality of Waters in California"). Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Los Angeles Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution 68-16. Requirements of this Order implement federal and state antidegradation policies as described in section 4.4.2 of this Fact Sheet.
- 3.3.7. **Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. Requirements of this Order implement federal anti-backsliding requirements as described in section 4.4.1 of this Fact Sheet.
- 3.3.8. **Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable federal and state Endangered Species Acts.
- 3.3.9. **Mercury Provisions.** The State Water Board adopted "*Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE); Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions*" (Mercury Provisions) through Resolution No. 2017-0027, which was approved by the Office of Administrative Law (OAL) on June 28, 2017 and became effective upon U.S. EPA approval on July 14, 2017. The Mercury Provisions established one narrative and four numeric water quality objectives for

mercury and three new beneficial use definitions, implemented through NPDES permits issued pursuant to CWA section 402, waste discharge requirements, or waivers of waste discharge requirements. The Mercury Provisions included specific implementation provisions for individual non-storm water NPDES permits for municipal and industrial dischargers; storm water discharges regulated by Municipal Separate Storm Sewer System (MS4) permits and the Industrial General Permit; as well as for storm water from mine site remediation sites; dredging activities; wetland projects and nonpoint source discharges.

The Mercury Provisions convert fish tissue-based water quality objectives into water column values to be used for a reasonable potential analysis and the development of effluent limitations. The objective for lakes and reservoirs like Pyramid Lake, based on the Mercury Provisions, needs to be established using a case-by-case approach. Mercury sample results were reported as “non-detect” with detection limits from 0.017 µg/L to 0.1 µg/L for the monitoring period between July 2018 and May 2021. According to the Mercury Provisions, “non-detect” data with the detection limit higher than 4 ng/L are not suitable for the analysis. Since the collected data did not meet the minimum detection limit stated in the Mercury Provisions, the data was not qualified to be evaluated and used for the purposes of performing an RPA. Thus, a reasonable potential to cause or contribute to an exceedance of the water quality standard cannot be determined for mercury at this time, this Order carries over the existing mercury effluent limitations to avoid backsliding until the site-specific value is established and reasonable potential can be assessed. In addition, this Order establishes monitoring requirements for mercury in the influent, effluent and receiving water in Attachment E with the new detection limit of 0.5 ng/L, which the Mercury Provisions specify as a quantification limit for the water samples.

- 3.3.10. **Trash Amendments.** The State Water Board adopted the “*Amendment to the Ocean Plan and Part I Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California*” (Trash Amendments) through Resolution Number 2015-0019, which was approved by OAL on December 2, 2015 and became effective upon U.S. EPA approval on January 12, 2016. The Trash Amendments established a narrative water quality objective and a prohibition on the discharge of trash, to be implemented through permits issued pursuant to CWA section 402(p), waste discharge requirements, or waivers of waste discharge requirements.

The Trash Amendments apply to all surface waters of the State, with the exception of those waters within the jurisdiction of the Los Angeles Water Board where trash or debris Total Maximum Daily Loads (TMDLs) were in effect prior to the effective date of the Trash Amendments. This Order regulates a discharge pursuant to CWA section 402(p) and there are currently no Trash TMDLs for Pyramid Lake or the final receiving water, Santa Clara River Reach 5 (Blue Cut gaging station to West Pier Highway 99 Bridge) and Santa Clara Reach 4A (A Street, Filmore to Piru Creek). Therefore, the discharges described in this Order are subject to the Trash Amendments. This Order incorporates the requirements of the Trash Amendments through the prohibition of trash discharges to the discharge point. This Order also requires the Discharger to update and implement

a Storm Water Pollution Prevention Plan (SWPPP), which shall include specific BMPs used as storm water control measures that the Discharger will undertake to prevent the discharge of trash from the Facility to Pyramid Lake. The Discharger is required to detail and submit to the Los Angeles Water Board the SWPPP.

3.3.11. Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries in California – Part 3 Bacteria Provisions (Bacteria Provisions). On August 7, 2018, the State Water Resources Control Board adopted Resolution Number 2018-0038, *“Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California—Bacteria Provisions and a Water Quality Standards Variance Policy and an Amendment to the Water Quality Control Plan for Ocean Waters of California”* (Bacteria Provisions). Part III.3 of the Bacteria Provisions state that TMDLs established before February 4, 2019, to implement numeric water quality objectives for bacteria remain in effect. The Santa Clara River Bacteria TMDL became effective on March 21, 2012, is applicable to the Facility, and the Bacteria Provisions do not apply.

3.3.12. Toxicity Provisions. Beginning in May 2013, the Los Angeles Water Board began incorporating into the NPDES permits for POTWs and industrial facilities numeric water quality objectives for both acute and chronic toxicity, using the Test of Significant Toxicity (TST), and a program of implementation to control toxicity. As explained later in the Fact Sheet, this approach is a preferred statistical method because it provides a higher confidence in results classifying in-waste stream concentrations as toxic or non-toxic, and it is supported by US EPA. This methodology is carried over from the existing permit. On December 1, 2020, the State Water Board adopted statewide numeric water quality objectives for both acute and chronic toxicity, using the test of Significant Toxicity (TST) statistical approach, and a program of implementation to control toxicity, which are collectively known as the Toxicity Provisions. On October 5, 2021, the State Water Board adopted a resolution rescinding the December 1, 2020 establishment of Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California and confirming that the Toxicity Provisions were adopted as a State Policy for Water Quality Control, for all inland surface waters, enclosed bays, estuaries, and coastal lagoons of the state, regardless of their status as waters of the United States. The Toxicity Provisions establish a uniform regulatory approach to provide consistent protection of aquatic life beneficial uses and protect aquatic habitats and life from the effects of known and unknown toxicants. The Provisions will take effect upon approval by the California Office of Administrative Law (for purposes of state law) and upon review and approval by the U.S. Environmental Protection Agency (for purposes of federal law).

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

The State Water Board proposed the California 2014 and 2016 Integrated Report based on a compilation of the Los Angeles Water Boards' Integrated Reports. These Integrated Reports contain both the Clean Water Act (CWA) section 305(b) water quality assessment and section 303(d) list of impaired waters. In developing the Integrated Reports, the Water Boards solicited data, information and comments from the public and other interested persons. On October 03, 2017, the State Water Board

adopted the CWA Section 303(d) List portion of the State's 2014 and 2016 Integrated Report (State Water Board Resolution No. 2017-0059). On April 06, 2018, the U.S. EPA approved California's 2014 and 2016 Integrated Report. The CWA section 303(d) List can be found at the following link:

https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml

Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2014-16 303(d) List and have been scheduled for TMDL development.

The Facility discharges to Pyramid Lake. Pyramid Lake is tributary to the Santa Clara River 4B via Piru Creek. Water from Pyramid Lake also flows through the Angeles Tunnel to Castaic Lake and then flows south to Castaic Creek, and from there, to Reach 5 of the Santa Clara River. The 2014-2016 303(d) list classifies Pyramid Lake as impaired for mercury, chlordane, dieldrin, polychlorinated biphenyls (PCBs), and dichlorodiphenyltrichloroethane (DDT). It also classifies Piru Creek (from the gaging station below Santa Felicia Dam to Headwaters) as impaired for chloride and pH. The Santa Clara River Reach 11 (Piru Creek, from the confluence with Santa Clara River Reach 4 to the gaging station below Santa Felicia Dam) is listed as impaired for boron, specific conductance, sulfates, and total dissolved solids. The Santa Clara River Reach 5 (Blue Cut gaging station to West Pier Hwy 99 Bridge; identified as Santa Clara River Reach 7 on the 2002 303(d) list) is listed as impaired for chloride, indicator bacteria, iron, and trash. The Santa Clara River Reach 4A (A Street, Filmore to Piru Creek) is listed as impaired for trash.

The following are summaries of the TMDLs that apply to the Facility:

- 3.4.1. **Upper Santa Clara River Watershed Chloride TMDL.** Several chloride TMDLs for the Santa Clara River have been developed and re-visited during the past decade. These TMDLs and related studies have assessed the impact of chloride on agricultural water supplies and groundwater recharge. Most recently, the Los Angeles Water Board adopted the Santa Clara River Chloride TMDL Revision and SSOs through Resolution R14-010. The TMDL became effective April 28, 2015 and is included in Chapter 7-6 of the Basin Plan. The TMDL specifies that chloride WLAs be met based on a 3-month rolling average concentration. This Order includes effluent limitations to implement the requirements of the TMDL.
- 3.4.2. **Santa Clara River Watershed Nitrogen Compounds TMDL.** On August 7, 2003, the Los Angeles Water Board adopted Resolution No. R03-011, which incorporated a TMDL and WLAs into the Basin Plan for ammonia and nitrate plus nitrite within the Santa Clara River at U.S. EPA Reach 5 (corresponds to Basin Plan Reach 5 and was named Santa Clara River Reach 7 on the 2002 303(d) list). The State Water Board and OAL approved the TMDL on November 19, 2003, and February 27, 2004, respectively. The U.S. EPA approved the TMDL on March 18, 2004, and it became effective on March 23, 2004. It is included in Chapter 7-9 of the Basin Plan. This Order includes effluent limitations for ammonia and nitrate plus nitrite that implement the requirements of the TMDL.

- 3.4.3. **Santa Clara River Bacteria TMDL.** The Los Angeles Water Board adopted the Santa Clara River Bacteria TMDL, Resolution No. R10-006 on July 8, 2010, which became effective on March 21, 2012 and is included in Chapter 7-36 of the Basin Plan. The TMDL identifies urban storm water runoff as a significant source of bacteria in the Santa Clara River. However, all sources are considered potential sources and are assigned allocations accordingly. The allocations for permittees other than the MS4 are described as follows:

"General NPDES permits, individual NPDES permits, the Statewide Industrial Stormwater General Permit, the Statewide Construction Activity Stormwater General Permit, and the Statewide Stormwater Permit for Ca/trans Activities are assigned WLAs of zero (0) allowable exceedance days of the single sample targets for both dry and wet weather and no exceedances of the geometric mean targets. Compliance with an effluent limit based on the bacteria water quality objectives will be used to demonstrate compliance with the WLA."

This Order includes effluent limitations consistent with the TMDL requirements.

3.5. Other Plans, Policies, and Regulations

- 3.5.1. **Climate Change Adaptation and Mitigation.** On March 7, 2017, the State Water Board adopted a resolution in recognition of the challenges posed by climate change that require a proactive approach in all State Water Board actions, including drinking water regulation, water quality protection, and financial assistance (Resolution No. 2017-0012). The resolution lays the foundation for a response to climate change that is integrated into all State Water Board actions by giving direction to the State Water Board divisions and encouraging coordination with the regional water boards. The Los Angeles Water Board adopted a similar resolution, "A Resolution to Prioritize Actions to Adapt and Mitigate the Impacts of Climate Change on the Los Angeles Region's Water Resources and Associated Beneficial Uses" (Resolution No. R18-004), on May 10, 2018. The resolution summarizes the steps taken so far to address the impacts of climate change within the Los Angeles Water Board's programs and lists a series of steps to move forward. These include the identification of potential regulatory adaptation and mitigation measures that could be mitigated on a short-term and long-term basis by each of the Los Angeles Water Board's programs to take into account, and assist in mitigating where possible, the effects of climate change on water resources and associated beneficial uses. This Order contains provisions to require planning and actions to address climate change impacts in accordance with both the State and Los Angeles Water Boards' resolutions.

The Permittee shall develop a Climate Change Effects Vulnerability Assessment and Management Plan (Climate Change Plan) and submit the Climate Change Plan to the Los Angeles Water Board for the Executive Officer's approval no later than 12 months after the effective date of this Order. The Climate Change Plan shall include an assessment of short- and long-term vulnerabilities of facilities and operations as well as plans to address vulnerabilities of facilities and outfalls for predicted impacts in order to ensure that facility operations are not disrupted, compliance with permit conditions is achieved, and receiving waters are not

adversely impacted by discharges. Control measures shall include, but are not limited to, emergency procedures, contingency plans, alarm/notification systems, training, backup power and equipment, and the need for planned mitigations to ameliorate climate-induced impacts including, but not limited to, changing influent and receiving water quality and conditions, as well as the impact of rising sea level (where applicable), wildfires, storm surges, and back-to-back severe storms that are expected to become more frequent.

3.5.2. Sources of Drinking Water Policy. On May 19, 1988, the State Water Board adopted Resolution No. 88-63, Sources of Drinking Water Policy, which established a policy that all surface and ground waters, with limited exemptions, are suitable or potentially suitable for municipal and domestic supply. To be consistent with State Water Board Resolution 88-63, on March 27, 1989, the Los Angeles Water Board adopted Resolution No. 89-03, Incorporation of Sources of Drinking Water Policy into the Water Quality Control Plans (Basin Plans) – Santa Clara River Basin (4A)/ Los Angeles River Basin (4B). This permit is designed to be consistent with the existing Basin Plan.

3.5.3. Title 22 of the California Code of Regulations (CCR Title 22). The State Water Resources Control Board, Division of Drinking Water, established primary and secondary maximum contaminant levels (MCLs) for inorganic, organic, and radioactive contaminants in drinking water. These MCLs are codified in Title 22. The Basin Plan (Chapter 3) incorporates Title 22 primary MCLs by reference. 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 WDRs and NPDES permits to protect the MUN beneficial use. This Order considers Title 22 MCLs to protect the MUN beneficial use.

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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

The Discharger operates a hydroelectric power generating facility. The discharge is comprised of once-through cooling water, non-contact cooling water, rotary strainer backwash water and drainage sump water. The list of pollutants of concern is based on constituents that are regulated in the Basin Plan or CTR and were detected in the effluent or intake water, as well as pollutants that are typically found in discharges of once-through cooling water. Settleable solids, TSS, and turbidity are pollutants of concern associated with backwash water and source water. Chloride, nitrogen compounds, and bacteria are pollutants of concern as TMDLs for these constituents have been adopted into the Basin Plan and are applicable to the discharge. The Facility obtains source water from the Peace

Valley Pipeline portion of the California Aqueduct and occasionally Pyramid Lake. The source water may be high in solids due to natural conditions or the physical conditions of withdrawal, which may stir up sediments, creating the potential to transport turbidity, settleable solids, and suspended solids to the receiving water. Hydroelectric plants frequently use materials in the equipment that may have the potential to enter the wastewater through leaks in the turbine shaft seals and thus contribute BOD and oil and grease to the discharge. Temperature is a pollutant of concern due to the heat transfer associated with cooling water and the potential effects on habitat in the receiving water. Since the water system is chlorinated, there is the potential for residual chlorine to be present in the discharge of backwash water at Discharge Point 002. Furthermore, the previous Order identified copper, mercury, asbestos, and TCDD equivalents as pollutants of concern at Discharge Point 001 (A&B); and copper, lead, zinc, TCDD equivalents, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene as pollutants of concern at Discharge Point 002. These parameters remain pollutants of concern.

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

The variety of potential pollutants found in the Facility discharges presents a potential for aggregate toxic effects to occur. Whole effluent toxicity (WET) is an indicator of the combined effect of pollutants contained in the discharge. Chronic toxicity is a more stringent requirement than acute toxicity. Therefore, chronic toxicity is considered a pollutant of concern for protection and evaluation of narrative Basin Plan Objectives.

4.1. Discharge Prohibitions.

Discharge Prohibitions in this Order are based on the federal CWA, the Code of Federal Regulations (CFR), the Basin Plan, the Water Code, State Water Board's plans and policies, U.S. EPA guidance and regulations, and the previous permit provisions. This Order includes a prohibition for trash in order to implement the statewide Trash Amendments. The discharge prohibitions included in this Order are consistent with the requirements set for other dischargers within the Los Angeles Region that are regulated by NPDES permits.

4.2. Technology-Based Effluent Limitations (TBELs)

4.2.1. Scope and Authority. Section 301(b) of the CWA and implementing U.S. EPA permit regulations at 40 CFR section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharges authorized by this Order must meet minimum federal

technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 CFR section 125.3

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

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

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

4.2.2. Applicable TBELs

The discharge from this Facility is comprised of once-through cooling water, non-contact cooling water, rotary strainer backwash water and drainage sump water. Hydroelectric power generation is not currently regulated under ELGs. As such, there are currently no technology-based ELGs that apply to the Facility. The technology-based requirements in this Order are based on case-by-case numeric limitations, developed in Order No. R4-2016-0224, using BPJ. In setting these limitations, the Los Angeles Water Board considered the factors listed in 40 CFR section 125.3(d) and chose to apply BCT for BOD, TSS, settleable solids, and turbidity. The Discharger's past performance demonstrates the ability to meet the effluent limitations for BOD, oil and grease, settleable solids, and turbidity (with

applicable intake water credits) established in Order No. R4-2016-0024 with only a few exceptions. As the current technology used by the Discharger is capable of meeting the limitations, no changes to equipment, facilities, process, or controls are necessary, thereby the Facility will incur no additional costs or non-water quality environmental impacts. Pursuant to state and federal anti-backsliding regulations, this Order retains effluent limitations for these pollutants as technology-based effluent limitations. The limitations for these pollutants are consistent with technology-based limitations included in other Orders within the region for similar types of discharges.

- a. **Effluent Limitations for Turbidity Based on Intake Water Credits.** Order No. R4-2016-0224 contained effluent limitations for turbidity that are retained in this Order. Historically, the Facility had experienced numerous exceedances of the effluent limitations for turbidity. In a letter dated November 4, 2009, the Discharger requested intake water credits. The Discharger supplied information on intake water and effluent turbidity and the Los Angeles Water Board determined the discharge met the criteria in 40 CFR section 122.45 (g) concerning intake water credits.

Turbidity in the intake water and effluent was re-evaluated for this Order. Since issuance of Order No. R4-2016-0224, events where intake water credits were applicable are presented in the Table F-7.

The criteria for applying intake water credit are specified in 40 CFR section 122.45 (g) and the discharges from the Facility comply with the criteria. The Discharger does not employ treatment technologies for cooling water discharges. Based on information provided in the application, the Discharger does not conduct operations that contribute significant quantities of turbidity to the effluent, thus demonstrating that the nature of turbidity in the influent is similar to the effluent. The intake water is obtained from the Peace Valley Pipeline, which connects to Pyramid Lake at the Facility, thus demonstrating a hydrologic connection between the intake water and the receiving water. The Los Angeles Water Board staff recognizes that the presence of turbidity in the intake water may largely account for high turbidity levels in the effluent. The inclusion of intake water credits will restrict effluent concentrations of turbidity to levels at or below the intake water concentration or the final effluent limitation for turbidity. Based on these facts, the Discharger has satisfied the conditions of 40 CFR section 122.45(g). As such, this Order retains intake credits for turbidity at Discharge Points 001 (A&B) and 002, and carried over technology based effluent limitations from the previous Order.

