

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION**

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**ORDER NO. R8-2020-0021
NPDES NO. CA8000383**

**WASTE DISCHARGE REQUIREMENTS AND MASTER RECLAMATION PERMIT
FOR THE CITY OF CORONA, DEPARTMENT OF WATER AND POWER,
WATER RECLAMATION FACILITY NO. 1
SURFACE WATER DISCHARGES AND RECYCLED WATER USE**

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

Table 1. Discharger Information

Discharger	City of Corona, Department of Water and Power
Name of Facility	Water Reclamation Facility No. 1
Facility Address	2205 Railroad Street Corona, CA 92880 Riverside County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point (Latitude)	Discharge Point (Longitude)	Receiving Water
001	Tertiary treated wastewater	33°53'43" N	117°36'38" W	Butterfield Drain within Prado Basin Management Zone, Reach 3 of Santa Ana River
002	Tertiary treated wastewater	33°53'34" N	117°36'36" W	Temescal Groundwater Management Zone (GMZ)
003	Tertiary treated recycled wastewater	33° 53'35" N	117°36'34" W	Prado Basin Management Zone, Bedford GMZ, and Temescal GMZ

Table 3. Administrative Information

This Order was adopted by the Regional Water Board on:	June 19, 2020
This Order shall become effective on:	July 1, 2020
This Order shall expire on:	June 30, 2025
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations as application for reissuance of new waste discharge requirements no later than:	December 31, 2024
The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, Santa Ana Region have classified this discharge as follows:	Major discharge

I, Hope A. Smythe, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on June 19, 2020.

Hope A. Smythe, Executive Officer

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I. FACILITY INFORMATION

Information describing the City of Corona Department of Water and Power, Water Reclamation Facility No. 1 (Facility) is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

II. FINDINGS

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Water Board), finds:

- A. Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (CWC) (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 Waste Discharge Requirements (WDRs) in this Order. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the CWC commencing with section 13260 and as a master reclamation permit pursuant to article 4, chapter 7, division 7 of the CWC commencing with section 13500.
- B. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and through other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes Findings for this Order. Attachments A through E and G through J are also incorporated into this Order.
- C. California Environmental Quality Act (CEQA).** Under CWC section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code section 21000 et seq. (*County of Los Angeles v. California State Water Resources Control Board* (2006) 143 Cal.App.4th 985, mod. (Nov. 6, 2006, B184034) 50 Cal.Rptr.3d 619, 632-636). This action also involves the re-issuance of WDRs for an existing facility that discharges treated wastewater to land and as such, is exempt from the provisions of the CEQA (commencing with Section 21100) pursuant to Title 14 of the California Code of Regulations, Section 15301.
- D. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.B, IV.C, and V.B are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- E. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written

comments and recommendations. Details of the notification are provided in the Fact Sheet (Attachment F) of this Order.

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

THEREFORE, IT IS HEREBY ORDERED that this Order supersedes and rescinds Order R8-2012-0008 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the CWC (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 Regional Water Board from taking enforcement action for violations of the previous Order.

III. DISCHARGE PROHIBITIONS

- A.** The discharge of wastewater at a location or in a manner different from those described in this Order is prohibited, unless otherwise permitted through a separate action by the Regional Water Board.
- B.** The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited, except as allowed in Standard Provision I.G. of Attachment D, Federal Standard Provisions.
- C.** The discharge of any substances in concentrations toxic to animal or plant life is prohibited.
- D.** The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Effluent Limitations for Discharges Under Conditions Without 20:1 Dilution in the Receiving Water

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

Table 4. Effluent Limitations at Discharge Point 001 Under Conditions Without 20:1 Dilution in the Receiving Water

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	20	30		--	--
Total Suspended Solids	mg/L	20	30		--	--
Ammonia-Nitrogen	mg/L	4.5	--	--	--	--

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Chromium (VI)	µg/L	8.1	--	16.3	--	--
Total Recoverable Copper ¹	µg/L	7.6	--	15.3	--	--
Total Recoverable Lead ¹	µg/L	2.9	--	5.9	--	--
Total Recoverable Selenium	µg/L	4.1	--	8.2	--	--
Free Cyanide	µg/L	4.3	--	8.5	--	--
2,3,7,8-TCDD (equivalents) ²	pg/L	0.014	--	0.028	--	--
Chlorodibromomethane	µg/L	34	--	68	--	--
Dichlorobromomethane	µg/L	46	--	92	--	--
Bis (2-ethylhexyl) Phthalate	µg/L	5.9	--	11.8	--	--
beta-BHC	µg/L	0.046	--	0.092	--	--
4,4'-DDT	µg/L	0.00059	--	0.0012	--	--
4,4'-DDE	µg/L	0.00059	--	0.0012	--	--
Dieldrin	µg/L	0.00014	--	0.00028	--	--
Heptachlor	µg/L	0.00021	--	0.00042	--	--
Heptachlor Epoxide	µg/L	0.00011	--	0.00022	--	--

b. Percent Removal

The average monthly percent removal of BOD 5-day 20°C and total suspended solids shall not be less than 85 percent.

c. Total Dissolved Solids (TDS)

i. The 12-month flow weighted running average TDS constituent concentration shall not exceed 700 mg/L, unless the Discharger demonstrates to the satisfaction of the Regional Water Board's Executive Officer that:

(a) Discharges in excess of the TDS limit are due to the quality of water supply sources utilized in the Discharger's service area, and that all reasonable steps, as agreed upon by the Executive Officer, have

¹ Effluent limitations for Copper and Lead have been added to this Order because the Facility discharges treated wastewater from DP-001 to Butterfield Drain within Prado Basin Management Zone, a tributary of Reach 3 of the Santa Ana River that is on the Clean Water Act 303(d) list as being impaired for Copper and Lead.

² The reported 2,3,7,8-TCDD concentration shall be the sum of the dioxin toxicity equivalence (TEQ) concentrations of the 17 chlorinated dibenzo-p-dioxins (CDDs) and chlorinated dibenzofurans (CDFs) detected and calculated with the use of the 2005 World Health Organization (WHO) dioxin toxicity equivalence factors (TEFs), as listed in Section I.J. of the MRP.

been taken to ensure that the best quality supplies are obtained and utilized in the Discharger's service area; and/or

- (b) Discharges in excess of the TDS limits are due to chemical additions in the treatment process needed to meet waste discharge requirements, and the Discharger has taken all steps to optimize chemical additions so as to minimize the increases; and
- (c) The Discharger implements a plan with the approval of the Executive Officer, to offset discharges in excess of the TDS limit. The City of Corona has been operating the Temescal Desalter at full capacity, which is determined to be an acceptable offset of discharges in excess of the TDS limit.

- ii. The 12-month flow weighted running average TDS concentration shall not exceed the 12-month flow weighted running average TDS concentration in the water supply by more than 250 mg/L, unless the Discharger demonstrates to the satisfaction of the Regional Water Board's Executive Officer that TDS discharges in excess of the 250 mg/L mineral increment are due solely to chemical additions in the treatment process needed to meet waste discharge requirements, and the Discharger has taken all steps to optimize chemical additions so as to minimize the TDS increases.

d. **Total Inorganic Nitrogen (TIN)**

The 12-month-flow weighted running average Total Inorganic Nitrogen (TIN) concentration of the discharge shall not exceed 10 mg/L, unless the Discharger implements a plan, with the approval of the Executive Officer, to offset TIN discharges in excess of the TIN limits.

e. **Disinfected Tertiary Treated Wastewater**

The discharge shall at all times be a filtered and subsequently disinfected wastewater and shall meet the following limitations:

i. Turbidity:

When filtration is through natural undisturbed soils or a bed of filter media, the turbidity of the filter effluent shall not exceed any of the following:

- (a) Average of 2 Nephelometric Turbidity Units (NTU) within any 24-hour period;
- (b) 5 NTU more than 5 percent of the time in any 24-hour period; and
- (c) 10 NTU more than one minute in any 24-hour period.

ii. Disinfection:

The discharge shall meet the following:

- (a) When a chlorine disinfection process is utilized following filtration, a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter shall be provided at all times, with a modal contact time³ of at least 90 minutes⁴, based on peak dry weather design flow⁵.
- (b) When a disinfection process combined with the filtration process is utilized, the combined process shall demonstrate inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.
- (c) Where ultraviolet (UV) disinfection is solely used for disinfection, UV disinfection shall meet the requirements specified in the Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse, published by the National Water Research Institute, Second Edition, unless otherwise approved by the California State Water Resources Control Board's (SWRCB's) Division of Drinking Water (DDW).

iii. Coliform:

The disinfected wastewater shall meet the following:

- (a) The weekly median concentration of total coliform bacteria shall not exceed a Most Probable Number (MPN) of 2.2 total coliform bacteria per 100 milliliters (ml).