Table F-7. Instances Where Intake Credits Apply

Discharge Point	Date	Parameter	Units	Intake Concentration	Effluent Concentration
001	3/31/2016	Turbidity	NTU	5.4	4
001	6/30/2016	Turbidity	NTU	2.9	2.3
001	10/31/2016	Turbidity	NTU	4.9	4.6

Discharge Point	Date	Parameter	Units	Intake Concentration	Effluent Concentration
001	11/30/2016	Turbidity	NTU	2.9	2.8
001	12/31/2016	Turbidity	NTU	1.8	0.8
001	1/31/2017	Turbidity	NTU	3.1	2.8
001	2/28/2017	Turbidity	NTU	14	13
001	4/30/2017	Turbidity	NTU	6.6	6.2
001	6/30/2017	Turbidity	NTU	4.6	4.1
001	7/31/2017	Turbidity	NTU	5.2	4.8
001	8/31/2017	Turbidity	NTU	3.9	3.4
001	9/30/2017	Turbidity	NTU	1.7	1.4
001	10/31/2017	Turbidity	NTU	1.4	1.1
001	11/30/2017	Turbidity	NTU	2.2	2
001	12/31/2017	Turbidity	NTU	2	1.5
001	2/28/2018	Turbidity	NTU	1.9	1.4
001	3/31/2018	Turbidity	NTU	2.1	1.8
001	4/30/2018	Turbidity	NTU	3.7	2.8
001	7/31/2018	Turbidity	NTU	2.8	2
001	8/31/2018	Turbidity	NTU	2.6	1.9
001	3/7/2019	Turbidity	NTU	5.4	5.1
001	3/7/2019	Turbidity	NTU	5.6	5.2
001	11/21/2019	Turbidity	NTU	2.4	1.2
001	3/4/2020	Turbidity	NTU	2.1	2
001	5/21/2020	Turbidity	NTU	2.3	1.6
001	7/30/2020	Turbidity	NTU	3.1	3
001	8/5/2020	Turbidity	NTU	4	3.5
001	11/23/2020	Turbidity	NTU	2.4	1.8
001	3/18/2021	Turbidity	NTU	1.6	1.2
001	4/22/2021	Turbidity	NTU	0.83	0.68
002	5/31/2016	Turbidity	NTU	4.9	1.7
002	6/30/2016	Turbidity	NTU	2.9	1.1
002	9/30/2016	Turbidity	NTU	2.6	2.4
002	10/31/2016	Turbidity	NTU	4.9	2
002	12/31/2016	Turbidity	NTU	1.8	0.48

Discharge Point	Date	Parameter	Units	Intake Concentration	Effluent Concentration
002	1/31/2017	Turbidity	NTU	3.1	1.7
002	2/28/2017	Turbidity	NTU	14	4.2
002	4/30/2017	Turbidity	NTU	6.6	6.5
002	7/31/2017	Turbidity	NTU	5.2	4.3
002	8/31/2017	Turbidity	NTU	3.9	2.5
002	9/30/2017	Turbidity	NTU	1.7	1.6
002	10/31/2017	Turbidity	NTU	1.4	1.3
002	12/31/2017	Turbidity	NTU	2	1.8
002	2/28/2018	Turbidity	NTU	1.9	1.8
002	3/31/2018	Turbidity	NTU	2.1	1.6
002	4/30/2018	Turbidity	NTU	3.7	2.9
002	5/31/2018	Turbidity	NTU	1.4	1.1
002	7/31/2018	Turbidity	NTU	2.8	1.7
002	8/31/2018	Turbidity	NTU	2.6	1.7
002	3/7/2019	Turbidity	NTU	5.4	3.6
002	3/7/2019	Turbidity	NTU	5.6	3.6
002	10/24/2019	Turbidity	NTU	1.2	0.94
002	11/21/2019	Turbidity	NTU	2.4	1.2
002	2/27/2020	Turbidity	NTU	2.1	1.7
002	3/4/2020	Turbidity	NTU	2.1	1.6
002	5/6/2020	Turbidity	NTU	1.7	1.2
002	5/21/2020	Turbidity	NTU	2.3	0.99
002	6/3/2020	Turbidity	NTU	1.4	0.67
002	8/5/2020	Turbidity	NTU	4	3.9
002	11/23/2020	Turbidity	NTU	2.4	1.1
002	3/18/2021	Turbidity	NTU	1.6	1.2
002	4/22/2021	Turbidity	NTU	0.83	0.73
002	5/26/2021	Turbidity	NTU	1.2	0.97

- b. **Biochemical Oxygen Demand (BOD₅)**. The 5-day BOD test indirectly measures the amount of readily degradable organic material in water by measuring the residual dissolved oxygen after a period of incubation (usually 5

days at 20° C). This Order addresses BOD through technology-based effluent limitations which was carried over from the previous permit.

- c. Solid, Suspended or Settleable Materials.** The Basin Plan requires that, *“Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses.”* Therefore, this Order retains the maximum daily effluent limitation of 75 mg/L for Total Suspended Solids (TSS) from the previous permit. This limitation is expected to be protective of receiving water quality, consistent with what is typically established for similar discharges in the Los Angeles Region, and achievable with technologies employed at the Facility.

Table F-8. Summary of Technology-Based Effluent Limitations

Parameter	Units	Average Monthly	Maximum Daily	Notes
BOD ₅ 20°C	mg/L	--	10	--
TSS	mg/L	50	75	--
Settleable Solids	ml/L	0.1	0.3	--
Turbidity	NTU	5	25	a

Footnotes for Table F-8

a. If the intake water pollutant concentration does not exceed the average monthly limitation, then the limitations are applied as noted in the table. If the intake water pollutant concentration exceeds the average monthly limitation, but does not exceed the maximum daily limitation, then compliance with the average monthly limitation will be determined based on intake water credit (intake water concentration) and compliance with the maximum daily limitation is applied as noted in the table. If the intake water pollutant concentration exceeds the maximum daily limitation, then compliance with both the average monthly and maximum daily limitation will be determined based on intake water credit (intake water concentration). When determining compliance based on intake water credit, the pollutant effluent limitation is equal to the maximum pollutant concentration in the intake water. When grab samples are taken, the timing and location of intake water and effluent samples shall reflect the travel time of water in the Facility. The intake water sample shall directly correspond to the effluent sample.

End of Footnotes for Table F-8

4.3. Water Quality-Based Effluent Limitations (WQBELs)

4.3.1. Scope and Authority

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

40 CFR Section 122.44(d)(1)(i) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard in the receiving water, including numeric and narrative objectives. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or

objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi). WQBELs must also be consistent with the assumptions and requirements of TMDL WLAs approved by U.S. EPA.

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

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

The Basin Plan establishes the beneficial uses for surface water bodies in the Los Angeles Region. The beneficial uses of Pyramid Lake affected by the discharge have been described previously in this Fact Sheet. The Basin Plan also specifies narrative and numeric WQOs applicable to surface water as described below:

- a. **pH.** The effluent limitation for pH in this permit requiring that the wastes discharged shall at all times be within the range of 6.5 to 8.5 is taken from the Basin Plan (page 3-15) which reads "the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge."
- b. **Ammonia and Nitrate-nitrogen + Nitrite-nitrogen.** As discussed in section 3.4.2 of this Fact Sheet, the Santa Clara River Watershed Nitrogen Compounds TMDL includes WLAs for ammonia and nitrate plus nitrite. Therefore, the discharge effluent limitations set forth in this permit for ammonia and nitrate plus nitrogen are based on the TMDL.
- c. **Dissolved Oxygen.** The receiving water has both COLD and WARM beneficial uses. The Basin Plan includes the following WQOs for dissolved oxygen for surface waters:
 - The mean annual dissolved oxygen concentration of all waters shall be greater than 7 mg/L, and no single determination shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations.
 - The dissolved oxygen content of all surface waters designated as WARM shall not be depressed below 5 mg/L as a result of waste discharges.
 - The dissolved oxygen content of all surface waters designated as COLD shall not be depressed below 6 mg/L as a result of waste discharges.

Order No. R4-2016-0224 included effluent limitations for dissolved oxygen at Discharge Points 001 (A&B) and 002 equal to a minimum concentration of 5.0 mg/L. This Order revises the DO effluent limitation to 6 mg/l to ensure the protection of both the COLD and WARM beneficial uses in the receiving water.

- d. **Bacteria Indicator.** As discussed in section 3.3.11 of this Fact Sheet, this Order implements the applicable numeric water quality objectives for bacteria included in the Santa Clara River Indicator Bacteria TMDL.
- e. **Temperature.** The receiving water has both COLD and WARM beneficial uses. Order No. R4-2016-0224 included an effluent limitation of 86 °F. This Order updates the temperature effluent limitation to 80 °F to align it with the water quality objective in the Basin Plan for temperature that is applicable to inland surface waters with WARM beneficial use designation such as Pyramid Lake. The applicable WQO to protect the WARM beneficial use designation states:

“For waters designated WARM, water temperature shall not be altered by more than 5°F above the natural temperature. At no time shall these WARM-designated waters be raised above 80°F as a result of waste discharges.”

The applicable WQO to protect the COLD beneficial use designation states:

“For waters designated COLD, water temperature shall not be altered by more than 5 °F above the natural temperature.”

- e. **Chloride, Boron and Nitrogen.** The effluent limitations for chloride and nitrogen are carried from the previous permit based on the Santa Clara River TMDL for Chloride and Nitrogen Compounds. Effluent limitations for boron are newly established based on Basin Plan WQOs and utilizing the AMEL and MDEL calculation protocol for aquatic life criteria included in the SIP.
- f. **Oil and Grease.** The limits for oil and grease are based on the Basin Plan (page 3-11) narrative, “Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.” This Order addresses oil and grease through water quality based effluent limitations consistent with the previous permit.

4.3.3. CTR and SIP

The CTR and the SIP specify numeric objectives for toxic substances and the procedures whereby these objectives are to be implemented. The procedures include those used to conduct reasonable potential analysis (RPA) to determine the need for effluent limitations for priority pollutants. The Technical Support Document (TSD) also specifies procedures to conduct reasonable potential analyses.

The CTR contains both saltwater and freshwater criteria for the protection of aquatic life. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, and in accordance with 40 CFR 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 Los Angeles Water Board has determined that freshwater conditions exist in Pyramid Lake and as such, freshwater criteria apply. The receiving water has a beneficial use of MUN, the criteria for human health based on consumption of

water and organisms are applicable. Therefore, the most stringent CTR criteria among the freshwater criteria, human health criteria based on consumption of organisms, and human health criteria based on consumption of water and organisms, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of Pyramid Lake, a water of the United States in the vicinity of the discharge.

Some water quality criteria are hardness dependent. The Discharger provided hardness data for the receiving water. The median receiving water hardness, based on representative data collected during the terms of Order No. R4-2016-0224 was 83 mg/L (as CaCO₃), which is the value used to evaluate the reasonable potential and calculate the WQBELs for hardness dependent metals (e.g., cadmium, chromium III, copper, lead, nickel, silver, and zinc) for this Order.

4.3.4. Title 22 Maximum Contaminant Level (MCL)

The Basin Plan Chapter 3 includes water quality objectives for chemical constituents incorporated by reference, drinking water primary MCLs as numeric objectives protective of the MUN beneficial use. As such, the drinking water MCLs from Title 22 of the California Code of Regulations are included in the Reasonable Potential Analysis (RPA).

Table F-9 summarizes the applicable water quality criteria/objectives for priority pollutants reported in detectable concentrations in the discharges through Discharge Point No. 001(A&B) or in receiving water based on data submitted to the Los Angeles Water Board, and those that were limited in the previous Order. These criteria were used to complete the RPA for this Order.

Table F-9. Applicable Water Quality Criteria/Objectives

CTR No.	Constituent	Selected Criteria (µg/L)	CTR Acute Criteria (µg/L)	CTR Chronic Criteria (µg/L)	CTR Human Health Consumption of Water and Organisms Criteria (µg/L)	Title 22 Maximum Contaminant Level (MCL) (µg/L)	Notes
2	Arsenic	10	340	150	---	10	a
4	Cadmium	5	3.66	2.13	---	5	a and b
5a	Chromium (III)	177.69	1,491	177.69	---	---	b
5b	Chromium (VI)	11.0	16	11	---	---	
6	Copper	9.49	14.60	9/49	---	---	b
7	Lead	18.58	84	3.26	---	---	b
9	Nickel	44.56	477	44.56	---	100	a and b
10	Selenium	5	20.0	5	---	50	a
13	Zinc	121.84	121.84	121.84	---	---	b
	TCDD Equivalents	0.000000013	---	---	0.000000013	0.00003	a
20	Bromoform	4.3	---	---	4.3	---	

CTR No.	Constituent	Selected Criteria (µg/L)	CTR Acute Criteria (µg/L)	CTR Chronic Criteria (µg/L)	CTR Human Health Consumption of Water and Organisms Criteria (µg/L)	Title 22 Maximum Contaminant Level (MCL) (µg/L)	Notes
26	Chloroform	No Criteria	---	---	---	---	
27	Dichlorobromomethane	0.56	---	---	0.56	---	
38	Tetrachloroethylene	0.8	---	---	0.8	5	a
43	Trichloroethylene	2.7	---	---	2.7	5	a
57	Acenaphthylene	No Criteria	---	---	---	---	
68	Bis(2-Ethylhexyl) Phthalate	1.8	---	---	1.8	4.0	a
79	Diethyl Phthalate	23,000	---	---	23,000	---	
94	Naphthalene	No Criteria	---	---	---	---	
103	alpha-BHC	0.0039	---	---	0.0039	---	

Footnote for Table F-9

- The Basin Plan lists the Municipal and Domestic Supply (MUN) beneficial use for the receiving water body (Pyramid Lake). The MUN beneficial use is protected using Title 22 Maximum Contaminant Levels (MCLs), in addition to the CTR Human Health Consumption of Water and Organisms criteria.
- A hardness of 83 mg/L was used to adjust the criteria for metals which represents the median receiving water hardness.

End of Footnote to Table F-9

4.3.5 Determining the Need for WQBELs

In accordance with Section 1.3 of the SIP, the Los Angeles Water Board staff conducts a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Los Angeles Water Board developed WQBELs for nitrogen, chloride, and bacteria based on TMDLs. These effluent limitations were established based on the wasteload allocations for the Santa Clara River. The Los Angeles Water Board developed water quality-based effluent limitations for these pollutants pursuant to 40 CFR section 122.44(d)(1)(vii), which does not require or contemplate a separate reasonable potential analysis at the permitting stage. Similarly, the SIP at section 1.3 recognizes that a separate reasonable potential analysis at the permitting stage is not necessary if a TMDL has been developed. In accordance with section 1.3 of the SIP, and noting the exceptions above, during the development of this Order, the Los Angeles Water Board conducted a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Los Angeles Water Board staff analyzes effluent and receiving water data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an

excursion above a state water quality standard. For all parameters that demonstrate reasonable potential, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Los Angeles Water Board staff identifies the maximum effluent concentration (MEC) and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger. Effluent and receiving water monitoring data from July 2016 through May 2021 provided by the Discharger during the term of Order No. R4-2016-0224 were used to determine reasonable potential.

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

Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limitation is needed.

Trigger 2 – If background water quality (B) > C and the pollutant is detected in the effluent, a limitation is needed.

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

The RPA was performed for the priority pollutants regulated in the CTR for which data are available. Based on the RPA for Discharge Point 001(A&B), pollutants that do not already have effluent limitations and demonstrate reasonable potential are TCDD equivalents and bis(2-ethylhexyl)phthalate because the MEC is greater than the C. In addition, total recoverable copper which has an existing effluent limitation, demonstrates a reasonable potential based on the MEC being greater than the C.

Based on the RPA for Discharge Point 002, pollutants that do not already have effluent limitations and demonstrate reasonable potential include bis(2-ethylhexyl)phthalate because the MEC is greater than the C. In addition, the pollutants with existing effluent limitations that demonstrate reasonable potential based on the MEC being greater than the C are total recoverable copper, total recoverable lead, total recoverable zinc, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene. The constituent with effluent limitations in Order No. R4-2016-0224 that no longer has a reasonable potential is bromoform.

Tables F-10 and F-11 summarize results from the RPA for Discharge Point 001(A&B) and Discharge Point 002, respectively.

Table F-10. Summary of Reasonable Potential Analysis for Discharge Point 001(A&B)

CTR No.	Constituent	Applicable Water Quality Criteria (C) µg/L	Max Effluent Conc. (MEC) µg/L	Maximum Detected Receiving Water Conc. (B) µg/L	RPA Result – Need Limitation?	Reason
2	Arsenic	10	5.5	4.2	No	MEC<C
5a	Chromium (III)	177.69	6.2	1.9	No	MEC<C
5b	Chromium (VI)	11.0	2.4	0.52	No	MEC<C
6	Copper	9.49	22	3	Yes	MEC>C
7	Lead	18.58	0.38	0.74	No	MEC<C
9	Nickel	44.56	2.6	2.2	No	MEC<C
10	Selenium	5	0.56	<0.14	No	MEC<C
13	Zinc	121.84	11	12	No	MEC<C
	TCDD Equivalents	0.000000013	0.0000019	---	Yes	MEC>C
68	Bis(2-Ethylhexyl) Phthalate	1.8	13	<2	Yes	MEC>C
94	Naphthalene	No Criteria	<0.05	0.06	No	No Criteria

Table F-11. Summary of Reasonable Potential Analysis for Discharge Point 002

CTR No.	Constituent	Applicable Water Quality Criteria (C) µg/L	Max Effluent Conc. (MEC) µg/L	Maximum Detected Receiving Water Conc. (B) µg/L	RPA Result – Need Limitation?	Reason
2	Arsenic	10	5.9	4.2	No	MEC<C
4	Cadmium	5	0.12	<0.041	No	MEC<C
5a	Chromium (III)	177.69	4.6	1.9	No	MEC<C
5b	Chromium (VI)	11.0	0.56	0.52	No	MEC<C
6	Copper	9.49	79	3	Yes	MEC>C
7	Lead	18.58	8.5	0.74	Yes	MEC>C
9	Nickel	44.56	4.6	2.2	No	MEC<C
10	Selenium	5	0.51	<0.14	No	MEC<C
13	Zinc	121.84	140	12	Yes	MEC>C
20	Bromoform	4.3	1.6	<0.086	No	MEC<C
23	Chlorodibromomethane	0.41	9.3	<0.089	Yes	MEC>C
26	Chloroform	No Criteria	1.7	<0.18	No	No Criteria
27	Dichlorobromomethane	0.56	9.6	<0.084	Yes	MEC>C
38	Tetrachloroethylene	0.8	0.99	<0.2	Yes	MEC>C
43	Trichloroethylene	2.7	2.4	<0.16	No	MEC<C
57	Acenaphthylene	No Criteria	0.12	<0.099	No	No Criteria

CTR No.	Constituent	Applicable Water Quality Criteria (C) µg/L	Max Effluent Conc. (MEC) µg/L	Maximum Detected Receiving Water Conc. (B) µg/L	RPA Result – Need Limitation?	Reason
68	Bis(2-Ethylhexyl) Phthalate	1.8	38	<2	Yes	MEC>C
79	Diethyl Phthalate	23,000	0.39	<0.15	No	MEC<C
94	Naphthalene	No Criteria	0.13	0.06	No	No Criteria
103	alpha-BHC	0.0039	0.0018	<0.0016	No	MEC<C

4.3.6. WQBEL Calculations

- a. **Calculation Options.** 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 the WLA established as part of a TMDL.
 - ii. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs)
 - iii. Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Los Angeles Water Board. Once RPA has been conducted using either the TSD or the SIP methodologies, WQBELs are calculated.
- b. Based on the RPA for Discharge Point 001 (A&B), total recoverable copper, TCDD equivalents, and bis(2-ethylhexyl)phthalate demonstrated reasonable potential to cause or contribute to an exceedance of water quality objectives. The RPA for Discharge Point 002 identified reasonable potential for total recoverable copper, total recoverable lead, total recoverable zinc, chlorodibromomethane, dichlorobromomethane, tetrachloroethylene, and bis(2-ethylhexyl)phthalate.
- c. **Mixing Zone/Applicable Dilution Credits.** The State Implementation Policy (SIP) allows the Los Angeles Water Board to grant mixing zones and dilution credits to dischargers in establishing effluent limitations. The SIP specifies the methodology using critical flow conditions for the determination of dilution ratios. It is the Los Angeles Water Board's discretion whether to allow a mixing zone. The SIP, in part, states that mixing zones shall not:
 - i. Compromise the integrity of the entire water body.
 - ii. Cause acutely toxic conditions to aquatic life passing through the mixing zone.
 - iii. Restrict passage of aquatic life.

- iv. Adversely impact biologically sensitive or critical habitats, including but not limited to, habitat of species listed under federal or state endangered species laws.
- v. Dominate the receiving water body.
- vi. Overlap a mixing zone from a different outfall.

The SIP also states that in no case shall the Los Angeles Water Board grant a dilution credit that is greater than the calculated dilution ratio (the critical receiving water flow divided by the effluent flow). The previous Order granted dilution credits for WQBELs for certain parameters (i.e., copper, lead, zinc, bromoform, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene). In 2012, while under a Time Schedule Order, the Discharger conducted a field tracer study and in 2013, submitted a Mixing Zone Study to the Los Angeles Water Board to support the request for dilution credits. Following the Los Angeles Water Board's evaluation and review of the proposed dilution credits and monitoring data, the Los Angeles Water Board determined that the 8.2 dilution ratio calculated using the SIP procedures is appropriate for acute aquatic life criteria but that the calculated dilution ratios - 28.2 for chronic aquatic life criteria and 79 for human health criteria - exceeded the ratios which were necessary for the discharges to meet the final effluent limitations. In the subsequent September 4, 2015 letter, as per the Los Angeles Water Board recommendation, the Discharger requested an 8.2 dilution credit be applied to both acute and chronic aquatic life criteria for copper, lead and zinc. In addition, for bromoform, chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene the Discharger proposed dilution credits using the projected or estimated effluent concentration allowances (ECAs) that were based on the monitoring data reported during the permit term of Order No. R4-2010-0089 and its amendment (the Orders previous to Order No. R4-2016-0224). The proposed dilution credits for these four constituents are more stringent than those determined by the SIP procedures. The application of these dilution credits ensures protection of the beneficial uses of the Pyramid Lake.

On October 26, 2015, the Los Angeles Water Board approved the dilution credits in Table F-12. These approved dilution credits are chemical and outfall specific and are not applicable to other pollutants in the permit. The approved dilution credits are equal to or less than the calculated available dilution credits derived from the SIP procedure; therefore, the resultant final effluent limitations are protective of the receiving water beneficial uses. The dilution credits are continued in this Order.

Table F-12. Summary of Dilution Credits for the Facility

Discharge Point	Parameter	Dilution Credit	Applicable to
001	Copper	8.2	Acute and chronic aquatic life criteria

Discharge Point	Parameter	Dilution Credit	Applicable to
002	Copper	8.2	Acute and chronic aquatic life criteria
002	Lead	8.2	Acute and chronic aquatic life criteria
002	Zinc	8.2	Acute and chronic aquatic life criteria
002	Chlorodibromomethane	39.7	Human health criteria
002	Dichlorobromomethane	8.6	Human health criteria
002	Tetrachloroethylene	2.3	Human health criteria

- d. **WQBELs Based on SIP Calculation Procedure.** The process for developing the effluent limitations is in accordance with Section 1.4 of the SIP. Two sets 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. Using total recoverable copper as an example, the WQBELs were calculated using the process described below:

Calculation of aquatic life AMEL and MDEL

Sample calculation for **total recoverable copper [Discharge Point 001(A&B)]**:

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

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

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

D = The dilution credit, and

B = The ambient background concentration

For total recoverable copper:

The applicable water quality criteria (using freshwater aquatic life criteria) are:

$$\text{ECA}_{\text{acute}} = 11 + 8.2(11 - 3) \mu\text{g/L} = 76.6 \mu\text{g/L}$$

$$\text{ECA}_{\text{chronic}} = 7.6 + 8.2(7.6 - 3) \mu\text{g/L} = 45.32 \mu\text{g/L}$$

Step 2: For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the

ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in section 1.4, Step 3 of the SIP and will not be repeated here.

$$LTA_{acute} = ECA_{acute} \times Multiplier_{acute99}$$

$$LTA_{chronic} = ECA_{chronic} \times Multiplier_{chronic99}$$

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

For total recoverable copper, the following data were used to develop the acute and chronic LTAs using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals). Based on the monitoring data for chromium VI, the calculated CV of 1.7 was used in the calculation.

No. of Samples per Month	CV	ECA Multiplier _{acute}	ECA Multiplier _{chronic}
4	0.76	0.260	0.454

Total recoverable copper:

$$LTA_{acute} = 76.6 \mu\text{g/L} \times 0.260 = 19.92 \mu\text{g/L}$$

$$LTA_{chronic} = 45.32 \mu\text{g/L} \times 0.454 = 20.57 \mu\text{g/L}$$

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

For total recoverable copper, the most limiting LTA is $LTA_{chronic}$

$$LTA_{acute} = 19.92 \mu\text{g/L}$$

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

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

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

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

For total recoverable copper, the following data were used to develop the AMEL and MDEL for effluent limitations using equations provided in section 1.4, Step 5 of the SIP.

No of Samples Per Month	CV	Multiplier _{MDEL99}	Multiplier _{AMEL95}
4	0.76	3.85	1.71

Total recoverable copper based on aquatic life:

$$AMEL = 19.92 \mu\text{g/L} \times 1.71 = 34.14 \mu\text{g/L}$$

$$MDEL = 19.92 \mu\text{g/L} \times 3.85 = 76.6 \mu\text{g/L}$$

Calculation of human health AMEL and MDEL:

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

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

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

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

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

Since there are no human health criteria for total recoverable copper, no AMEL or MDEL are calculated for human health criteria.

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

For total recoverable copper: Since no AMEL or MDEL calculated for human health criteria, the lowest AMEL and MDEL are based on the aquatic life protection:

AMEL = 34 µg/L

MDEL = 77 µg/L

Therefore, the effluent limitations for total recoverable copper at Discharge Point 001(A&B): AMEL (34 µg/L) and MDEL (77 µg/L) based on aquatic life criteria, are incorporated into this permit. Following the same process, the AMELs and MDELs for total recoverable copper, total recoverable lead, and total recoverable zinc at Discharge Point 002 were calculated based on the CTR freshwater aquatic life criteria and the SIP procedures. For total recoverable mercury, the effluent limitations were established based on the statewide Mercury Provisions. For TCDD equivalents at Discharge Point 001(A&B), bis(2-ethylhexyl)phthalate at Discharge Points 001(A&B) and 002 and chlorodibromomethane, dichlorobromomethane, and tetrachloroethylene at Discharge Point 002, the effluent limitations were established based on the human health CTR criteria and the SIP procedures. Effluent limitations for boron are based on Basin Plan WQOs and utilizing the AMEL and MDEL calculation protocol for aquatic life criteria included in the SIP. These limitations are expected to be protective of the beneficial uses of the receiving water.

- e. Effluent Limitations Based on Intake Water Credits.** Intake water credits for WQBELs are addressed in the SIP. Section 1.4.4 of the SIP enumerates the conditions under which intake water credits for WQBELs may be allowed are as follows:

- "(1) The observed maximum ambient background concentration, as determined in section 1.4. 3. 1, and the intake water concentration of the pollutant exceeds the most stringent applicable criterion/objective for that pollutant;*
- (2) The intake water credits provided are consistent with any TMDL applicable to the discharge that has been approved by the Regional Water Board, State Water Board, and U.S. EPA;*
- (3) The intake water is from the same water body as the receiving water body. The Discharger may demonstrate this condition by showing that:*
 - (a) the ambient background concentration of the pollutant in the receiving water, excluding any amount of the pollutant in the facility's discharge, is similar to that of the intake water;*
 - (b) there is a direct hydrological connection between the intake and discharge points;*
 - (c) the water quality characteristics are similar in the intake and receiving waters; and*
 - (d) the intake water pollutant would have reached the vicinity of the discharge point in the receiving water within a reasonable period of time and with the same effect had it not been diverted by the Discharger.*

The Regional Water Board may also consider other factors when determining whether the intake water is from the same water body as the receiving water body;

(4) The facility does not alter the intake water pollutant chemically or physically in a manner that adversely affects water quality and beneficial uses; and (5) The timing and location of the discharge does not cause adverse effects on water quality and beneficial uses that would not occur if the intake water pollutant had been left in the receiving water body."

The Los Angeles Water Board determined during development of the previous Order No. R4-2016-0024, following review of the Discharger's request and monitoring data from the Facility, that, for chloride, mercury, nitrate plus nitrite, *E. coli*, and turbidity at Discharge Point 001 (A&B) and chloride, mercury, nitrate plus nitrite, *E. coli*, and turbidity at Discharge Point 002, intake water concentrations may be contributing to effluent concentrations that are higher than the prescribed effluent limitations in this Order and that intake water credits may be warranted. The Discharger indicated that there are no potential sources for nitrate plus nitrite and *E. coli* from the operations at the Facility. The intake water is the only source for these pollutants. The Los Angeles Water Board continues to determine that the criteria for applying intake water credit for chloride, mercury, nitrate plus nitrite, turbidity, and *E. coli* as specified in 40 CFR section 122.45(g) is still satisfied and has continued the allowance of intake water credits for these parameters. A discussion of the evaluation of each constituent with respect to the conditions is discussed below:

Condition (1). The intake water is directly drawn from the upstream ambient water at the Facility location so that the intake water is the same as the ambient water. For each parameter, the intake water has demonstrated a concentration greater than the most stringent applicable criterion (See Table F-10 and F-11).

Condition (2). The intake credits for chloride, nitrogen and bacteria are consistent with the TMDLs in effect for the Santa Clara River.

Condition (3). The intake water is taken from the Peace Valley Pipeline water as it passes through turbines and enters the tail race of the Facility, thus the intake water is the same as the upstream, ambient water, thus satisfying conditions (a) and (c). The Peace Valley Pipeline, which is the upstream, intake water and the cooling water supply source enters directly into Pyramid Lake through turbines, satisfying condition (b). Pyramid Lake and the associated influent water bodies are part of the SWP and are manmade infrastructure. Therefore, condition (d) does not apply.

Condition (4). Based on the nature of operations, as described in the ROWD, the Facility does not alter the intake water pollutants chemically or physically. The Discharger does not conduct operations that contribute appreciable quantities of pollutants to the effluent, thus demonstrating that the nature of intake water is similar to the effluent. In some instances, turbidity associated with solids may settle and then become re-suspended

upon discharge, particularly during wet weather. However, the extent to which this occurs is slight and consistent with natural wet weather conditions in streams entering Pyramid Lake.

Condition (5). Cooling water passes through the system and is discharged at the same location where turbine water enters Pyramid Lake. Thus, timing and location of the discharge does not cause adverse effects on water quality and beneficial uses that would not occur if the intake water pollutant had been left in the receiving water body.

In summary, the constituents for which intake water credits are allowed in this Order were found in the intake water and effluent samples at concentrations that exceed the most stringent applicable water quality criterion. The Facility does not conduct operations which add appreciable amounts of these constituents to the effluent.

Effluent limitations based on intake water credits prohibit the Facility from contributing additional amounts of the constituents to the discharge beyond the original effluent limitations or the concentration of the pollutant in the intake water.

This Order continues intake water credits as specified in sections 4.1 and 4.2 of this Order for chloride, mercury, nitrate plus nitrite, *E. coli*, and turbidity at Discharge Points 001 (A&B) and 002.

The Discharger requested intake water credits for pH, with the submittal of their ROWD. After reviewing the data submitted by the Discharger, Los Angeles Water Board determined that the criteria for applying intake water credit for pH as specified in 40 CFR section 122.45(g) is satisfied. Therefore, this Order allows intake water credits for pH in addition to continuing to include intake water credit for turbidity (as discussed in section 4.2.2 of this Fact Sheet), chloride, mercury, nitrate plus nitrite, and *E. coli*.

Tables F-13 and F-14 provide a comparison of the combined maximum ambient background data (RSW-001), the intake water concentrations (INF-001), and the applicable criteria. The comparison shows that the intake and/or the ambient background data exceeds the most stringent applicable criteria for chloride, mercury, nitrate plus nitrite, *E. coli*, and pH.

Table F-13. Current Intake Water Credit Evaluation Data for Discharge Point 001 (A&B)

Parameter	Units	Effluent Concentration	Maximum Ambient Background	Intake Water	Maximum Ambient Background/ Intake Water	Applicable Criteria	Notes
Chloride	mg/L	110	100	120	120	100	---
Mercury	µg/L	0.1	0.1	0.1	0.1	0.012	a

Parameter	Units	Effluent Concentration	Maximum Ambient Background	Intake Water	Maximum Ambient Background/ Intake Water	Applicable Criteria	Notes
Nitrate plus nitrite	mg/L	0.83	0.79	0.8	0.8	6.8	---
<i>E. coli</i>	MPN/100 ml	50	80	30	80	235	---
pH	standard units	9.5	9.5	9.4	9.5	8.5 Max	---

Footnotes for Table F-13

- a. The result was detected at a level below the minimum level and is an estimated concentration.

End of Footnotes for Table F-13

Table F-14. Current Intake Water Credit Evaluation Data for Discharge Point 002

Parameter	Units	Effluent Concentration	Maximum Ambient Background	Intake Water	Maximum Ambient Background/ Intake Water	Applicable Criteria	Notes
Chloride	mg/L	110	100	120	120	100	---
Mercury	µg/L	0.1	0.1	0.1	0.1	0.012	a
Nitrate plus nitrite	mg/L	0.74	0.79	0.8	0.8	6.8	---
<i>E. coli</i>	MPN/100 ml	23	80	30	80	235	---
pH	standard units	9.5	9.5	9.4	9.5	8.5 Max	---

Footnotes for Table F-14

- a. The result was detected at a level below the minimum level and is an estimated concentration.

End of Footnotes for Table F-14

- f. Mass-based Effluent Limits.** Generally, mass-based effluent limitations ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limitations. 40 CFR 122.45(f)(1) requires that all permit limitations, standards or prohibitions be expressed in terms of mass units except under the following conditions: (1) for pH, temperature, radiation or other pollutants that cannot appropriately be expressed by mass limitations; (2) when applicable standards or limitations are expressed in terms of other

units of measure; or (3) if, in establishing technology-based permit limitation on a case-by-case basis, limitations based on mass are infeasible because the mass or pollutant cannot be related to a measure of production.

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

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

Where: Mass = mass limitation for a pollutant (pounds/day)

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

Flow rate = discharge flow rate (MGD).

According to the Report of Waste Discharge submitted by the Discharger, the maximum flow is 1.95 MGD at Discharge Point 001(A&B) and 0.02 MGD at Discharge Point 002. The mass-based effluent limitations are calculated using this flow.

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

In addition to the Basin Plan requirements, section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters.

In June 2010, U.S. EPA published a guidance document titled *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010), in which they recommend the following: “Permitting authorities should consider adding the TST approach to their implementation procedures for analyzing valid WET data for their current NPDES WET Program.” The TST statistical approach is another statistical option for analyzing valid WET test data. Use of the TST statistical approach does not result in any changes to EPA’s WET test methods. Section 9.4.1.2 of U.S. EPA’s *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and*

Estuarine Organisms (EPA/600/R-95/0136, 1995), recognizes that, “the statistical methods recommended in this manual are not the only possible methods of statistical analysis.” The TST statistical approach can be applied to acute (survival) and chronic (sublethal) endpoints and is appropriate to use for both freshwater and marine EPA WET test methods.

The TST’s null hypothesis for chronic toxicity is:

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

Results obtained from the chronic toxicity test are analyzed using the TST statistical approach and an acceptable level of chronic toxicity is demonstrated by rejecting the null hypothesis and reporting “Pass” or “P”. Chronic toxicity results are expressed as “Pass” or “Fail” and “% Effect”. Since no dilution is allowed, the chronic toxicity IWC for Discharge Point 001 is 100 percent effluent

The previous Order No. R4-2016-0224 included chronic toxicity effluent limitations expressed as “Pass” for the median monthly summary results and “Pass” and “<50% Effect” for each maximum daily individual result. These chronic toxicity effluent limitations are as stringent as necessary to protect the narrative Basin Plan Water Quality Objective for chronic toxicity. The chronic toxicity in the discharge is evaluated using U.S. EPA’s 2010 Test of Significant Toxicity (TST) hypothesis testing statistical approach.

The Facility demonstrate reasonable potential for chronic toxicity. Monitoring data for chronic toxicity tests reported between July 2016 and May 2021 indicated no “Fail” results for chronic toxicity. This Order continues chronic toxicity requirements from the previous Order No. R4-2016-0224 at discharge locations EFF-001 and EFF-002. This Order also establishes a chronic toxicity accelerated monitoring trigger defined as a test result of “Fail” for the TST approach. Nevertheless, this Order contains a reopener to allow the Los Angeles Water Board to modify the permit in the future, if necessary, to make it consistent with any new policy, plan, law, or regulation.

4.4. Final Effluent Limitation Considerations

4.4.1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R4-2016-0224 with the exception of those discussed below.

- a. Total Recoverable Copper, Chlorodibromomethane, and Dichlorobromomethane – Attainment Water

Pursuant to CWA section 303(d)(4)(B), a WQBEL may be relaxed for discharges to receiving waters that are in attainment for the pollutants as long as the action complies with the state’s antidegradation policy.

The average monthly effluent limitation (AMEL) and the maximum daily effluent limitation (MDEL) in this Order are less stringent than that in the prior Order No. R4-2016-0224. The changes are a result of a recalculation of the effluent limitations using updated monitoring data collected during the permit term (July 2016 through May 2021), which reflects effluent variability during the permit term. The CTR-SIP procedure accounts for variability in the effluent data using a “coefficient of variation” (CV). Where there is insufficient data, a CV value of 0.6 is used (see Step 3 in section 1.4.B of the SIP); however, when there are sufficient data, a specific CV is calculated. Although the updated effluent limitations are less stringent than those established in the prior order, the relaxation of this objective is consistent with the exceptions to backsliding in section 304(d)(B) of the CWA because the effluent will not result in a violation of any applicable criteria or water quality objective in the receiving water into which the effluent discharges. The quality of the water equals or exceeds levels necessary to protect the designated uses, and it meets water quality standards for these parameters. Further, as required for attainment waters, the revision is consistent with antidegradation policies, as set forth below. Thus, the revision is justified under section 303(d)(4)(B). Additionally, this Order retains effluent monitoring for this pollutant, in accordance with the SIP.

b. Bromoform – Attainment Water

Pursuant to CWA section 402(o)(2)(B)(i), permit effluent limitations may be revised based on new information. The final effluent limitations for bromoform at Discharge Point 002 that were included in R4-2016-0224 are removed in this Order because the discharge does not show reasonable potential to cause or contribute to an exceedance of the applicable water quality criteria for this pollutant, based on the recent monitoring data. The reasonable potential analysis using the updated monitoring data justifies removal of the effluent limitations for bromoform. The removal of effluent limitations for this pollutant is thus consistent with the anti-backsliding requirements of the CWA and federal regulations. Nonetheless, this Order retains effluent monitoring for this pollutant, in accordance with the SIP.

4.4.2. Antidegradation Policies

40 CFR section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution 68-16. Resolution 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Los Angeles Water Board’s Basin Plan and the SIP implement, and incorporate by reference, both the state and federal antidegradation policies. This Order is consistent with the state and federal antidegradation policies as follows:

The revised effluent limitations for total recoverable copper, chlorodibromomethane, and dichlorobromomethane will not result in degradation to receiving waters because, as discussed above, the new effluent limitations were calculated based on a coefficient of variation (CV) value that has been updated based on representative

effluent data during the permit term, in accordance with the CTR-SIP procedures. The effluent limitations are still protective of beneficial uses and will not result in exceedances of the applicable water quality objectives.

Effluent limitations at Discharge Point 002 for bromoform are removed in this Order because monitoring data demonstrated that there is no reasonable potential for the discharge to cause or contribute to an exceedance of the water quality standard for this pollutant. There is monitoring for this constituent to ensure that water quality objectives continue to be attained and beneficial uses protected.

Further, this Order does not provide for an increase in the permitted design flow or allow for a reduction in the level of treatment. The limits included hold the Discharger to performance levels that will not cause or contribute to water quality impairment or water quality degradation. The final limitations in this Order, which include concentration-based and mass-based limitations, hold the Discharger to performance levels that will not adversely impact the beneficial uses or degrade the water quality of the receiving water and are developed consistent with applicable effluent criteria, the protocol established to calculate effluent limitations, and state regulations. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. Therefore, the issuance of this permit is consistent with the state's antidegradation policy.

4.4.3. 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, settleable solids and TSS at Discharge Points 001 (A&B) and 002. Restrictions on these parameters are discussed in section 4.2.2 of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

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

4.4.4. Summary of Final Effluent Limitations

Table F-15. Summary of Final Effluent Limitations at Discharge Point 001

Parameter	Units	Average Monthly	Maximum Daily	Basis	Notes
Biochemical Oxygen Demand (BOD ₅ 20°C)	mg/L	---	10	E, BPJ	---
(BOD ₅ 20°C)	lbs/day	---	160	E, BPJ	---
Total Suspended Solids (TSS)	mg/L	50	75	E, BPJ	---
TSS	lbs/day	810	1,220	E, BPJ	---
Oil and Grease	mg/L	10	15	E	---
Oil and Grease	lbs/day	160	240	E	---
pH	Standard unit	---	6.5 Min 8.5 Max	E, BP	a and b
Temperature	°F	---	80	BP	c
Settleable Solids	mL/L	0.1	0.3	E	---
Turbidity	NTU	5	25	E,	b
Ammonia Nitrogen, Total (as N)	mg/L	1.75	5.2	E, TMDL	---
Ammonia Nitrogen, Total (as N)	lbs/day	28	85	E, TMDL	---
Boron	mg/L	1.5	3.0	BP	---
Boron	lbs/day	24	2449	BP	---
Chloride	mg/L	100	---	E, TMDL	b and d
Chloride	lbs/day	1,630	---	E, TMDL	---
Dissolved Oxygen	mg/L		6.0	BP	--
<i>E. coli</i>	MPN/100 ml	126	235	E, TMDL	b, e and f
Nitrate + Nitrite as N	mg/L	6.8	---	E, TMDL	b
Nitrate+ Nitrite as N	lbs/day	111	---	E, TMDL	---
Chronic Toxicity	Pass or Fail, % Effect	Pass	Pass or % Effect <50	E, BP, TST	---
Copper, TR	µg/L	34	77	CTR/SIP	g
Copper, TR	lbs/day	0.56	1.25	CTR/SIP	---
Mercury, TR	µg/L	0.05	0.10	E, CTR	b
Mercury, TR	lbs/day	0.00081	0.0016	E, CTR	---
TCDD Equivalents	µg/L	1.30E-08	2.60E-08	CTR/SIP	h

Parameter	Units	Average Monthly	Maximum Daily	Basis	Notes
TCDD Equivalents	lbs/day	2.11E-10	4.24E-10	CTR/SIP	---
Bis(2-Ethylhexyl)Phthalate	µg/L	1.8	3.6	CTR/SIP	---
Bis(2-Ethylhexyl)Phthalate	lbs/day	0.029	0.059	CTR/SIP	---

Footnotes for Table F-15

- The effluent limitations for pH are 6.5 as an Instantaneous Minimum and 8.5 as an Instantaneous Maximum.
- Intake water credits are included for pH, turbidity, chloride, *E. coli*, nitrate plus nitrite and mercury. If the intake water pollutant concentration does not exceed the average monthly limitation, then the limitations are applied as noted in the table. If the intake water pollutant concentration exceeds the average monthly limitation, but does not exceed the maximum daily limitation, then compliance with the average monthly limitation will be determined based on intake water credit (intake water concentration) and compliance with the maximum daily limitation is applied as noted in the table. If the intake water pollutant concentration exceeds the maximum daily limitation, then compliance with both the average monthly and maximum daily limitation will be determined based on intake water credit (intake water concentration). When determining compliance based on intake water credit, the pollutant effluent limitation is equal to the maximum pollutant concentration in the intake water. When grab samples are taken, the timing and location of intake water and effluent samples shall reflect the travel time of water in the Facility. The intake water sample shall directly correspond to the effluent sample.
- The effluent limitation for temperature is 80°F based on the water quality objective in the Basin Plan for temperature that is applicable to inland surface waters with WARM beneficial use designation such as Pyramid Lake. Additionally, the effluent limitation for temperature requires that water temperature shall not be altered by more than 5 °F above the natural temperature to protect both the WARM and COLD beneficial use designations of Pyramid Lake.
- Applied as a 3-month rolling average.
- Applied as a geometric mean.
- Applied as a single sample maximum.
- The minimum dilution ratio used to calculate effluent limitations for copper for Discharge Point 001 (AS&B) is 8.2:1.
- TCDD equivalents shall be calculated using the following formula, where the toxicity equivalency factors (TEFs) are as provided in the table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. The TCDD equivalents are calculated as follows: Dioxin-TEQ (TCDD equivalents) = Sum of Concentration of dioxin or furan congener_x (C_x) X Toxicity Equivalency Factors (TEFs) for congener_x. The TEFs are listed in the Table Below.