To comply with the limit, the 7-day median MPN must not exceed 2.2 per 100 ml on any day during the week. However, only one violation is recorded for each calendar week, even if the 7-day median MPN value is greater than 2.2 for more than one day in the week.

- (b) The number of total coliform bacteria shall not exceed an MPN of 23 total coliform bacteria per 100 ml in more than one sample in any 30-day period.

³ Modal contact time and CT shall be calculated based on the minimum one-hour average value in a 24-hr period.

⁴ The modal contact time requirement is applicable unless the receiving water provides at least a 1:1 dilution. The receiving water considered here shall exclude upstream POTW effluent flow.

⁵ "Peak Dry Weather Flow" means the arithmetic mean of the maximum peak flow rates sustained over some period of time (for example, three hours) during the maximum 24-hour dry weather period. Dry weather period is defined as period of little or no rainfall.

(c) No total coliform bacteria sample shall exceed an MPN of 240 total coliform bacteria per 100 ml.

f. Total Chlorine Residual

The discharge shall not exceed the following:

- i. The total time during which the total chlorine residual values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month);
- ii. No individual excursion from 0.1 mg/L value shall exceed 5 minutes; and
- iii. No individual excursion shall exceed 5.0 mg/L.

g. pH

The pH of the discharge shall be maintained between 6.5 to 8.5 pH units.

Compliance with pH limits shall be determined as follows:

- i. The total time during which the pH is outside the range of 6.5-8.5 pH units shall not exceed 7 hours and 26 minutes in any calendar month; and
- ii. No individual excursion from the above range shall exceed 60 minutes.

2. Effluent Limitations for Discharges Under Conditions With 20:1 or More Dilution in the Receiving Water

- a. Whenever the flow⁶ at monitoring location R-001U in Butterfield Drain results in a dilution of 20:1 (receiving water flow: wastewater flow) or more, the Discharger shall comply with the following effluent limitations in lieu of those specified in Effluent Limitation IV.A.1., above:

Table 5. Effluent Limitations at Discharge Point 001 With 20:1 Dilution

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	30	45		--	--
Total Suspended Solids	mg/L	30	45		--	--
Ammonia-Nitrogen	mg/L	4.5	--	--	--	--
Chromium (VI)	µg/L	8.1	--	16.3	--	--
Total Recoverable Copper	µg/L	7.6	--	15.3	--	--
Total Recoverable Lead	µg/L	2.9	--	5.9	--	--
Total Recoverable Selenium	µg/L	4.1	--	8.2	--	--
Free Cyanide	µg/L	4.3	--	8.5	--	--

⁶ Exclusive of discharges to surface waters from upstream publicly owned treatment works.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
2,3,7,8-TCDD (equivalents)	pg/L	0.014	--	0.028	--	--
Chlorodibromomethane	µg/L	34	--	68	--	--
Dichlorobromomethane	µg/L	46	--	92	--	--
Bis(2-ethylhexyl) Phthalate	µg/L	5.9	--	11.8	--	--
beta-BHC	µg/L	0.046	--	0.092	--	--
4,4'-DDT	µg/L	0.00059	--	0.0012	--	--
4,4'-DDE	µg/L	0.00059	--	0.0012	--	--
Dieldrin	µg/L	0.00014	--	0.00028	--	--
Heptachlor	µg/L	0.00021	--	0.00042	--	--
Heptachlor Epoxide	µg/L	0.00011	--	0.00022	--	--

b. **Percent Removal**

The average monthly percent removal of BOD 5-day 20°C and total suspended solids shall not be less than 85 percent.

c. **Coliform**

The weekly median number of coliform bacteria shall not exceed a median of 23 per 100 ml as determined from the daily coliform bacteria values for the last seven (7) days. To comply with this limit, the 7-day median MPN must not exceed 23 per 100 ml on any day during the week. However, only one violation is recorded for each calendar week, even if the 7-day median MPN value is greater than 23 for more than one day in the week.

d. **pH**

The pH of the discharge shall be maintained between 6.5 to 8.5 pH units.