Toxicity Equivalency Factors

Congeners	Minimum Level (pg/L)	Toxicity Equivalence Factor (TEF)
2,3,7,8 - tetra CDD	10	1.0
1,2,3,7,8 - penta CDD	50	1.0
1,2,3,4,7,8 - hexa CDD	50	0.1

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

End of Footnotes for Table F-15

Table F-16. Summary of Final Effluent Limitations at Discharge Point 002

Parameter	Units	Average Monthly	Maximum Daily	Basis	Notes
Biochemical Oxygen Demand (BOD ₅ 20°C)	mg/L	---	10	E, BPJ	---
(BOD ₅ 20°C)	lbs/day	---	1.7	E, BPJ	---
Total Suspended Solids (TSS)	mg/L	50	75	E, BPJ	---
TSS	lbs/day	8.3	13	E, BPJ	---
Oil and Grease	mg/L	10	15	E	---
Oil and Grease	lbs/day	1.7	2.5	E	---
pH	Standard unit	---	6.5 Min 8.5 Max	E, BP	a and b
Temperature	°F	---	80	BP	c
Settleable Solids	mL/L	0.1	0.3	E	---
Turbidity	NTU	5	25	E	b

Parameter	Units	Average Monthly	Maximum Daily	Basis	Notes
Ammonia Nitrogen, Total (as N)	mg/L	1.75	5.2	E, TMDL	---
Ammonia Nitrogen, Total (as N)	lbs/day	0.29	0.87	E, TMDL	---
Chlorine, Total Residual	mg/L	---	0.1	E, BP	---
Chlorine, Total Residual	lbs/day	---	0.017	E, BP	---
Boron	mg/L	1.5	3.0	BP	---
Boron	lbs/day	0.25	0.50	BP	---
Chloride	mg/L	100	---	E, TMDL	b and d
Chloride	lbs/day	17	---	E, BP, TMDL	---
Dissolved Oxygen	mg/L	---	6.0	BP	--
<i>E. coli</i>	MPN/100 ml	126	235	E, TMDL	b, e and f
Nitrate + Nitrite as N	mg/L	6.8	---	E, TMDL	b
Nitrate+ Nitrite as N	lbs/day	---	---	E, TMDL	---
Chronic Toxicity	Pass or Fail, % Effect	Pass	Pass or % Effect <50	E, BP, TST	---
Copper, TR	µg/L	29	77	CTR/SIP	g
Copper, TR	lbs/day	0.005	0.013	CTR/SIP	---
Lead, TR	µg/L	8	23	CTR/SIP	g
Lead, TR	lbs/day	0.0013	0.004	CTR/SIP	---
Mercury, TR	µg/L	0.05	0.10	E, CTR	b
Mercury, TR	lbs/day	8.3×10^{-6}	1.7×10^{-5}	E, CTR	---
Zinc, TR	µg/L	303	822	CTR/SIP	g
Zinc, TR	lbs/day	0.051	0.137	CTR/SIP	---
Chlorodibromomethane	µg/L	17	54	CTR/SIP	g
Chlorodibromomethane	lbs/day	0.0028	0.0089	CTR/SIP	---
Dichlorobromomethane	µg/L	5.4	17	CTR/SIP	g
Dichlorobromomethane	lbs/day	0.0009	0.0029	CTR/SIP	---
Tetrachloroethylene	µg/L	2.6	5.3	CTR/SIP	g
Tetrachloroethylene	lbs/day	0.00044	0.00088	CTR/SIP	---
Bis(2-Ethylhexyl)Phthalate	µg/L	1.8	3.6	CTR/SIP	---
Bis(2-Ethylhexyl)Phthalate	lbs/day	0.0003	0.0006	CTR/SIP	---

Footnotes for Table F-16

- a. The effluent limitations for pH are 6.5 as an Instantaneous Minimum and 8.5 as an Instantaneous Maximum.
- b. Intake water credits are included for pH, turbidity, chloride, *E. coli*, nitrate plus nitrite and mercury. If the intake water pollutant concentration does not exceed the average monthly limitation, then the limitations are applied as noted in the table. If the intake water pollutant concentration exceeds the average monthly limitation, but does not exceed the maximum daily limitation, then compliance with the average monthly limitation will be determined based on intake water credit (intake water concentration) and compliance with the maximum daily limitation is applied as noted in the table. If the intake water pollutant concentration exceeds the maximum daily limitation, then compliance with both the average monthly and maximum daily limitation will be determined based on intake water credit (intake water concentration). When determining compliance based on intake water credit, the pollutant effluent limitation is equal to the maximum pollutant concentration in the intake water. When grab samples are taken, the timing and location of intake water and effluent samples shall reflect the travel time of water in the Facility. The intake water sample shall directly correspond to the effluent sample.
- c. The effluent limitation for temperature is 80°F based on the water quality objective in the Basin Plan for temperature that is applicable to inland surface waters with WARM beneficial use designation such as Pyramid Lake. Additionally, the effluent limitation for temperature requires that water temperature shall not be altered by more than 5 °F above the natural temperature to protect both the WARM and COLD beneficial use designations of Pyramid Lake.
- d. Applied as a 3-month rolling average.
- e. Applied as a geometric mean.
- f. Applied as a single sample maximum.
- g. The minimum dilution ratio used to calculate effluent limitations for copper, lead, and zinc for Discharge Point 002 is 8.2:1. The minimum dilution ratio used to calculate effluent limitations for Chlorodibromomethane, Dichlorobromomethane, and Tetrachloroethylene are 39.7:1, 8.6:1, and 2.3:1, respectively.

End of Footnotes for Table F-16

4.5. Interim Effluent Limitations – Not Applicable

4.6. Land Discharge Specifications – Not Applicable

4.7. Recycling Specifications – Not Applicable

5. RATIONALE FOR RECEIVING WATER LIMITATIONS

5.1. Surface Water

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

5.2. Groundwater – Not Applicable

6. RATIONALE FOR PROVISIONS

6.1. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. The

Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

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

6.2. Special Provisions

6.2.1. Reopener Provisions

These provisions are based on 40 CFR part 123 and Order No. R4-2016-0224. The Los Angeles Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new federal regulations, modification in toxicity requirements, or adoption of new regulations by the State Water Board or Los Angeles Water Board, including revisions to the Basin Plan.

6.2.2. Special Studies and Additional Monitoring Requirements

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

Evaluation of Drainage Sump for Discharge Point 002 and its Pollutant Removal Potential

Within 90 days of the effective date of this Order, the Discharger shall submit to the Los Angeles Water Board a work plan that evaluates the water quality of the influent and effluent of the drainage sump and its pollutant removal efficiency, the appropriateness of the dilution credits to the pollutants, the volume of the drainage sump and the retention time, and the latest available technology to treat or reduce the pollutant concentration in the discharge.

6.2.3. Best Management Practices and Pollution Prevention

This provision is based on section 122.44(k) and includes the requirement to update and continue to implement the SWPPP, BMPP, and Spill Contingency Plan (SCP). This Order requires the Discharger to report on the effectiveness of the plans and update them as needed to ensure all actual or potential sources of pollutants in wastewater discharged from the Facility are addressed in the SWPPP, BMP, and Spill Contingency Plan.

6.2.4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of 40 CFR section 122.41(e) and the previous Order.

6.2.5. Other Special Provisions (Not Applicable)

7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

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

7.1. Influent Monitoring

The source water from which the Facility draws intake water is Quail Lake via the Lower Quail Canal through a 5-mile long penstock. Influent monitoring is required to distinguish between contaminants potentially contributed by the Facility and contaminants present in the intake water.

As discussed in sections 4.2.2.a. and 4.3.6.e., this Order allows for intake water credits for chloride, E. coli, mercury, nitrate plus nitrite, pH and turbidity at Discharge Points 001 (A&B) and 002. The levels of these constituents in the intake water and effluent may be above WQOs, obscuring the potential impacts the effluent has on the receiving water. In order to characterize pollutants present in the intake water, the MRP includes monthly monitoring requirements for the constituents for which intake credits are allowed at Discharge Points 001 (A&B), and 002. Furthermore, in order to characterize any Facility contributions that would result in exceedance of the limitations and/or potentially impair beneficial uses, the Discharger must ensure that the timing and location of sampling for intake water and effluent for pollutants with intake water credits reflect the travel time of water in the Facility such that the intake water samples directly correspond to effluent samples.

Order No. R4-2016-0224 required influent monitoring for several constituents. Sufficient data were collected to characterize influent contributions of several parameters. This Order discontinues influent monitoring requirements with the exception of parameters for which intake credits are allowed and parameters that may be present in the influent. However, this Order retains annual influent monitoring for priority pollutants to evaluate the water quality of the influent.

7.2. Effluent Monitoring

Monitoring for pollutants expected to be present in the discharge are required as established in the MRP (Attachment E) and as required in the SIP. To demonstrate compliance with established effluent limitations, the Order retains the monitoring requirements from Order No. R4-2016-0224.

In addition, monitoring for boron is changed from twice per year to monthly to determine compliance with newly established effluent limitations that are based on the Basin Plan.

The SIP states that the Los Angeles Water Board will require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established. This Order continues to require the Discharger to conduct annual

monitoring for the remaining CTR priority pollutants. The Los Angeles Water Board will use the additional data to conduct an RPA and determine if additional WQBELs are required. The Los Angeles Water Board may reopen the permit to incorporate additional effluent limitations and requirements, if necessary.

7.3. Whole Effluent Toxicity Testing Requirements

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. This Order continues the chronic toxicity monitoring requirements from the previous Order No. R4-2016-0224.

7.4. Receiving Water Monitoring

7.4.1. Surface Water

This Order includes receiving water limitations and therefore monitoring requirements are included in the MRP to determine compliance with the receiving water limitations established in Section 5.1 of the Order.

According to the SIP, the Discharger is required to monitor the upstream receiving water for the CTR priority pollutants to determine reasonable potential. Accordingly, this permit continues to require the Discharger to conduct receiving water monitoring of the CTR priority pollutants at Monitoring Location RSW-001. The Discharger must analyze temperature, hardness, and pH of the upstream receiving water at the same time the samples are collected for priority pollutants analysis. This Order continues to require receiving water monitoring for *E. coli* to determine reasonable potential.

7.4.2. Groundwater – Not Applicable

7.5. Other Monitoring Requirements

7.5.1. Storm Water Monitoring - Not Applicable

7.5.2. SWPPP, BMP, and Spill Contingency Plan Status and Effectiveness Report

The Discharger is required by Special Provision 6.3.3. of the Order to update and implement a SWPPP, BMP, and Spill Contingency Plan. This Order requires the Discharger to report on the effectiveness of the plans and update them as needed to ensure all actual or potential sources of pollutants in wastewater discharged from the Facility are addressed in the SWPPP, BMP, and Spill Contingency Plan.

8. PUBLIC PARTICIPATION

The Los Angeles Water Board has considered the issuance of WDRs that will serve as an NPDES permit for the William E. Warne Power Plant. As a step in the WDR adoption process, the Los Angeles Water Board staff has developed tentative WDRs and has encouraged public participation in the WDR adoption process.

8.1. Notification of Interested Parties

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

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

8.2. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the Los Angeles Water Board at the address on the cover page of this Order, or by email submitted to losangeles@waterboards.ca.gov with a copy to adriana.vallejo@waterboards.ca.gov.

To be fully responded to by staff and considered by the Los Angeles Water Board, the written comments were due at the Los Angeles Water Board office by **5:00 p.m. on May 16, 2022**.

8.3. Public Hearing

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

Date: June 9, 2022
Time: 09:00 a.m.
Location: TBD

Additional information about the location of the hearing and options for participating will be available 10 days before the hearing. Any person desiring to receive future notices about any proposed Board action regarding this Discharger, please contact Adriana Vallejo at adriana.vallejo@waterboards.ca.gov, to be included on the e-mail list.

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

8.4. Reconsideration of Waste Discharge Requirements

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

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

Or by email at waterqualitypetitions@waterboards.ca.gov

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

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

8.5. Information and Copying

The Report of Waste Discharge, other supporting documents, and comments received are on file and may be inspected at the address above by appointment between 8:30 a.m. and 4:45 p.m., Monday through Friday. Inspection and copying of documents may be arranged through the Los Angeles Water Board at the address below or by emailing losangeles@waterboards.ca.gov

Los Angeles Regional Water Quality Control Board
320 W. 4th Street, Suite 200
Los Angeles, CA 90013-2343

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

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

8.6. Register of Interested Persons

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

8.7. Additional Information

Requests for additional information or questions regarding this order should be directed to Adrianna Vallejo at adriana.vallejo@waterboards.ca.gov or at (213) 620-2160.

ATTACHMENT G - STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS

1. IMPLEMENTATION SCHEDULE

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

2. OBJECTIVES

The SWPPP has two major objectives: (a) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of stormwater discharges and authorized non-stormwater discharges from the facility; and (b) to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in stormwater discharges and authorized non-stormwater discharges. BMPs may include a variety of pollution prevention measures or other low-cost and pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, run-off controls, 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 Los Angeles Water Board inspectors

3. PLANNING AND ORGANIZATION

3.1. Pollution Prevention Team

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

3.2. Review Other Requirements and Existing Facility Plans

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

plans that contain 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.

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

Phase	Tasks
Planning and Organization	Form Pollution Prevention Team Review other plans
Assessment Phase	Develop a site map Identify potential pollutant sources Inventory of materials and chemicals List significant spills and leaks Identify non-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

4. SITE MAP

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

The following information shall be included on the site map:

- 4.1. The facility boundaries; the outline of all 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.
- 4.2. 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, skim ponds, diversion barriers, etc.
- 4.3. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.
- 4.4. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in section 6.1.4. below have occurred.
- 4.5. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

5. LIST OF SIGNIFICANT MATERIALS

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

6. DESCRIPTION OF POTENTIAL POLLUTANT SOURCES

The SWPPP shall include a narrative description of the facility's industrial activities, as identified in section 4.5. above, associated potential pollutant sources, and potential pollutants that could be discharged in 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 "Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to section 313 of Title III of Superfund Amendments and Reauthorization Act (SARA); fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges.

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

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

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

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

Non-storm water discharges that are not authorized by this Permit, other waste discharge requirements, or other NPDES permits are prohibited. The SWPPP must include BMPs to prevent or reduce contact of authorized non-storm water discharges with significant materials (as defined in Footnote 1 of section 5 above) or equipment.

- 6.6. **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.

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

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

7. ASSESSMENT OF POTENTIAL POLLUTANT SOURCES

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

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

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

Facility operators are required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source.

8.. STORMWATER BEST MANAGEMENT PRACTICES

The SWPPP shall include a narrative description of the stormwater BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections 6 and 7 above). The BMPs shall be developed and implemented to reduce or prevent pollutants in stormwater discharges and authorized non-stormwater discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

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

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

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

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

8.1. Non-Structural BMPs

Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with stormwater discharges and authorized non-stormwater discharges. They are considered low technology, cost-effective measures. Facility operators should consider all possible non-structural BMPs before considering additional structural BMPs (see section 8.2). Below is a list of non-structural BMPs that should be considered:

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

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

8.2. Structural BMPs

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

- A. Overhead Coverage.** Includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with stormwater and authorized non-stormwater discharges.
- B. Retention Ponds.** Includes basins, ponds, surface impoundments, bermed areas, etc. that do not allow storm water to discharge from the facility.

- C. Control Devices.** This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.
- D. Secondary Containment Structures.** Includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.
- E. Treatment.** Includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc. that reduce the pollutants in stormwater discharges and authorized non-stormwater discharges.

9. Annual Comprehensive Site Compliance Evaluation

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

- 9.1. A review of all visual observation records, inspection records, and sampling and analysis results.
- 9.2. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
- 9.3. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.
- 9.4. An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in section 10.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 5.4.5 of Attachment D.

10. SWPPP GENERAL REQUIREMENTS

- 10.1. The SWPPP shall be retained onsite and made available upon request of a representative of the Los Angeles Water Board and/or local stormwater management agency (local agency) which receives the stormwater discharges.
- 10.2. The Los Angeles Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this Section. As requested by the Los Angeles Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Los Angeles Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide

written certification to the Los Angeles Water Board and/or local agency that the revisions have been implemented.

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

ATTACHMENT H – SUMMARY OF RPA AND WQBEL CALCULATIONS

Reasonable Potential Analysis for Discharge Point 001 (A&B)

CTR#	Parameters	Units	CV	MEC	Title 22 MCLs (µg/L)	Basin Plan Objectives (mg/L)	CTR Freshwater Quality Criteria (ug/L) C acute = CMC tot	CTR Freshwater Quality Criteria (ug/L) C chronic = CCC tot	Human Health criteria for consumption of water & organisms	Lowest C	RPA: MEC >= Lowest C	RPA: Tier 1 - Need limit?	RPA: B available (Y/N)?	RPA: Are all B data points non- detects (Y/N)?
1	Antimony	ug/L	0.6	0.045	6				14.00	6.00	No	No	Y	Y
2	Arsenic	ug/L	0.6	5.5	10		340.00	150.00		10.00	No	No	Y	N
3	Beryllium	ug/L	0.6	0.033	4.0					4.00	No	No	Y	Y
4	Cadmium	ug/L	0.6	0.041	5.0		3.48	1.95		1.95	No	No	Y	Y
5a	Chromium (III)		0.6	6.2			471.08	152.81		152.81	No	No	Y	N
5b	Chromium (VI)	ug/L	0.6	2.4	50		16.00	11.00		11.00	No	No	Y	N
6	Copper	ug/L	0.76	22			11.28	7.64		7.64	Yes	Yes	Y	N
7	Lead	ug/L	0.6	0.38			52.69	2.05		2.05	No	No	Y	N
8	Mercury	ug/L	0.6		2.0		Reserved	0.01	0.050	0.012			Y	Y
9	Nickel	ug/L	0.6	2.6	100		399.95	44.42		44.42	No	No	Y	N
10	Selenium	ug/L	0.6	0.56	50		20.00	5.00		5.00	No	No	Y	Y
11	Silver	ug/L	0.6	0.062			2.50			2.50	No	No	Y	Y
12	Thallium	ug/L	0.6	0.014	2				1.70	1.70	No	No	Y	
13	Zinc	ug/L	0.6	11			100.07	100.89		100.07	Yes	Yes	Y	N
14	Cyanide	ug/L	0.6	0.48	150		22.00	5.20	700.00	5.20	No	No	Y	Y
15	Asbestos	Fibers/L	0.6		7				7.00	7.00			N	
16	2,3,7,8 TCDD Equivalents	ug/L	0.6	0.0000019	3.0E-05				0.00	0.00	Yes	Yes	N	
	TCDD Equivalents	ug/L	0.6						0.00000	0.000000013			N	
17	Acrolein	ug/L	0.6	2.2					320	320	No	No	Y	Y
18	Acrylonitrile	ug/L	0.6						0.059	0.059			Y	Y
19	Benzene	ug/L	0.6	0.13	1				1.2	1.0	No	No	Y	Y
20	Bromoform	ug/L	0.6	0.086					4.3	4.3	No	No	Y	Y
21	Carbon Tetrachloride	ug/L	0.6		0.5				0.25	0.25			Y	Y
22	Chlorobenzene	ug/L	0.6	0.058	70				680	70	No	No	Y	Y
23	Chlorodibromomethane	ug/L	0.6	0.089					0.41	0.41	No	No	Y	Y
24	Chloroethane	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
25	2-Chloroethylvinyl ether	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
26	Chloroform	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
27	Dichlorobromomethane	ug/L	0.6	0.084					0.56	0.56	No	No	Y	Y
28	1,1-Dichloroethane	ug/L	0.6	0.14	5					5.00	No	No	Y	Y
29	1,2-Dichloroethane	ug/L	0.6	0.24	0.5				0.38	0.38	No	No	Y	Y
30	1,1-Dichloroethylene	ug/L	0.6		6				0.057	0.057			Y	Y
31	1,2-Dichloropropane	ug/L	0.6	0.077	5				0.52	0.52	No	No	Y	Y
32	1,3-Dichloropropylene	ug/L	0.6	0.24	0.5				10	1	No	No	Y	Y
33	Ethylbenzene	ug/L	0.6	0.14	300				3100	300	No	No	Y	Y
34	Methyl Bromide	ug/L	0.6	0.25					48	48	No	No	Y	Y
35	Methyl Chloride	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
36	Methylene Chloride	ug/L	0.6	0.19	5				4.7	4.7	No	No	Y	Y
37	1,1,2,2- Tetrachloroethane	ug/L	0.6	0.064	1				0.17	0.17	No	No	Y	Y

CTR#	Parameters	Units	CV	MEC	Title 22 MCLs (µg/L)	Basin Plan Objectives (mg/L)	CTR Freshwater Quality Criteria (ug/L) C acute = CMC tot	CTR Freshwater Quality Criteria (ug/L) C chronic = CCC tot	Human Health criteria for consumption of water & organisms	Lowest C	RPA: MEC >= Lowest C	RPA: Tier 1 - Need limit?	RPA: B available (Y/N)?	RPA: Are all B data points non- detects (Y/N)?
38	Tetrachloroethylene	ug/L	0.6	0.25	5				0.8	0.8	No	No	Y	Y
39	Toluene	ug/L	0.6	0.077	150				6800	150	No	No	Y	Y
40	1,2-Trans- Dichloroethylene	ug/L	0.6	0.18	10				700	10	No	No	Y	Y
41	1,1,1-Trichloroethane	ug/L	0.6	0.094	200					200.00	No	No	Y	Y
42	1,1,2-Trichloroethane	ug/L	0.6	0.12	5				0.6	0.6	No	No	Y	Y
43	Trichloroethylene	ug/L	0.6	0.16	5				2.7	2.7	No	No	Y	Y
44	Vinyl Chloride	ug/L	0.6	0.14	0.5				2	1	No	No	Y	Y
45	2-Chlorophenol	ug/L	0.6	0.099					120	120	No	No	Y	Y
46	2,4-Dichlorophenol	ug/L	0.6	0.2					93	93	No	No	Y	Y
47	2,4-Dimethylphenol	ug/L	0.6	0.3					540	540	No	No	Y	Y
48	4,6-dinitro-o-resol (aka2- methyl-4,6-Dinitrophenol)	ug/L	0.6	0.99					13.4	13.4	No	No	Y	Y
49	2,4-Dinitrophenol	ug/L	0.6	0.99					70	70	No	No	Y	Y
50	2-Nitrophenol	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
51	4-Nitrophenol	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
53	Pentachlorophenol	ug/L	0.6	0.19	1		23.83	18.28	0.28	0.28	No	No	Y	Y
54	Phenol	ug/L	0.6	0.099					21000	21000	No	No	Y	Y
55	2,4,6-Trichlorophenol	ug/L	0.6	0.099					2.1	2.1	No	No	Y	Y
56	Acenaphthene	ug/L	0.6	0.099					1200	1200	No	No	Y	Y
57	Acenaphthylene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
58	Anthracene	ug/L	0.6	0.099					9600	9600	No	No	Y	Y
59	Benzidine	ug/L	0.6						0.00012	0.00012			Y	Y
60	Benzo(a)Anthracene	ug/L	0.6						0.0044	0.0044			Y	Y
61	Benzo(a)Pyrene	ug/L	0.6		0.2				0.0044	0.0044			Y	Y
62	Benzo(b)Fluoranthene	ug/L	0.6						0.0044	0.0044			Y	Y
63	Benzo(ghi)Perylene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
64	Benzo(k)Fluoranthene	ug/L	0.6						0.0044	0.0044			Y	Y
65	Bis(2- Chloroethoxy)Methane	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
66	Bis(2-Chloroethyl)Ether	ug/L	0.6						0.031	0.031			Y	Y
67	Bis(2- Chloroisopropyl)Ether	ug/L	0.6	0.099					1400	1400	No	No	Y	Y
68	Bis(2- Ethylhexyl)Phthalate	ug/L	0.6	13	4				1.8	1.8	Yes	Yes	Y	Y
69	4-Bromophenyl Phenyl Ether	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
70	Butylbenzyl Phthalate	ug/L	0.6	0.18					3000	3000	No	No	Y	Y
71	2-Chloronaphthalene	ug/L	0.6	0.099					1700	1700	No	No	Y	Y
72	4-Chlorophenyl Phenyl Ether	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
73	Chrysene	ug/L	0.6						0.0044	0.0044			Y	Y

CTR#	Parameters	Units	CV	MEC	Title 22 MCLs (µg/L)	Basin Plan Objectives (mg/L)	CTR Freshwater Quality Criteria (ug/L) C acute = CMC tot	CTR Freshwater Quality Criteria (ug/L) C chronic = CCC tot	Human Health criteria for consumption of water & organisms	Lowest C	RPA: MEC >= Lowest C	RPA: Tier 1 - Need limit?	RPA: B available (Y/N)?	RPA: Are all B data points non- detects (Y/N)?
74	Dibenzo(a,h)Anthracene	ug/L	0.6						0.0044	0.0044			Y	Y
75	1,2-Dichlorobenzene	ug/L	0.6	0.2	600				2700	600	No	No	Y	Y
76	1,3-Dichlorobenzene	ug/L	0.6	0.2					400	400	No	No	Y	Y
77	1,4-Dichlorobenzene	ug/L	0.6	0.2	5				400	5	No	No	Y	Y
78	3,3 Dichlorobenzidine	ug/L	0.6						0.04	0.04			Y	Y
79	Diethyl Phthalate	ug/L	0.6	0.2					23000	23000	No	No	Y	Y
80	Dimethyl Phthalate	ug/L	0.6	0.099					313000	313000	No	No	Y	Y
81	Di-n-Butyl Phthalate	ug/L	0.6	0.24					2700	2700	No	No	Y	Y
82	2,4-Dinitrotoluene	ug/L	0.6						0.11	0.11			Y	Y
83	2,6-Dinitrotoluene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
84	Di-n-Octyl Phthalate	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
85	1,2-Diphenylhydrazine	ug/L	0.6						0.040	0.040			Y	Y
86	Fluoranthene	ug/L	0.6	0.099					300	300	No	No	Y	Y
87	Fluorene	ug/L	0.6	0.099					1300	1300	No	No	Y	Y
88	Hexachlorobenzene	ug/L	0.6		1				0.00075	0.00075			Y	Y
89	Hexachlorobutadiene	ug/L	0.6						0.44	0.44			Y	Y
90	Hexachlorocyclopentadiene	ug/L	0.6	1.5	50				240	50	No	No	Y	Y
91	Hexachloroethane	ug/L	0.6	0.5					1.9	1.9	No	No	Y	Y
92	Indeno(1,2,3-cd)Pyrene	ug/L	0.6						0.0044	0.0044			Y	Y
93	Isophorone	ug/L	0.6	0.2					8.4	8.4	No	No	Y	Y
94	Naphthalene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	N
95	Nitrobenzene	ug/L	0.6	0.2					17	17	No	No	Y	Y
96	N-Nitrosodimethylamine	ug/L	0.6						0.00069	0.00069			Y	Y
97	N-Nitrosodi-n-Propylamine	ug/L	0.6						0.005	0.005			Y	Y
98	N-Nitrosodiphenylamine	ug/L	0.6	0.2					5.0	5.0	No	No	Y	Y
99	Phenanthrene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
100	Pyrene	ug/L	0.6	0.099					960	960	N/A	N/A	Y	Y
101	1,2,4-Trichlorobenzene	ug/L	0.6	0.2	5					5.00	No	No	Y	Y
102	Aldrin	ug/L	0.6				3.00		0.00013	0.00013			Y	Y
103	alpha-BHC	ug/L	0.6	0.0016					0.0039	0.0039	No	No	Y	Y
104	beta-BHC	ug/L	0.6	0.0031					0.014	0.014	No	No	Y	Y
105	gamma-BHC	ug/L	0.6	0.0017	0.2		0.95		0.019	0.019	No	No	Y	Y
106	delta-BHC	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y	Y
107	Chlordane	ug/L	0.6		0.1		2.4	0.0043	0.00	0.00057			Y	Y
108	4,4'-DDT	ug/L	0.6				1.1	0.001	0.00059	0.00059			Y	Y
109	4,4'-DDE (linked to DDT)	ug/L	0.6						0.00059	0.00059			Y	Y
110	4,4'-DDD	ug/L	0.6						0.00083	0.00083			Y	Y
111	Dieldrin	ug/L	0.6				0.24	0.056	0.00014	0.00014			Y	Y
112	alpha-Endosulfan	ug/L	0.6	0.0017			0.22	0.056	110	0.0560	No	No	Y	Y
113	beta-Endolsulfan	ug/L	0.6	0.0019			0.22	0.056	110	0.0560	No	No	Y	Y
114	Endosulfan Sulfate	ug/L	0.6	0.0024					110	110	No	No	Y	Y
115	Endrin	ug/L	0.6	0.0019	2		0.086	0.036	0.76	0.0360	No	No	Y	Y

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116	Endrin Aldehyde	ug/L	0.6	0.0019					0.76	0.76	No	No	Y	Y
117	Heptachlor	ug/L	0.6		0.01		0.52	0.0038	0.00	0.00021			Y	Y
118	Heptachlor Epoxide	ug/L	0.6		0.01		0.52	0.0038	0.00	0.00010			Y	Y
119-125	PCBs sum (2)	ug/L	0.6		0.5			0.014	0.00	0.00017			Y	Y
126	Toxaphene	ug/L	0.6		3		0.73	0.0002	0.00	0.0002			Y	Y
	Boron (mg/L)	mg/L	0.6	200		1.5		1.5		1.5	Yes	Yes	Y	N
	Chloride (mg/L)	mg/L	0.6	110		100		100		100	Yes	Yes	Y	N
	Nitrogen (as NO2 + NO3) (mg/L)	mg/L	0.6	0.83		5.0		5		5	No	No	Y	N
	Sulfate (mg/L)	mg/L	0.6	56		400		400		400	No	No	Y	N
	Total Dissolved Solids (TDS) (mg/L)	mg/L	0.6	290		1000		1000		1000	No	No	Y	N

CTR#	Parameters	Units	RPA: If all data points ND Enter the min detection limit (MDL) (ug/L)	RPA: Enter the pollutant B detected max conc (ug/L)	RPA: If all B is ND, is MDL>C?	RPA: If B>C, effluent limit required	RPA: Tier 3 - other info. ?	RPA: RPA Result - Need Limit?	RPA: Reason
1	Antimony	ug/L	0.045		N	No detected value of B, Step 7		No	MEC<C & B is ND
2	Arsenic	ug/L		4.2		B<=C, Step 7		No	MEC<C & B<=C
3	Beryllium	ug/L	0.033		N	No detected value of B, Step 7		No	MEC<C & B is ND
4	Cadmium	ug/L	0.041		N	No detected value of B, Step 7		No	MEC<C & B is ND
5a	Chromium (III)			1.9		B<=C, Step 7		No	MEC<C & B<=C
5b	Chromium (VI)	ug/L		0.52		B<=C, Step 7		No	MEC<C & B<=C
6	Copper	ug/L		3		B<=C, Step 7		Yes	MEC>=C
7	Lead	ug/L		0.74		B<=C, Step 7		No	MEC<C & B<=C
8	Mercury	ug/L	0.017		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
9	Nickel	ug/L		2.2		B<=C, Step 7		No	MEC<C & B<=C
10	Selenium	ug/L	0.14		N	No detected value of B, Step 7		No	MEC<C & B is ND
11	Silver	ug/L	0.062		N	No detected value of B, Step 7		No	MEC<C & B is ND
12	Thallium	ug/L			N	No detected value of B, Step 7		No	MEC<C & B is ND
13	Zinc	ug/L		33		B<=C, Step 7		No	Ud;MEC<C & no B
14	Cyanide	ug/L	0.48		N	No detected value of B, Step 7		No	MEC<C & B is ND
15	Asbestos	Fibers/L				No detected value of B, Step 7		Ud	No effluent data & no B
16	2,3,7,8 TCDD Equivalents	ug/L				No detected value of B, Step 7		Yes	MEC>=C
	TCDD Equivalents	ug/L				No detected value of B, Step 7		Ud	No effluent data & no B
17	Acrolein	ug/L	2.2		N	No detected value of B, Step 7		No	MEC<C & B is ND
18	Acrylonitrile	ug/L	1		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND

CTR#	Parameters	Units	RPA: If all data points ND Enter the min detection limit (MDL) (ug/L)	RPA: Enter the pollutant B detected max conc (ug/L)	RPA: If all B is ND, is MDL>C?	RPA: If B>C, effluent limit required	RPA: Tier 3 - other info. ?	RPA: RPA Result - Need Limit?	RPA: Reason
19	Benzene	ug/L	0.13		N	No detected value of B, Step 7		No	MEC<C & B is ND
20	Bromoform	ug/L	0.086		N	No detected value of B, Step 7		No	MEC<C & B is ND
21	Carbon Tetrachloride	ug/L	0.25		N	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
22	Chlorobenzene	ug/L	0.058		N	No detected value of B, Step 7		No	MEC<C & B is ND
23	Chlorodibromomethane	ug/L	0.089		N	No detected value of B, Step 7		No	MEC<C & B is ND
24	Chloroethane	ug/L	0.23		N	No Criteria		Uc	No Criteria
25	2-Chloroethylvinyl ether	ug/L	0.28		N	No Criteria		Uc	No Criteria
26	Chloroform	ug/L				No Criteria		Uc	No Criteria
27	Dichlorobromomethane	ug/L	0.084		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
28	1,1-Dichloroethane	ug/L	0.14		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
29	1,2-Dichloroethane	ug/L	0.24		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
30	1,1-Dichloroethylene	ug/L	0.21		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
31	1,2-Dichloropropane	ug/L	0.077		N	No detected value of B, Step 7		No	MEC<C & B is ND
32	1,3-Dichloropropylene	ug/L	0.24		N	No detected value of B, Step 7		No	MEC<C & B is ND
33	Ethylbenzene	ug/L	0.14		N	No detected value of B, Step 7		No	MEC<C & B is ND
34	Methyl Bromide	ug/L	0.25		N	No detected value of B, Step 7		No	MEC<C & B is ND
35	Methyl Chloride	ug/L	0.25		N	No Criteria		Uc	No Criteria
36	Methylene Chloride	ug/L	0.19		N	No detected value of B, Step 7		No	MEC<C & B is ND
37	1,1,2,2-Tetrachloroethane	ug/L	0.064		N	No detected value of B, Step 7		No	MEC<C & B is ND
38	Tetrachloroethylene	ug/L	0.2		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
39	Toluene	ug/L	0.077		N	No detected value of B, Step 7		No	MEC<C & B is ND
40	1,2-Trans-Dichloroethylene	ug/L	0.18		N	No detected value of B, Step 7		No	MEC<C & B is ND
41	1,1,1-Trichloroethane	ug/L	0.094		N	No detected value of B, Step 7		No	MEC<C & B is ND
42	1,1,2-Trichloroethane	ug/L	0.12		N	No detected value of B, Step 7		No	MEC<C & B is ND
43	Trichloroethylene	ug/L	0.16		N	No detected value of B, Step 7		No	MEC<C & B is ND
44	Vinyl Chloride	ug/L	0.14		N	No detected value of B, Step 7		No	MEC<C & B is ND
45	2-Chlorophenol	ug/L	0.099		N	No detected value of B, Step 7		No	MEC<C & B is ND
46	2,4-Dichlorophenol	ug/L	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND
47	2,4-Dimethylphenol	ug/L	0.3		N	No detected value of B, Step 7		No	MEC<C & B is ND
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L	0.99		N	No detected value of B, Step 7		No	MEC<C & B is ND
49	2,4-Dinitrophenol	ug/L	0.99		N	No detected value of B, Step 7		No	MEC<C & B is ND
50	2-Nitrophenol	ug/L	0.2		N	No Criteria		Uc	No Criteria
51	4-Nitrophenol	ug/L	0.45		N	No Criteria		Uc	No Criteria
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L	0.2		N	No Criteria		Uc	No Criteria
53	Pentachlorophenol	ug/L	0.19		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
54	Phenol	ug/L	0.099		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND

CTR#	Parameters	Units	RPA: If all data points ND Enter the min detection limit (MDL) (ug/L)	RPA: Enter the pollutant B detected max conc (ug/L)	RPA: If all B is ND, is MDL>C?	RPA: If B>C, effluent limit required	RPA: Tier 3 - other info. ?	RPA: RPA Result - Need Limit?	RPA: Reason
55	2,4,6-Trichlorophenol	ug/L	0.099		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
56	Acenaphthene	ug/L	0.099		N	No detected value of B, Step 7		No	MEC<C & B is ND
57	Acenaphthylene	ug/L	0.099		N	No Criteria		Uc	No Criteria
58	Anthracene	ug/L	0.099		N	No detected value of B, Step 7		No	MEC<C & B is ND
59	Benzidine	ug/L	3.7		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
60	Benzo(a)Anthracene	ug/L	0.02		N	No detected value of B, Step 7	No Criteria	No	UD; effluent ND, MDL>C, and B is ND
61	Benzo(a)Pyrene	ug/L	0.012		N	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
62	Benzo(b)Fluoranthene	ug/L	0.14		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
63	Benzo(ghi)Perylene	ug/L	0.1		N	No Criteria		Uc	No Criteria
64	Benzo(k)Fluoranthene	ug/L	0.099		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
65	Bis(2-Chloroethoxy)Methane	ug/L	0.2		N	No Criteria		Uc	No Criteria
66	Bis(2-Chloroethyl)Ether	ug/L	0.05		Y	No detected value of B, Step 7	No Criteria	No	UD; effluent ND, MDL>C, and B is ND
67	Bis(2-Chloroisopropyl)Ether	ug/L	0.099		N	No detected value of B, Step 7		No	MEC<C & B is ND
68	Bis(2-Ethylhexyl)Phthalate	ug/L	2		Y	No detected value of B, Step 7	No Criteria	Yes	MEC>=C
69	4-Bromophenyl Phenyl Ether	ug/L	0.099		N	No Criteria		Uc	No Criteria
70	Butylbenzyl Phthalate	ug/L	0.18		N	No detected value of B, Step 7		No	MEC<C & B is ND
71	2-Chloronaphthalene	ug/L	0.099		N	No detected value of B, Step 7		No	MEC<C & B is ND
72	4-Chlorophenyl Phenyl Ether	ug/L	0.099		N	No Criteria	No Criteria	Uc	No Criteria
73	Chrysene	ug/L	0.013		N	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
74	Dibenzo(a,h)Anthracene	ug/L	0.08		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
75	1,2-Dichlorobenzene	ug/L	0.2		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
76	1,3-Dichlorobenzene	ug/L	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND
77	1,4-Dichlorobenzene	ug/L	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND
78	3,3 Dichlorobenzidine	ug/L	0.99		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
79	Diethyl Phthalate	ug/L	0.15		N	No detected value of B, Step 7		No	MEC<C & B is ND
80	Dimethyl Phthalate	ug/L	0.099		N	No detected value of B, Step 7		No	MEC<C & B is ND
81	Di-n-Butyl Phthalate	ug/L	0.24		N	No detected value of B, Step 7		No	MEC<C & B is ND
82	2,4-Dinitrotoluene	ug/L	0.18		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
83	2,6-Dinitrotoluene	ug/L	0.27		N	No Criteria		Uc	No Criteria
84	Di-n-Octyl Phthalate	ug/L	0.19		N	No Criteria		Uc	No Criteria
85	1,2-Diphenylhydrazine	ug/L	0.25		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
86	Fluoranthene	ug/L	0.099		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
87	Fluorene	ug/L	0.099		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
88	Hexachlorobenzene	ug/L	0.099		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
89	Hexachlorobutadiene	ug/L	0.47		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
90	Hexachlorocyclopentadiene	ug/L	1.5		N	No detected value of B, Step 7		No	MEC<C & B is ND
91	Hexachloroethane	ug/L	0.5		N	No detected value of B, Step 7		No	MEC<C & B is ND
92	Indeno(1,2,3-cd)Pyrene	ug/L	0.12		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND

CTR#	Parameters	Units	RPA: If all data points ND Enter the min detection limit (MDL) (ug/L)	RPA: Enter the pollutant B detected max conc (ug/L)	RPA: If all B is ND, is MDL>C?	RPA: If B>C, effluent limit required	RPA: Tier 3 - other info. ?	RPA: RPA Result - Need Limit?	RPA: Reason
93	Isophorone	ug/L	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND
94	Naphthalene	ug/L		0.06		No Criteria		Uc	No Criteria
95	Nitrobenzene	ug/L	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND
96	N-Nitrosodimethylamine	ug/L	0.14		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
97	N-Nitrosodi-n-Propylamine	ug/L	0.2		Y	No detected value of B, Step 7	No Criteria	No	UD; effluent ND, MDL>C, and B is ND
98	N-Nitrosodiphenylamine	ug/L	0.19		N	No detected value of B, Step 7		No	MEC<C & B is ND
99	Phenanthrene	ug/L	0.099		N	No Criteria		Uc	No Criteria
100	Pyrene	ug/L	0.038		N	No detected value of B, Step 7		No	MEC<C & B is ND
101	1,2,4-Trichlorobenzene	ug/L	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND
102	Aldrin	ug/L				No detected value of B, Step 7	No Criteria	No	UD; effluent ND, MDL>C, and B is ND
103	alpha-BHC	ug/L				No detected value of B, Step 7		No	MEC<C & B is ND
104	beta-BHC	ug/L	0.0031		N	No detected value of B, Step 7		No	MEC<C & B is ND
105	gamma-BHC	ug/L	0.0017		N	No detected value of B, Step 7		No	MEC<C & B is ND
106	delta-BHC	ug/L	0.0025		N	No Criteria		Uc	No Criteria
107	Chlordane	ug/L	0.28		Y	No detected value of B, Step 7		No	TMDL
108	4,4'-DDT	ug/L	0.028		Y	No detected value of B, Step 7		No	TMDL
109	4,4'-DDE (linked to DDT)	ug/L	0.0025		Y	No detected value of B, Step 7	No Criteria	No	UD; effluent ND, MDL>C, and B is ND
110	4,4'-DDD	ug/L	0.003		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
111	Dieldrin	ug/L	0.028		Y	No detected value of B, Step 7		No	TMDL
112	alpha-Endosulfan	ug/L	0.0017		N	No detected value of B, Step 7		No	MEC<C & B is ND
113	beta-Endosulfan	ug/L	0.0019		N	No detected value of B, Step 7		No	MEC<C & B is ND
114	Endosulfan Sulfate	ug/L	0.0024		N	No detected value of B, Step 7		No	MEC<C & B is ND
115	Endrin	ug/L	0.0019		N	No detected value of B, Step 7		No	MEC<C & B is ND
116	Endrin Aldehyde	ug/L	0.0019		N	No detected value of B, Step 7		No	MEC<C & B is ND
117	Heptachlor	ug/L	0.0017		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
118	Heptachlor Epoxide	ug/L	0.0018		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
119-125	PCBs sum (2)	ug/L	0.24		Y	No detected value of B, Step 7		No	TMDL
126	Toxaphene	ug/L	0.12		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
	Boron (mg/L)	mg/L		200		Limit required, B>C & pollutant detected in effluent	0.00	Yes	MEC>=C
	Chloride (mg/L)	mg/L		100		B<=C, Step 7	0.00	Yes	MEC>=C
	Nitrogen (as NO2 + NO3) (mg/L)	mg/L		0.79		B<=C, Step 7	0.00	No	MEC<C & B<=C
	Sulfate (mg/L)	mg/L		57		B<=C, Step 7	0.00	No	MEC<C & B<=C
	Total Dissolved Solids (TDS) (mg/L)	mg/L		300		B<=C, Step 7	0.00	No	MEC<C & B<=C

CTR#	Parameters	Units	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	ug/L												
2	Arsenic	ug/L												
3	Beryllium	ug/L												
4	Cadmium	ug/L												
5a	Chromium (III)													
5b	Chromium (VI)	ug/L												
6	Copper	ug/L		2.24		0.26	19.92	0.45	20.57	19.92	1.71	34.14	3.85	76.60
7	Lead	ug/L												
8	Mercury	ug/L												
9	Nickel	ug/L												
10	Selenium	ug/L												
11	Silver	ug/L												
12	Thallium	ug/L												
13	Zinc	ug/L												
14	Cyanide	ug/L												
15	Asbestos	Fibers/L												
16	2,3,7,8 TCDD Equivalents	ug/L	0.000000013	2.01	0.00000						1.55		3.11	
	TCDD Equivalents	ug/L												
17	Acrolein	ug/L												
18	Acrylonitrile	ug/L												
19	Benzene	ug/L												
20	Bromoform	ug/L												
21	Carbon Tetrachloride	ug/L												
22	Chlorobenzene	ug/L												
23	Chlorodibromomethane	ug/L												
24	Chloroethane	ug/L												
25	2-Chloroethylvinyl ether	ug/L												
26	Chloroform	ug/L												
27	Dichlorobromomethane	ug/L												
28	1,1-Dichloroethane	ug/L												
29	1,2-Dichloroethane	ug/L												
30	1,1-Dichloroethylene	ug/L												
31	1,2-Dichloropropane	ug/L												
32	1,3-Dichloropropylene	ug/L												
33	Ethylbenzene	ug/L												
34	Methyl Bromide	ug/L												
35	Methyl Chloride	ug/L												
36	Methylene Chloride	ug/L												
37	1,1,2,2- Tetrachloroethane	ug/L												

CTR#	Parameters	Units	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
38	Tetrachloroethylene	ug/L												
39	Toluene	ug/L												
40	1,2-Trans-Dichloroethylene	ug/L												
41	1,1,1-Trichloroethane	ug/L												
42	1,1,2-Trichloroethane	ug/L												
43	Trichloroethylene	ug/L												
44	Vinyl Chloride	ug/L												
45	2-Chlorophenol	ug/L												
46	2,4-Dichlorophenol	ug/L												
47	2,4-Dimethylphenol	ug/L												
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L												
49	2,4-Dinitrophenol	ug/L												
50	2-Nitrophenol	ug/L												
51	4-Nitrophenol	ug/L												
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L												
53	Pentachlorophenol	ug/L												
54	Phenol	ug/L												
55	2,4,6-Trichlorophenol	ug/L												
56	Acenaphthene	ug/L												
57	Acenaphthylene	ug/L												
58	Anthracene	ug/L												
59	Benzidine	ug/L												
60	Benzo(a)Anthracene	ug/L												
61	Benzo(a)Pyrene	ug/L												
62	Benzo(b)Fluoranthene	ug/L												
63	Benzo(ghi)Perylene	ug/L												
64	Benzo(k)Fluoranthene	ug/L												
65	Bis(2-Chloroethoxy)Methane	ug/L												
66	Bis(2-Chloroethyl)Ether	ug/L												
67	Bis(2-Chloroisopropyl)Ether	ug/L												
68	Bis(2-Ethylhexyl)Phthalate	ug/L	1.8	2.01	3.61114						1.55		3.11	
69	4-Bromophenyl Phenyl Ether	ug/L												
70	Butylbenzyl Phthalate	ug/L												
71	2-Chloronaphthalene	ug/L												

CTR#	Parameters	Units	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
72	4-Chlorophenyl Phenyl Ether	ug/L												
73	Chrysene	ug/L												
74	Dibenzo(a,h)Anthracene	ug/L												
75	1,2-Dichlorobenzene	ug/L												
76	1,3-Dichlorobenzene	ug/L												
77	1,4-Dichlorobenzene	ug/L												
78	3,3 Dichlorobenzidine	ug/L												
79	Diethyl Phthalate	ug/L												
80	Dimethyl Phthalate	ug/L												
81	Di-n-Butyl Phthalate	ug/L												
82	2,4-Dinitrotoluene	ug/L												
83	2,6-Dinitrotoluene	ug/L												
84	Di-n-Octyl Phthalate	ug/L												
85	1,2-Diphenylhydrazine	ug/L												
86	Fluoranthene	ug/L												
87	Fluorene	ug/L												
88	Hexachlorobenzene	ug/L												
89	Hexachlorobutadiene	ug/L												
90	Hexachlorocyclopentadiene	ug/L												
91	Hexachloroethane	ug/L												
92	Indeno(1,2,3-cd)Pyrene	ug/L												
93	Isophorone	ug/L												
94	Naphthalene	ug/L												
95	Nitrobenzene	ug/L												
96	N-Nitrosodimethylamine	ug/L												
97	N-Nitrosodi-n-Propylamine	ug/L												
98	N-Nitrosodiphenylamine	ug/L												
99	Phenanthrene	ug/L												
100	Pyrene	ug/L		2.10							1.55		3.11	
101	1,2,4-Trichlorobenzene	ug/L												
102	Aldrin	ug/L												
103	alpha-BHC	ug/L												
104	beta-BHC	ug/L												
105	gamma-BHC	ug/L												
106	delta-BHC	ug/L												
107	Chlordane	ug/L												
108	4,4'-DDT	ug/L												
109	4,4'-DDE (linked to DDT)	ug/L												
110	4,4'-DDD	ug/L												

CTR#	Parameters	Units	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
111	Dieldrin	ug/L												
112	alpha-Endosulfan	ug/L												
113	beta-Endolsulfan	ug/L												
114	Endosulfan Sulfate	ug/L												
115	Endrin	ug/L												
116	Endrin Aldehyde	ug/L												
117	Heptachlor	ug/L												
118	Heptachlor Epoxide	ug/L												
119- 125	PCBs sum (2)	ug/L												
126	Toxaphene	ug/L												
	Boron (mg/L)	mg/L	1.5	2.01	3.00928						1.55		3.11	
	Chloride (mg/L)	mg/L	100	2.01	200.61892						1.55		3.11	
	Nitrogen (as NO2 + NO3) (mg/L)	mg/L												
	Sulfate (mg/L)	mg/L												
	Total Dissolved Solids (TDS) (mg/L)	mg/L												

CTR#	Parameters	Units	Limits: Lowest AMEL	Limits: Lowest MDEL	Recommendation
1	Antimony	ug/L			No Limit
2	Arsenic	ug/L			No Limit
3	Beryllium	ug/L			No Limit
4	Cadmium	ug/L			No Limit
5a	Chromium (III)				No Limit
5b	Chromium (VI)	ug/L			No Limit
6	Copper	ug/L	34	77	Limit Required
7	Lead	ug/L			No Limit
8	Mercury	ug/L	0.050	0.100	Limit from previous permit
9	Nickel	ug/L			No Limit
10	Selenium	ug/L			No Limit
11	Silver	ug/L			No Limit
12	Thallium	ug/L			No Limit
13	Zinc	ug/L			No Limit
14	Cyanide	ug/L			No Limit
15	Asbestos	Fibers/L			No Limit
16	2,3,7,8 TCDD Equivalents	ug/L	0.000000013	0.000000026	Limit Required
	TCDD Equivalents	ug/L			No Limit
17	Acrolein	ug/L			No Limit

CTR#	Parameters	Units	Limits: Lowest AMEL	Limits: Lowest MDEL	Recommendation
18	Acrylonitrile	ug/L			No Limit
19	Benzene	ug/L			No Limit
20	Bromoform	ug/L			No Limit
21	Carbon Tetrachloride	ug/L			No Limit
22	Chlorobenzene	ug/L			No Limit
23	Chlorodibromomethane	ug/L			No Limit
24	Chloroethane	ug/L			No Limit
25	2-Chloroethylvinyl ether	ug/L			No Limit
26	Chloroform	ug/L			No Limit
27	Dichlorobromomethane	ug/L			No Limit
28	1,1-Dichloroethane	ug/L			No Limit
29	1,2-Dichloroethane	ug/L			No Limit
30	1,1-Dichloroethylene	ug/L			No Limit
31	1,2-Dichloropropane	ug/L			No Limit
32	1,3-Dichloropropylene	ug/L			No Limit
33	Ethylbenzene	ug/L			No Limit
34	Methyl Bromide	ug/L			No Limit
35	Methyl Chloride	ug/L			No Limit
36	Methylene Chloride	ug/L			No Limit
37	1,1,2,2-Tetrachloroethane	ug/L			No Limit
38	Tetrachloroethylene	ug/L			No Limit
39	Toluene	ug/L			No Limit
40	1,2-Trans-Dichloroethylene	ug/L			No Limit
41	1,1,1-Trichloroethane	ug/L			No Limit
42	1,1,2-Trichloroethane	ug/L			No Limit
43	Trichloroethylene	ug/L			No Limit
44	Vinyl Chloride	ug/L			No Limit
45	2-Chlorophenol	ug/L			No Limit
46	2,4-Dichlorophenol	ug/L			No Limit
47	2,4-Dimethylphenol	ug/L			No Limit
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L			No Limit
49	2,4-Dinitrophenol	ug/L			No Limit
50	2-Nitrophenol	ug/L			No Limit
51	4-Nitrophenol	ug/L			No Limit
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L			No Limit
53	Pentachlorophenol	ug/L			No Limit
54	Phenol	ug/L			No Limit

CTR#	Parameters	Units	Limits: Lowest AMEL	Limits: Lowest MDEL	Recommendation
55	2,4,6-Trichlorophenol	ug/L			No Limit
56	Acenaphthene	ug/L			No Limit
57	Acenaphthylene	ug/L			No Limit
58	Anthracene	ug/L			No Limit
59	Benzidine	ug/L			No Limit
60	Benzo(a)Anthracene	ug/L			No Limit
61	Benzo(a)Pyrene	ug/L			No Limit
62	Benzo(b)Fluoranthene	ug/L			No Limit
63	Benzo(ghi)Perylene	ug/L			No Limit
64	Benzo(k)Fluoranthene	ug/L			No Limit
65	Bis(2-Chloroethoxy)Methane	ug/L			No Limit
66	Bis(2-Chloroethyl)Ether	ug/L			No Limit
67	Bis(2-Chloroisopropyl)Ether	ug/L			No Limit
68	Bis(2-Ethylhexyl)Phthalate	ug/L	1.80	3.61	Limit Required
69	4-Bromophenyl Phenyl Ether	ug/L			No Limit
70	Butylbenzyl Phthalate	ug/L			No Limit
71	2-Chloronaphthalene	ug/L			No Limit
72	4-Chlorophenyl Phenyl Ether	ug/L			No Limit
73	Chrysene	ug/L			No Limit
74	Dibenzo(a,h)Anthracene	ug/L			No Limit
75	1,2-Dichlorobenzene	ug/L			No Limit
76	1,3-Dichlorobenzene	ug/L			No Limit
77	1,4-Dichlorobenzene	ug/L			No Limit
78	3,3 Dichlorobenzidine	ug/L			No Limit
79	Diethyl Phthalate	ug/L			No Limit
80	Dimethyl Phthalate	ug/L			No Limit
81	Di-n-Butyl Phthalate	ug/L			No Limit
82	2,4-Dinitrotoluene	ug/L			No Limit
83	2,6-Dinitrotoluene	ug/L			No Limit
84	Di-n-Octyl Phthalate	ug/L			No Limit
85	1,2-Diphenylhydrazine	ug/L			No Limit
86	Fluoranthene	ug/L			No Limit
87	Fluorene	ug/L			No Limit
88	Hexachlorobenzene	ug/L			No Limit
89	Hexachlorobutadiene	ug/L			No Limit
90	Hexachlorocyclopentadiene	ug/L			No Limit
91	Hexachloroethane	ug/L			No Limit
92	Indeno(1,2,3-cd)Pyrene	ug/L			No Limit
93	Isophorone	ug/L			No Limit

CTR#	Parameters	Units	Limits: Lowest AMEL	Limits: Lowest MDEL	Recommendation
94	Naphthalene	ug/L			No Limit
95	Nitrobenzene	ug/L			No Limit
96	N-Nitrosodimethylamine	ug/L			No Limit
97	N-Nitrosodi-n-Propylamine	ug/L			No Limit
98	N-Nitrosodiphenylamine	ug/L			No Limit
99	Phenanthrene	ug/L			No Limit
100	Pyrene	ug/L			No Limit
101	1,2,4-Trichlorobenzene	ug/L			No Limit
102	Aldrin	ug/L			No Limit
103	alpha-BHC	ug/L			No Limit
104	beta-BHC	ug/L			No Limit
105	gamma-BHC	ug/L			No Limit
106	delta-BHC	ug/L			No Limit
107	Chlordane	ug/L			No Limit
108	4,4'-DDT	ug/L			No Limit
109	4,4'-DDE (linked to DDT)	ug/L			No Limit
110	4,4'-DDD	ug/L			No Limit
111	Dieldrin	ug/L			No Limit
112	alpha-Endosulfan	ug/L			No Limit
113	beta-Endolsulfan	ug/L			No Limit
114	Endosulfan Sulfate	ug/L			No Limit
115	Endrin	ug/L			No Limit
116	Endrin Aldehyde	ug/L			No Limit
117	Heptachlor	ug/L			No Limit
118	Heptachlor Epoxide	ug/L			No Limit
119-125	PCBs sum (2)	ug/L			No Limit
126	Toxaphene	ug/L			No Limit
	Boron (mg/L)	mg/L	1.5	3.0	Limit Required
	Chloride (mg/L)	mg/L	100.0		Limit Required
	Nitrogen (as NO2 + NO3) (mg/L)	mg/L			No Limit
	Sulfate (mg/L)	mg/L			No Limit
	Total Dissolved Solids (TDS) (mg/L)	mg/L			No Limit

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
(2) = PCBs sum refers to sum of PCB 1016, 1221, 1232, 1242, 1248, 1254, and 1260

Reasonable Potential Analysis for Discharge Point 002

CTR#	Parameters	Units	CV	MEC	Title 22 MCLs (µg/L)	Basin Plan Objectives (mg/L)	CTR Freshwater Quality Criteria (ug/L) C acute = CMC tot	CTR Freshwater Quality Criteria (ug/L) C chronic = CCC tot	Human Health criteria for consumption of water & organisms	Lowest C	RPA: MEC >= Lowest C	RPA: Tier 1 - Need limit?	RPA: B available (Y/N)?
1	Antimony	ug/L	0.6	0.045	6				14.00	6.00	No	No	Y
2	Arsenic	ug/L	0.6	5.9	10		340.00	150.00		10.00	No	No	Y
3	Beryllium	ug/L	0.6	0.033	4.0					4.00	No	No	Y
4	Cadmium	ug/L	0.6	0.12	5.0		3.48	1.95		1.95	No	No	Y
5a	Chromium (III)		0.6	4.6			471.08	152.81		152.81	No	No	Y
5b	Chromium (VI)	ug/L	0.6	0.56	50		16.00	11.00		11.00	No	No	Y
6	Copper	ug/L	1.1	79			11.28	7.64		7.64	Yes	Yes	Y
7	Lead	ug/L	2	8.5			52.69	2.05		2.05	Yes	Yes	Y
8	Mercury	ug/L	0.6		2.0		Reserved	0.01	0.050	0.012			Y
9	Nickel	ug/L	0.6	4.6	100		399.95	44.42		44.42	No	No	Y
10	Selenium	ug/L	0.6	0.51	50		20.00	5.00		5.00	No	No	Y
11	Silver	ug/L	0.6	0.062			2.50			2.50	No	No	Y
12	Thallium	ug/L	0.6	0.014	2				1.70	1.70	No	No	Y
13	Zinc	ug/L	1.2	140			100.07	100.89		100.07	Yes	Yes	Y
14	Cyanide	ug/L	0.6	0.48	150		22.00	5.20	700.00	5.20	No	No	Y
15	Asbestos	Fibers/L	0.6		7				7.00	7.00			N
16	2,3,7,8 TCDD Equivalents	ug/L	0.6		3.0E-05				0.00	0.00			N
	TCDD Equivalents	ug/L	0.6						0.000000	0.000000013			N
17	Acrolein	ug/L	0.6	2.2					320	320	No	No	Y
18	Acrylonitrile	ug/L	0.6						0.059	0.059			Y
19	Benzene	ug/L	0.6	0.13	1				1.2	1.0	No	No	Y
20	Bromoform	ug/L	0.6	1.6					4.3	4.3	No	No	Y
21	Carbon Tetrachloride	ug/L	0.6		0.5				0.25	0.25			Y
22	Chlorobenzene	ug/L	0.6	0.058	70				680	70	No	No	Y
23	Chlorodibromomethane	ug/L	2.7	9.3					0.41	0.41	Yes	Yes	Y
24	Chloroethane	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
25	2-Chloroethylvinyl ether	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
26	Chloroform	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
27	Dichlorobromomethane	ug/L	2.7	9.6					0.56	0.56	Yes	Yes	Y
28	1,1-Dichloroethane	ug/L	0.6	0.14	5					5.00	No	No	Y
29	1,2-Dichloroethane	ug/L	0.6	0.24	0.5				0.38	0.38	No	No	Y
30	1,1-Dichloroethylene	ug/L	0.6		6				0.057	0.057			Y
31	1,2-Dichloropropane	ug/L	0.6	0.077	5				0.52	0.52	No	No	Y
32	1,3-Dichloropropylene	ug/L	0.6	0.14	0.5				10	1	No	No	Y
33	Ethylbenzene	ug/L	0.6	0.14	300				3100	300	No	No	Y
34	Methyl Bromide	ug/L	0.6	0.25					48	48	No	No	Y
35	Methyl Chloride	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
36	Methylene Chloride	ug/L	0.6	0.25	5				4.7	4.7	No	No	Y
37	1,1,2,2-Tetrachloroethane	ug/L	0.6	0.064	1				0.17	0.17	No	No	Y