Compliance with pH limits shall be determined as follows:

- i. The total time during which the pH is outside the range of 6.5-8.5 pH units shall not exceed 7 hours and 26 minutes in any calendar month; and
- ii. No individual excursion from the above range shall exceed 60 minutes.

3. Toxicity Requirements

- a. There shall be no acute or chronic toxicity in the discharge nor shall the discharge cause any acute or chronic toxicity in the receiving water. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. This Order contains no numeric limitation for toxicity. However, the Discharger shall conduct chronic toxicity monitoring.

- b. The Discharger shall implement the accelerated monitoring as specified in Attachment E when the result of any single chronic toxicity test of the effluent exceeds 1.0 TUc.

B. Land Discharge Specifications – Discharge Point 002

- 1. Unless otherwise specified hereinafter, compliance with the following effluent limitations shall be measured at Monitoring Location M-002 as described in the attached Monitoring and Reporting Program (Attachment E).

Table 6. Land Discharge Specifications

Parameter	Units	Discharge Specifications	
		Average Monthly	Average Weekly
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	20	30
Total Suspended Solids	mg/L	20	30

2. Total Dissolved Solids (TDS)

- a. The 12-month flow weighted running average total dissolved solids concentration of the discharge at Discharge Point 002 shall not exceed 770 mg/L, unless the Discharger demonstrates to the satisfaction of the Regional Water Board’s Executive Officer that:
 - i. Discharges in excess of the TDS limit are due to the quality of water supply sources utilized in the Discharger’s service area, and that all reasonable steps, as agreed upon by the Executive Officer, have been taken to ensure that the best quality supplies are obtained and utilized in the Discharger’s service area; and/or
 - ii. Discharges in excess of the TDS limits are due to chemical additions in the treatment process needed to meet waste discharge requirements, and the Discharger has taken all steps to optimize chemical additions so as to minimize the increases; and
 - iii. The Discharger implements a plan with the approval of the Executive Officer, to offset discharges in excess of the TDS limit. As noted in Section IV.A.1.c.(c). above, the City of Corona has been operating the Temescal Desalter at full capacity, which is determined to be an acceptable offset of discharges in excess of the TDS limit.
- b. The 12-month flow weighted running average TDS concentration shall not exceed the 12-month flow weighted running average TDS concentration in the water supply by more than 250 mg/L, unless the Discharger demonstrates to the satisfaction of the Regional Water Board’s Executive Officer that TDS discharges in excess of the 250 mg/L mineral increment are due solely to chemical additions in the treatment process needed to meet

waste discharge requirements, and the Discharger has taken all steps to optimize chemical additions so as to minimize the TDS increases.

3. Total Inorganic Nitrogen (TIN)

The 12-month flow weighted running average Total Inorganic Nitrogen (TIN) concentration of the combined discharge from Water Reclamation Facility No. 1 and Water Reclamation Facility No. 2 shall not exceed 13.3 mg/L unless the Discharger implements a plan with the approval of the Regional Water Board's Executive Officer, to offset discharges in excess of the TIN limits.

4. pH

The pH of the discharge shall at all times be within the range of 6.0 to 9.0 pH units.

Compliance with pH limits shall be determined as follows:

- a. The total time during which the pH is outside the range of 6.0-9.0 pH units shall not exceed 7 hours and 26 minutes in any calendar month; and
- b. No individual excursion from the above range shall exceed 60 minutes.

5. Disinfected Tertiary Treated Wastewater

The discharge shall at all times be a filtered and subsequently disinfected wastewater and shall meet the following limitations:

a. Turbidity:

When filtration is through natural undisturbed soils or a bed of filter media, the turbidity of the filter effluent shall not exceed any of the following:

- i. Average of 2 NTU within any 24-hour period;
- ii. 5 NTU more than 5 percent of the time in any 24-hour period; and
- iii. 10 NTU more than one minute.

b. Disinfection:

The discharge shall meet the following:

- i. When a chlorine disinfection process is utilized following filtration, a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter shall be provided at all times, with a modal contact time of at least 90 minutes, based on peak dry weather design flow.
- ii. When a disinfection process combined with the filtration process is utilized, the combined process shall demonstrate inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

iii. Where ultraviolet (UV) disinfection is solely used for disinfection, UV disinfection shall meet the requirements specified in the Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse, published by the National Water Research Institute, Second Edition, unless otherwise approved by the California State Water Board’s Division of Drinking Water (DDW).

c. Coliform:

The disinfected wastewater shall meet the following:

i. The weekly median concentration of total coliform bacteria shall not exceed a Most Probable Number (MPN) of 2.2 total coliform bacteria per 100 milliliters (ml).