CTR#	Parameters	Units	CV	MEC	Title 22 MCLs (µg/L)	Basin Plan Objectives (mg/L)	CTR Freshwater Quality Criteria (ug/L) C acute = CMC tot	CTR Freshwater Quality Criteria (ug/L) C chronic = CCC tot	Human Health criteria for consumption of water & organisms	Lowest C	RPA: MEC >= Lowest C	RPA: Tier 1 - Need limit?	RPA: B available (Y/N)?
38	Tetrachloroethylene	ug/L	0.6	0.99	5				0.8	0.8	Yes	Yes	Y
39	Toluene	ug/L	0.6	0.077	150				6800	150	No	No	Y
40	1,2-Trans-Dichloroethylene	ug/L	0.6	0.18	10				700	10	No	No	Y
41	1,1,1-Trichloroethane	ug/L	0.6	0.094	200					200.00	No	No	Y
42	1,1,2-Trichloroethane	ug/L	0.6	0.12	5				0.6	0.6	No	No	Y
43	Trichloroethylene	ug/L	0.6	2.4	5				2.7	2.7	No	No	Y
44	Vinyl Chloride	ug/L	0.6	0.14	0.5				2	1	No	No	Y
45	2-Chlorophenol	ug/L	0.6	0.098					120	120	No	No	Y
46	2,4-Dichlorophenol	ug/L	0.6	0.2					93	93	No	No	Y
47	2,4-Dimethylphenol	ug/L	0.6	0.3					540	540	No	No	Y
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L	0.6	0.98					13.4	13.4	No	No	Y
49	2,4-Dinitrophenol	ug/L	0.6	0.98					70	70	No	No	Y
50	2-Nitrophenol	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
51	4-Nitrophenol	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
53	Pentachlorophenol	ug/L	0.6	0.19	1		23.83	18.28	0.28	0.28	No	No	Y
54	Phenol	ug/L	0.6	0.098					21000	21000	No	No	Y
55	2,4,6-Trichlorophenol	ug/L	0.6	0.098					2.1	2.1	No	No	Y
56	Acenaphthene	ug/L	0.6	0.098					1200	1200	No	No	Y
57	Acenaphthylene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
58	Anthracene	ug/L	0.6	0.098					9600	9600	No	No	Y
59	Benzidine	ug/L	0.6						0.00012	0.00012			Y
60	Benzo(a)Anthracene	ug/L	0.6						0.0044	0.0044			Y
61	Benzo(a)Pyrene	ug/L	0.6		0.2				0.0044	0.0044			Y
62	Benzo(b)Fluoranthene	ug/L	0.6						0.0044	0.0044			Y
63	Benzo(ghi)Perylene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
64	Benzo(k)Fluoranthene	ug/L	0.6						0.0044	0.0044			Y
65	Bis(2-Chloroethoxy)Methane	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
66	Bis(2-Chloroethyl)Ether	ug/L	0.6						0.031	0.031			Y
67	Bis(2-Chloroisopropyl)Ether	ug/L	0.6	0.098					1400	1400	No	No	Y
68	Bis(2-Ethylhexyl)Phthalate	ug/L	0.6	38	4				1.8	1.8	Yes	Yes	Y
69	4-Bromophenyl Phenyl Ether	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
70	Butylbenzyl Phthalate	ug/L	0.6	0.18					3000	3000	No	No	Y

CTR#	Parameters	Units	CV	MEC	Title 22 MCLs (µg/L)	Basin Plan Objectives (mg/L)	CTR Freshwater Quality Criteria (ug/L) C acute = CMC tot	CTR Freshwater Quality Criteria (ug/L) C chronic = CCC tot	Human Health criteria for consumption of water & organisms	Lowest C	RPA: MEC >= Lowest C	RPA: Tier 1 - Need limit?	RPA: B available (Y/N)?
71	2-Chloronaphthalene	ug/L	0.6	0.098					1700	1700	No	No	Y
72	4-Chlorophenyl Phenyl Ether	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
73	Chrysene	ug/L	0.6						0.0044	0.0044			Y
74	Dibenzo(a,h)Anthracene	ug/L	0.6						0.0044	0.0044			Y
75	1,2-Dichlorobenzene	ug/L	0.6	0.2	600				2700	600	No	No	Y
76	1,3-Dichlorobenzene	ug/L	0.6	0.2					400	400	No	No	Y
77	1,4-Dichlorobenzene	ug/L	0.6	0.2	5				400	5	No	No	Y
78	3,3 Dichlorobenzidine	ug/L	0.6						0.04	0.04			Y
79	Diethyl Phthalate	ug/L	0.6	0.39					23000	23000	No	No	Y
80	Dimethyl Phthalate	ug/L	0.6	0.098					313000	313000	No	No	Y
81	Di-n-Butyl Phthalate	ug/L	0.6	0.24					2700	2700	No	No	Y
82	2,4-Dinitrotoluene	ug/L	0.6						0.11	0.11			Y
83	2,6-Dinitrotoluene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
84	Di-n-Octyl Phthalate	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
85	1,2-Diphenylhydrazine	ug/L	0.6						0.040	0.040			Y
86	Fluoranthene	ug/L	0.6	0.098					300	300	No	No	Y
87	Fluorene	ug/L	0.6	0.098					1300	1300	No	No	Y
88	Hexachlorobenzene	ug/L	0.6		1				0.00075	0.00075			Y
89	Hexachlorobutadiene	ug/L	0.6						0.44	0.44			Y
90	Hexachlorocyclopentadiene	ug/L	0.6	1.5	50				240	50	No	No	Y
91	Hexachloroethane	ug/L	0.6	0.49					1.9	1.9	No	No	Y
92	Indeno(1,2,3-cd)Pyrene	ug/L	0.6						0.0044	0.0044			Y
93	Isophorone	ug/L	0.6	0.2					8.4	8.4	No	No	Y
94	Naphthalene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
95	Nitrobenzene	ug/L	0.6	0.2					17	17	No	No	Y
96	N-Nitrosodimethylamine	ug/L	0.6						0.00069	0.00069			Y
97	N-Nitrosodi-n-Propylamine	ug/L	0.6						0.005	0.005			Y
98	N-Nitrosodiphenylamine	ug/L	0.6	0.19					5.0	5.0	No	No	Y
99	Phenanthrene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
100	Pyrene	ug/L	0.6	0.098					960	960	N/A	N/A	Y
101	1,2,4-Trichlorobenzene	ug/L	0.6	0.2	5					5.00	No	No	Y
102	Aldrin	ug/L	0.6				3.00		0.00013	0.00013			Y
103	alpha-BHC	ug/L	0.6	0.0018					0.0039	0.0039	No	No	Y
104	beta-BHC	ug/L	0.6	0.0031					0.014	0.014	No	No	Y
105	gamma-BHC	ug/L	0.6	0.0017	0.2		0.95		0.019	0.019	No	No	Y

CTR#	Parameters	Units	CV	MEC	Title 22 MCLs (µg/L)	Basin Plan Objectives (mg/L)	CTR Freshwater Quality Criteria (ug/L) C acute = CMC tot	CTR Freshwater Quality Criteria (ug/L) C chronic = CCC tot	Human Health criteria for consumption of water & organims	Lowest C	RPA: MEC >= Lowest C	RPA: Tier 1 - Need limit?	RPA: B available (Y/N)?
106	delta-BHC	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	Y
107	Chlordane	ug/L	0.6		0.1		2.4	0.0043	0.00	0.00057			Y
108	4,4'-DDT	ug/L	0.6				1.1	0.001	0.00059	0.00059			Y
109	4,4'-DDE (linked to DDT)	ug/L	0.6						0.00059	0.00059			Y
110	4,4'-DDD	ug/L	0.6						0.00083	0.00083			Y
111	Dieldrin	ug/L	0.6				0.24	0.056	0.00014	0.00014			Y
112	alpha-Endosulfan	ug/L	0.6	0.0017			0.22	0.056	110	0.0560	No	No	Y
113	beta-Endolsulfan	ug/L	0.6	0.0019			0.22	0.056	110	0.0560	No	No	Y
114	Endosulfan Sulfate	ug/L	0.6	0.0024					110	110	No	No	Y
115	Endrin	ug/L	0.6	0.0019	2		0.086	0.036	0.76	0.0360	No	No	Y
116	Endrin Aldehyde	ug/L	0.6	0.0019					0.76	0.76	No	No	Y
117	Heptachlor	ug/L	0.6		0.01		0.52	0.0038	0.00	0.00021			Y
118	Heptachlor Epoxide	ug/L	0.6		0.01		0.52	0.0038	0.00	0.00010			Y
119-125	PCBs sum (2)	ug/L	0.6		0.5			0.014	0.00	0.00017			Y
126	Toxaphene	ug/L	0.6		3		0.73	0.0002	0.00	0.0002			Y
	Boron (mg/L)	mg/L	0.6	200		1.5				1.5000	Yes	Yes	Y
	Chloride (mg/L)	mg/L	0.6	120		100				100.0000	Yes	Yes	Y
	Nitrogen (as NO2 + NO3) (mg/L)	mg/L	0.6	0.74		5.0				5.0000	No	No	Y
	Sulfate (mg/L)	mg/L	0.6	53		400				400.0000	No	No	Y
	Total Dissolved Solids (TDS) (mg/L)	mg/L	0.6	320		1000				1000.0000	No	No	Y

CTR#	Parameters	Units	RPA: Are all B data points non- detects (Y/N)?	RPA: If all data points ND Enter the min detection limit (MDL) (ug/L)	RPA: Enter the pollutant B detected max conc (ug/L)	RPA: If all B is ND, is MDL>C?	RPA: If B>C, effluent limit required	RPA: Tier 3 - other info. ?	RPA: RPA Result - Need Limit?	RPA: Reason
1	Antimony	ug/L	Y	0.045		N	No detected value of B, Step 7		No	MEC<C & B is ND
2	Arsenic	ug/L	N		4.2		B<=C, Step 7		No	MEC<C & B<=C
3	Beryllium	ug/L	Y	0.033		N	No detected value of B, Step 7		No	MEC<C & B is ND
4	Cadmium	ug/L	Y	0.041		N	No detected value of B, Step 7		No	MEC<C & B is ND
5a	Chromium (III)		N		1.9		B<=C, Step 7		No	MEC<C & B<=C
5b	Chromium (VI)	ug/L	N		0.52		B<=C, Step 7		No	MEC<C & B<=C
6	Copper	ug/L	N		3		B<=C, Step 7		Yes	MEC>=C
7	Lead	ug/L	N		0.74		B<=C, Step 7		Yes	MEC>=C
8	Mercury	ug/L	Y	0.017		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
9	Nickel	ug/L	N		2.2		B<=C, Step 7		No	MEC<C & B<=C
10	Selenium	ug/L	Y	0.14		N	No detected value of B, Step 7		No	MEC<C & B is ND
11	Silver	ug/L	Y	0.062		N	No detected value of B, Step 7		No	MEC<C & B is ND

CTR#	Parameters	Units	RPA: Are all B data points non-detects (Y/N)?	RPA: If all data points ND Enter the min detection limit (MDL) (ug/L)	RPA: Enter the pollutant B detected max conc (ug/L)	RPA: If all B is ND, is MDL>C?	RPA: If B>C, effluent limit required	RPA: Tier 3 - other info. ?	RPA: RPA Result - Need Limit?	RPA: Reason
12	Thallium	ug/L				N	No detected value of B, Step 7		No	MEC<C & B is ND
13	Zinc	ug/L	N		33		B<=C, Step 7		Yes	MEC>=C
14	Cyanide	ug/L	Y	0.48		N	No detected value of B, Step 7		No	MEC<C & B is ND
15	Asbestos	Fibers/L					No detected value of B, Step 7		Ud	No effluent data & no B
16	2,3,7,8 TCDD	ug/L					No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B
	TCDD Equivalents	ug/L					No detected value of B, Step 7		Ud	No effluent data & no B
17	Acrolein	ug/L	Y	2.2		N	No detected value of B, Step 7		No	MEC<C & B is ND
18	Acrylonitrile	ug/L	Y	1		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
19	Benzene	ug/L	Y	0.13		N	No detected value of B, Step 7		No	MEC<C & B is ND
20	Bromoform	ug/L	Y	0.086		N	No detected value of B, Step 7		No	MEC<C & B is ND
21	Carbon Tetrachloride	ug/L	Y	0.25		N	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
22	Chlorobenzene	ug/L	Y	0.058		N	No detected value of B, Step 7		No	MEC<C & B is ND
23	Chlorodibromomethane	ug/L	Y	0.089		N	No detected value of B, Step 7		Yes	MEC>=C
24	Chloroethane	ug/L	Y	0.23		N	No Criteria		Uc	No Criteria
25	2-Chloroethylvinyl ether	ug/L	Y	0.28		N	No Criteria		Uc	No Criteria
26	Chloroform	ug/L	Y				No Criteria		Uc	No Criteria
27	Dichlorobromomethane	ug/L	Y	0.084		N	No detected value of B, Step 7	No Criteria	Yes	MEC>=C
28	1,1-Dichloroethane	ug/L	Y	0.14		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
29	1,2-Dichloroethane	ug/L	Y	0.24		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
30	1,1-Dichloroethylene	ug/L	Y	0.21		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
31	1,2-Dichloropropane	ug/L	Y	0.077		N	No detected value of B, Step 7		No	MEC<C & B is ND
32	1,3-Dichloropropylene	ug/L	Y	0.24		N	No detected value of B, Step 7		No	MEC<C & B is ND
33	Ethylbenzene	ug/L	Y	0.14		N	No detected value of B, Step 7		No	MEC<C & B is ND
34	Methyl Bromide	ug/L	Y	0.25		N	No detected value of B, Step 7		No	MEC<C & B is ND
35	Methyl Chloride	ug/L	Y	0.25		N	No Criteria		Uc	No Criteria
36	Methylene Chloride	ug/L	Y	0.19		N	No detected value of B, Step 7		No	MEC<C & B is ND
37	1,1,2,2-Tetrachloroethane	ug/L	Y	0.064		N	No detected value of B, Step 7		No	MEC<C & B is ND
38	Tetrachloroethylene	ug/L	Y	0.2		N	No detected value of B, Step 7	No Criteria	Yes	MEC>=C
39	Toluene	ug/L	Y	0.077		N	No detected value of B, Step 7		No	MEC<C & B is ND
40	1,2-Trans-Dichloroethylene	ug/L	Y	0.18		N	No detected value of B, Step 7		No	MEC<C & B is ND
41	1,1,1-Trichloroethane	ug/L	Y	0.094		N	No detected value of B, Step 7		No	MEC<C & B is ND
42	1,1,2-Trichloroethane	ug/L	Y	0.12		N	No detected value of B, Step 7		No	MEC<C & B is ND
43	Trichloroethylene	ug/L	Y	0.16		N	No detected value of B, Step 7		No	MEC<C & B is ND
44	Vinyl Chloride	ug/L	Y	0.14		N	No detected value of B, Step 7		No	MEC<C & B is ND
45	2-Chlorophenol	ug/L	Y	0.099		N	No detected value of B, Step 7		No	MEC<C & B is ND

CTR#	Parameters	Units	RPA: Are all B data points non-detects (Y/N)?	RPA: If all data points ND Enter the min detection limit (MDL) (ug/L)	RPA: Enter the pollutant B detected max conc (ug/L)	RPA: If all B is ND, is MDL>C?	RPA: If B>C, effluent limit required	RPA: Tier 3 - other info. ?	RPA: RPA Result - Need Limit?	RPA: Reason
46	2,4-Dichlorophenol	ug/L	Y	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND
47	2,4-Dimethylphenol	ug/L	Y	0.3		N	No detected value of B, Step 7		No	MEC<C & B is ND
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L	Y	0.99		N	No detected value of B, Step 7		No	MEC<C & B is ND
49	2,4-Dinitrophenol	ug/L	Y	0.99		N	No detected value of B, Step 7		No	MEC<C & B is ND
50	2-Nitrophenol	ug/L	Y	0.2		N	No Criteria		Uc	No Criteria
51	4-Nitrophenol	ug/L	Y	0.45		N	No Criteria		Uc	No Criteria
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L	Y	0.2		N	No Criteria		Uc	No Criteria
53	Pentachlorophenol	ug/L	Y	0.19		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
54	Phenol	ug/L	Y	0.099		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
55	2,4,6-Trichlorophenol	ug/L	Y	0.099		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
56	Acenaphthene	ug/L	Y	0.099		N	No detected value of B, Step 7		No	MEC<C & B is ND
57	Acenaphthylene	ug/L	Y	0.099		N	No Criteria		Uc	No Criteria
58	Anthracene	ug/L	Y	0.099		N	No detected value of B, Step 7		No	MEC<C & B is ND
59	Benzidine	ug/L	Y	3.7		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
60	Benzo(a)Anthracene	ug/L	Y	0.02		N	No detected value of B, Step 7	No Criteria	No	UD; effluent ND, MDL>C, and B is ND
61	Benzo(a)Pyrene	ug/L	Y	0.012		N	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
62	Benzo(b)Fluoranthene	ug/L	Y	0.14		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
63	Benzo(ghi)Perylene	ug/L	Y	0.1		N	No Criteria		Uc	No Criteria
64	Benzo(k)Fluoranthene	ug/L	Y	0.099		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
65	Bis(2-Chloroethoxy)Methane	ug/L	Y	0.2		N	No Criteria		Uc	No Criteria
66	Bis(2-Chloroethyl)Ether	ug/L	Y	0.05		Y	No detected value of B, Step 7	No Criteria	No	UD; effluent ND, MDL>C, and B is ND
67	Bis(2-Chloroisopropyl)Ether	ug/L	Y	0.099		N	No detected value of B, Step 7		No	MEC<C & B is ND
68	Bis(2-Ethylhexyl)Phthalate	ug/L	Y	2		Y	No detected value of B, Step 7	No Criteria	Yes	MEC>=C
69	4-Bromophenyl Phenyl Ether	ug/L	Y	0.099		N	No Criteria		Uc	No Criteria
70	Butylbenzyl Phthalate	ug/L	Y	0.18		N	No detected value of B, Step 7		No	MEC<C & B is ND
71	2-Chloronaphthalene	ug/L	Y	0.099		N	No detected value of B, Step 7		No	MEC<C & B is ND
72	4-Chlorophenyl Phenyl Ether	ug/L	Y	0.099		N	No Criteria	No Criteria	Uc	No Criteria
73	Chrysene	ug/L	Y	0.013		N	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
74	Dibenzo(a,h)Anthracene	ug/L	Y	0.08		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
75	1,2-Dichlorobenzene	ug/L	Y	0.2		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
76	1,3-Dichlorobenzene	ug/L	Y	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND
77	1,4-Dichlorobenzene	ug/L	Y	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND

CTR#	Parameters	Units	RPA: Are all B data points non-detects (Y/N)?	RPA: If all data points ND Enter the min detection limit (MDL) (ug/L)	RPA: Enter the pollutant B detected max conc (ug/L)	RPA: If all B is ND, is MDL>C?	RPA: If B>C, effluent limit required	RPA: Tier 3 - other info. ?	RPA: RPA Result - Need Limit?	RPA: Reason
78	3,3 Dichlorobenzidine	ug/L	Y	0.99		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
79	Diethyl Phthalate	ug/L	Y	0.15		N	No detected value of B, Step 7		No	MEC<C & B is ND
80	Dimethyl Phthalate	ug/L	Y	0.099		N	No detected value of B, Step 7		No	MEC<C & B is ND
81	Di-n-Butyl Phthalate	ug/L	Y	0.24		N	No detected value of B, Step 7		No	MEC<C & B is ND
82	2,4-Dinitrotoluene	ug/L	Y	0.18		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
83	2,6-Dinitrotoluene	ug/L	Y	0.27		N	No Criteria		Uc	No Criteria
84	Di-n-Octyl Phthalate	ug/L	Y	0.19		N	No Criteria		Uc	No Criteria
85	1,2-Diphenylhydrazine	ug/L	Y	0.25		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
86	Fluoranthene	ug/L	Y	0.099		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
87	Fluorene	ug/L	Y	0.099		N	No detected value of B, Step 7	No Criteria	No	MEC<C & B is ND
88	Hexachlorobenzene	ug/L	Y	0.099		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
89	Hexachlorobutadiene	ug/L	Y	0.47		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
90	Hexachlorocyclopentadiene	ug/L	Y	1.5		N	No detected value of B, Step 7		No	MEC<C & B is ND
91	Hexachloroethane	ug/L	Y	0.5		N	No detected value of B, Step 7		No	MEC<C & B is ND
92	Indeno(1,2,3-cd)Pyrene	ug/L	Y	0.12		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
93	Isophorone	ug/L	Y	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND
94	Naphthalene	ug/L	N		0.06		No Criteria		Uc	No Criteria
95	Nitrobenzene	ug/L	Y	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND
96	N-Nitrosodimethylamine	ug/L	Y	0.14		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
97	N-Nitrosodi-n-Propylamine	ug/L	Y	0.2		Y	No detected value of B, Step 7	No Criteria	No	UD; effluent ND, MDL>C, and B is ND
98	N-Nitrosodiphenylamine	ug/L	Y	0.19		N	No detected value of B, Step 7		No	MEC<C & B is ND
99	Phenanthrene	ug/L	Y	0.099		N	No Criteria		Uc	No Criteria
100	Pyrene	ug/L	Y	0.038		N	No detected value of B, Step 7		No	MEC<C & B is ND
101	1,2,4-Trichlorobenzene	ug/L	Y	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND
102	Aldrin	ug/L	Y				No detected value of B, Step 7	No Criteria	No	UD; effluent ND, MDL>C, and B is ND
103	alpha-BHC	ug/L	Y				No detected value of B, Step 7		No	MEC<C & B is ND
104	beta-BHC	ug/L	Y	0.0031		N	No detected value of B, Step 7		No	MEC<C & B is ND
105	gamma-BHC	ug/L	Y	0.0017		N	No detected value of B, Step 7		No	MEC<C & B is ND
106	delta-BHC	ug/L	Y	0.0025		N	No Criteria		Uc	No Criteria
107	Chlordane	ug/L	Y	0.28		Y	No detected value of B, Step 7		No	TMDL
108	4,4'-DDT	ug/L	Y	0.028		Y	No detected value of B, Step 7		No	TMDL
109	4,4'-DDE (linked to DDT)	ug/L	Y	0.0025		Y	No detected value of B, Step 7	No Criteria	No	UD; effluent ND, MDL>C, and B is ND
110	4,4'-DDD	ug/L	Y	0.003		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
111	Dieldrin	ug/L	Y	0.028		Y	No detected value of B, Step 7		No	TMDL
112	alpha-Endosulfan	ug/L	Y	0.0017		N	No detected value of B, Step 7		No	MEC<C & B is ND
113	beta-Endosulfan	ug/L	Y	0.0019		N	No detected value of B, Step 7		No	MEC<C & B is ND
114	Endosulfan Sulfate	ug/L	Y	0.0024		N	No detected value of B, Step 7		No	MEC<C & B is ND

CTR#	Parameters	Units	RPA: Are all B data points non-detects (Y/N)?	RPA: If all data points ND Enter the min detection limit (MDL) (ug/L)	RPA: Enter the pollutant B detected max conc (ug/L)	RPA: If all B is ND, is MDL>C?	RPA: If B>C, effluent limit required	RPA: Tier 3 - other info. ?	RPA: RPA Result - Need Limit?	RPA: Reason
115	Endrin	ug/L	Y	0.0019		N	No detected value of B, Step 7		No	MEC<C & B is ND
116	Endrin Aldehyde	ug/L	Y	0.0019		N	No detected value of B, Step 7		No	MEC<C & B is ND
117	Heptachlor	ug/L	Y	0.0017		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
118	Heptachlor Epoxide	ug/L	Y	0.0018		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
119-125	PCBs sum (2)	ug/L	Y	0.24		Y	No detected value of B, Step 7		No	TMDL
126	Toxaphene	ug/L	Y	0.12		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and B is ND
	Boron (mg/L)	mg/L	N		200		Limit required, B>C & pollutant detected in effluent	0.00	Yes	MEC>=C
	Chloride (mg/L)	mg/L	N		100		B<=C, Step 7	0.00	Yes	MEC>=C
	Nitrogen (as NO2 + NO3) (mg/L)	mg/L	N		0.79		B<=C, Step 7	0.00	No	MEC<C & B<=C
	Sulfate (mg/L)	mg/L	N		57		B<=C, Step 7	0.00	No	MEC<C & B<=C
	Total Dissolved Solids (TDS) (mg/L)	mg/L	N		300		B<=C, Step 7	0.00	No	MEC<C & B<=C

CTR#	Parameters	Units	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	ug/L												
2	Arsenic	ug/L												
3	Beryllium	ug/L												
4	Cadmium	ug/L												
5a	Chromium (III)													
5b	Chromium (VI)	ug/L												
6	Copper	ug/L		2.61		0.19	14.40	0.35	15.69	14.40	2.04	29.33	5.32	76.60
7	Lead	ug/L		3.07		0.12	56.41	0.20	2.71	2.71	2.78	7.53	8.54	23.13
8	Mercury	ug/L												
9	Nickel	ug/L												
10	Selenium	ug/L												
11	Silver	ug/L												
12	Thallium	ug/L												
13	Zinc	ug/L		2.71		0.17	140.79	0.32	262.80	140.79	2.15	303.13	5.84	822.244
14	Cyanide	ug/L												
15	Asbestos	Fibers/L												

CTR#	Parameters	Units	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
16	2,3,7,8 TCDD Equivalents	ug/L												
	TCDD Equivalents	ug/L												
17	Acrolein	ug/L												
18	Acrylonitrile	ug/L												
19	Benzene	ug/L												
20	Bromoform	ug/L												
21	Carbon Tetrachloride	ug/L												
22	Chlorobenzene	ug/L												
23	Chlorodibromomethane	ug/L	16.687	3.21	53.55415						3.16		10.13	
24	Chloroethane	ug/L												
25	2-Chloroethylvinyl ether	ug/L												
26	Chloroform	ug/L												
27	Dichlorobromomethane	ug/L	5.376	3.22	17.32093						3.20		10.30	
28	1,1-Dichloroethane	ug/L												
29	1,2-Dichloroethane	ug/L												
30	1,1-Dichloroethylene	ug/L												
31	1,2-Dichloropropane	ug/L												
32	1,3-Dichloropropylene	ug/L												
33	Ethylbenzene	ug/L												
34	Methyl Bromide	ug/L												
35	Methyl Chloride	ug/L												
36	Methylene Chloride	ug/L												
37	1,1,2,2-Tetrachloroethane	ug/L												
38	Tetrachloroethylene	ug/L	2.64	2.01	5.29634						1.55		3.11	
39	Toluene	ug/L												
40	1,2-Trans-Dichloroethylene	ug/L												
41	1,1,1-Trichloroethane	ug/L												
42	1,1,2-Trichloroethane	ug/L												
43	Trichloroethylene	ug/L												
44	Vinyl Chloride	ug/L												
45	2-Chlorophenol	ug/L												
46	2,4-Dichlorophenol	ug/L												
47	2,4-Dimethylphenol	ug/L												
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L												
49	2,4-Dinitrophenol	ug/L												
50	2-Nitrophenol	ug/L												
51	4-Nitrophenol	ug/L												
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L												

CTR#	Parameters	Units	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
41	1,1,1-Trichloroethane	ug/L												
42	1,1,2-Trichloroethane	ug/L												
43	Trichloroethylene	ug/L												
44	Vinyl Chloride	ug/L												
45	2-Chlorophenol	ug/L												
46	2,4-Dichlorophenol	ug/L												
47	2,4-Dimethylphenol	ug/L												
48	4,6-dinitro-o-resol (aka2- methyl-4,6-Dinitrophenol)	ug/L												
49	2,4-Dinitrophenol	ug/L												
50	2-Nitrophenol	ug/L												
51	4-Nitrophenol	ug/L												
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L												
53	Pentachlorophenol	ug/L												
54	Phenol	ug/L												
55	2,4,6-Trichlorophenol	ug/L												
56	Acenaphthene	ug/L												
57	Acenaphthylene	ug/L												
58	Anthracene	ug/L												
59	Benzidine	ug/L												
60	Benzo(a)Anthracene	ug/L												
61	Benzo(a)Pyrene	ug/L												
62	Benzo(b)Fluoranthene	ug/L												
63	Benzo(ghi)Perylene	ug/L												
64	Benzo(k)Fluoranthene	ug/L												
65	Bis(2-Chloroethoxy)Methane	ug/L												
66	Bis(2-Chloroethyl)Ether	ug/L												
67	Bis(2-Chloroisopropyl)Ether	ug/L												
68	Bis(2-Ethylhexyl)Phthalate	ug/L	1.8	2.01	3.61114						1.55		3.11	
69	4-Bromophenyl Phenyl Ether	ug/L												
70	Butylbenzyl Phthalate	ug/L												
71	2-Chloronaphthalene	ug/L												
72	4-Chlorophenyl Phenyl Ether	ug/L												
73	Chrysene	ug/L												
74	Dibenzo(a,h)Anthracene	ug/L												
75	1,2-Dichlorobenzene	ug/L												
76	1,3-Dichlorobenzene	ug/L												
77	1,4-Dichlorobenzene	ug/L												

CTR#	Parameters	Units	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
78	3,3 Dichlorobenzidine	ug/L												
79	Diethyl Phthalate	ug/L												
80	Dimethyl Phthalate	ug/L												
81	Di-n-Butyl Phthalate	ug/L												
82	2,4-Dinitrotoluene	ug/L												
83	2,6-Dinitrotoluene	ug/L												
84	Di-n-Octyl Phthalate	ug/L												
85	1,2-Diphenylhydrazine	ug/L												
86	Fluoranthene	ug/L												
87	Fluorene	ug/L												
88	Hexachlorobenzene	ug/L												
89	Hexachlorobutadiene	ug/L												
90	Hexachlorocyclopentadiene	ug/L												
91	Hexachloroethane	ug/L												
92	Indeno(1,2,3-cd)Pyrene	ug/L												
93	Isophorone	ug/L												
94	Naphthalene	ug/L												
95	Nitrobenzene	ug/L												
96	N-Nitrosodimethylamine	ug/L												
97	N-Nitrosodi-n-Propylamine	ug/L												
98	N-Nitrosodiphenylamine	ug/L												
99	Phenanthrene	ug/L												
100	Pyrene	ug/L												
101	1,2,4-Trichlorobenzene	ug/L												
102	Aldrin	ug/L												
103	alpha-BHC	ug/L												
104	beta-BHC	ug/L												
105	gamma-BHC	ug/L												
106	delta-BHC	ug/L												
107	Chlordane	ug/L												
108	4,4'-DDT	ug/L												
109	4,4'-DDE (linked to DDT)	ug/L												
110	4,4'-DDD	ug/L												
111	Dieldrin	ug/L												
112	alpha-Endosulfan	ug/L												
113	beta-Endolsulfan	ug/L												
114	Endosulfan Sulfate	ug/L												
115	Endrin	ug/L												
116	Endrin Aldehyde	ug/L												
117	Heptachlor	ug/L												

CTR#	Parameters	Units	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
118	Heptachlor Epoxide	ug/L												
119-125	PCBs sum (2)	ug/L												
126	Toxaphene	ug/L												
	Boron (mg/L)	mg/L	1.5	2.01	3.00928						1.55		3.11	
	Chloride (mg/L)	mg/L	100	2.01	200.61892						1.55		3.11	
	Nitrogen (as NO2 + NO3) (mg/L)	mg/L												
	Sulfate (mg/L)	mg/L												
	Total Dissolved Solids (TDS) (mg/L)	mg/L												

CTR#	Parameters	Units	Limits: Lowest AMEL	Limits: Lowest MDEL	Recommendation
1	Antimony	ug/L			No Limit
2	Arsenic	ug/L			No Limit
3	Beryllium	ug/L			No Limit
4	Cadmium	ug/L			No Limit
5a	Chromium (III)				No Limit
5b	Chromium (VI)	ug/L			No Limit
6	Copper	ug/L	29.33	76.60	Limit Required
7	Lead	ug/L	7.53	23.13	Limit Required
8	Mercury	ug/L	0.05	0.10	Limit from previous permit
9	Nickel	ug/L			No Limit
10	Selenium	ug/L			No Limit
11	Silver	ug/L			No Limit
12	Thallium	ug/L			No Limit
13	Zinc	ug/L	303.13	822.24	Limit Required
14	Cyanide	ug/L			No Limit
15	Asbestos	Fibers/L			No Limit
16	2,3,7,8 TCDD Equivalents	ug/L			No Limit
	TCDD Equivalents	ug/L			No Limit
17	Acrolein	ug/L			No Limit
18	Acrylonitrile	ug/L			No Limit
19	Benzene	ug/L			No Limit
20	Bromoform	ug/L			No Limit
21	Carbon Tetrachloride	ug/L			No Limit
22	Chlorobenzene	ug/L			No Limit
23	Chlorodibromomethane	ug/L	16.69	53.55	Limit Required

CTR#	Parameters	Units	Limits: Lowest AMEL	Limits: Lowest MDEL	Recommendation
24	Chloroethane	ug/L			No Limit
25	2-Chloroethylvinyl ether	ug/L			No Limit
26	Chloroform	ug/L			No Limit
27	Dichlorobromomethane	ug/L	5.38	17.32	Limit Required
28	1,1-Dichloroethane	ug/L			No Limit
29	1,2-Dichloroethane	ug/L			No Limit
30	1,1-Dichloroethylene	ug/L			No Limit
31	1,2-Dichloropropane	ug/L			No Limit
32	1,3-Dichloropropylene	ug/L			No Limit
33	Ethylbenzene	ug/L			No Limit
34	Methyl Bromide	ug/L			No Limit
35	Methyl Chloride	ug/L			No Limit
36	Methylene Chloride	ug/L			No Limit
37	1,1,2,2-Tetrachloroethane	ug/L			No Limit
38	Tetrachloroethylene	ug/L	2.64	5.30	Limit Required
39	Toluene	ug/L			No Limit
40	1,2-Trans-Dichloroethylene	ug/L			No Limit
41	1,1,1-Trichloroethane	ug/L			No Limit
42	1,1,2-Trichloroethane	ug/L			No Limit
43	Trichloroethylene	ug/L			No Limit
44	Vinyl Chloride	ug/L			No Limit
45	2-Chlorophenol	ug/L			No Limit
46	2,4-Dichlorophenol	ug/L			No Limit
47	2,4-Dimethylphenol	ug/L			No Limit
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L			No Limit
49	2,4-Dinitrophenol	ug/L			No Limit
50	2-Nitrophenol	ug/L			No Limit
51	4-Nitrophenol	ug/L			No Limit
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L			No Limit
53	Pentachlorophenol	ug/L			No Limit
54	Phenol	ug/L			No Limit
55	2,4,6-Trichlorophenol	ug/L			No Limit
56	Acenaphthene	ug/L			No Limit
57	Acenaphthylene	ug/L			No Limit
58	Anthracene	ug/L			No Limit
59	Benzidine	ug/L			No Limit
60	Benzo(a)Anthracene	ug/L			No Limit

CTR#	Parameters	Units	Limits: Lowest AMEL	Limits: Lowest MDEL	Recommendation
61	Benzo(a)Pyrene	ug/L			No Limit
62	Benzo(b)Fluoranthene	ug/L			No Limit
63	Benzo(ghi)Perylene	ug/L			No Limit
64	Benzo(k)Fluoranthene	ug/L			No Limit
65	Bis(2-Chloroethoxy)Methane	ug/L			No Limit
66	Bis(2-Chloroethyl)Ether	ug/L			No Limit
67	Bis(2-Chloroisopropyl)Ether	ug/L			No Limit
68	Bis(2-Ethylhexyl)Phthalate	ug/L	1.80	3.61	Limit Required
69	4-Bromophenyl Phenyl Ether	ug/L			No Limit
70	Butylbenzyl Phthalate	ug/L			No Limit
71	2-Chloronaphthalene	ug/L			No Limit
72	4-Chlorophenyl Phenyl Ether	ug/L			No Limit
73	Chrysene	ug/L			No Limit
74	Dibenzo(a,h)Anthracene	ug/L			No Limit
75	1,2-Dichlorobenzene	ug/L			No Limit
76	1,3-Dichlorobenzene	ug/L			No Limit
77	1,4-Dichlorobenzene	ug/L			No Limit
78	3,3 Dichlorobenzidine	ug/L			No Limit
79	Diethyl Phthalate	ug/L			No Limit
80	Dimethyl Phthalate	ug/L			No Limit
81	Di-n-Butyl Phthalate	ug/L			No Limit
82	2,4-Dinitrotoluene	ug/L			No Limit
83	2,6-Dinitrotoluene	ug/L			No Limit
84	Di-n-Octyl Phthalate	ug/L			No Limit
85	1,2-Diphenylhydrazine	ug/L			No Limit
86	Fluoranthene	ug/L			No Limit
87	Fluorene	ug/L			No Limit
88	Hexachlorobenzene	ug/L			No Limit
89	Hexachlorobutadiene	ug/L			No Limit
90	Hexachlorocyclopentadiene	ug/L			No Limit
91	Hexachloroethane	ug/L			No Limit
92	Indeno(1,2,3-cd)Pyrene	ug/L			No Limit
93	Isophorone	ug/L			No Limit
94	Naphthalene	ug/L			No Limit
95	Nitrobenzene	ug/L			No Limit
96	N-Nitrosodimethylamine	ug/L			No Limit
97	N-Nitrosodi-n-Propylamine	ug/L			No Limit
98	N-Nitrosodiphenylamine	ug/L			No Limit
99	Phenanthrene	ug/L			No Limit
100	Pyrene	ug/L			No Limit

CTR#	Parameters	Units	Limits: Lowest AMEL	Limits: Lowest MDEL	Recommendation
101	1,2,4-Trichlorobenzene	ug/L			No Limit
102	Aldrin	ug/L			No Limit
103	alpha-BHC	ug/L			No Limit
104	beta-BHC	ug/L			No Limit
105	gamma-BHC	ug/L			No Limit
106	delta-BHC	ug/L			No Limit
107	Chlordane	ug/L			No Limit
108	4,4'-DDT	ug/L			No Limit
109	4,4'-DDE (linked to DDT)	ug/L			No Limit
110	4,4'-DDD	ug/L			No Limit
111	Dieldrin	ug/L			No Limit
112	alpha-Endosulfan	ug/L			No Limit
113	beta-Endolsulfan	ug/L			No Limit
114	Endosulfan Sulfate	ug/L			No Limit
115	Endrin	ug/L			No Limit
116	Endrin Aldehyde	ug/L			No Limit
117	Heptachlor	ug/L			No Limit
118	Heptachlor Epoxide	ug/L			No Limit
119-125	PCBs sum (2)	ug/L			No Limit
126	Toxaphene	ug/L			No Limit
	Boron (mg/L)	mg/L	1.50	3.01	Limit Required
	Chloride (mg/L)	mg/L	100.00		Limit Required
	Nitrogen (as NO2 + NO3) (mg/L)	mg/L			No Limit
	Sulfate (mg/L)	mg/L			No Limit
	Total Dissolved Solids (TDS) (mg/L)	mg/L			No Limit

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
(2) = PCBs sum refers to sum of PCB 1016, 1221, 1232, 1242, 1248, 1254, and 1260