To comply with the limit, the 7-day median MPN must not exceed 2.2 per 100 ml on any day during the week. However, only one violation is recorded for each calendar week, even if the 7-day median MPN value is greater than 2.2 for more than one day in the week.

ii. The number of total coliform bacteria shall not exceed an MPN of 23 total coliform bacteria per 100 ml in more than one sample in any 30-day period.

iii. No total coliform bacteria sample shall exceed an MPN of 240 total coliform bacteria per 100 ml.

C. Recycling Specifications – Discharge Point 003

1. Unless otherwise specified hereinafter, compliance with the following limitations shall be measured at Monitoring Location REC-001 as described in the attached Monitoring and Reporting Program (Attachment E). If monitoring is conducted at monitoring location M-001 at the same time, then compliance with the following limitations shall be measured at M-001, instead.

2. The Discharger shall comply with the following limitations for the production and use of recycled water supplied for landscape irrigation, or other similar uses:

a. Physical and Biological Limitations:

Table 7. Recycled Water Discharge Specifications

Parameter	Units	Discharge Specifications	
		Average Monthly	Average Weekly
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	20	30
Total Suspended Solids	mg/L	20	30

b. Total Dissolved Solids (TDS):

- i. The 12-month flow weighted running average TDS concentration shall not exceed 770 mg/L, unless the Discharger demonstrates to the satisfaction of the Regional Water Board's Executive Officer that:
 - (a) Discharges in excess of the TDS limit are due to the quality of water supply sources utilized in the Discharger's service area, and that all reasonable steps, as agreed upon by the Executive Officer, have been taken to ensure that the best quality supplies are obtained and utilized in the Discharger's service area; and/or
 - (b) Discharges in excess of the TDS limits are due to chemical additions in the treatment process needed to meet waste discharge requirements, and the Discharger has taken all steps to optimize chemical additions so as to minimize the increases; and
 - (c) The Discharger implements a plan with the approval of the Executive Officer, to offset discharges in excess of the TDS limit. As noted in Section IV.A.1.c.(c). above, the City of Corona has been operating the Temescal Desalter at full capacity, which is determined to be an acceptable offset of discharges in excess of the TDS limit.
 - ii. The 12-month flow weighted running average TDS concentration shall not exceed the 12-month flow weighted running average TDS concentration in the water supply by more than 250 mg/L, unless the Discharger demonstrates to the satisfaction of the Regional Water Board's Executive Officer that TDS discharges in excess of the 250 mg/L mineral increment are due solely to chemical additions in the treatment process needed to meet waste discharge requirements, and the Discharger has taken all steps to optimize chemical additions so as to minimize the TDS increases.
- c. Recycled water, as described in Section 60307(a) of Division 4, Chapter 3, Title 22, California Code of Regulations, supplied for irrigation of food crops, parks and playground, school yards, residential landscaping and other irrigation uses not specified in Section 60304(a) of Division 4, Chapter 3, Title 22, California Code of Regulations or not prohibited in other Sections of the California Code of Regulations shall at all times be adequately oxidized, filtered, and disinfected tertiary treated wastewater and shall meet the following limitations:
- i. Turbidity:

When filtration is through natural undisturbed soils or a bed of filter media, the turbidity of the filter effluent shall not exceed any of the following:

 - (a) Average of 2 NTU within any 24-hour period;
 - (b) 5 NTU more than 5 percent of the time in any 24-hour period; and

(c) 10 NTU more than one minute in any 24-hour period.

ii. Disinfection:

The Discharger shall comply with the following:

- (a) When a chlorine disinfection process is utilized followed by filtration, a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; shall be provided.
- (b) When a disinfection process combined with the filtration process is utilized, the combined process shall demonstrate inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.
- (c) Where UV disinfection is solely used for disinfection, UV disinfection shall meet the requirements specified in the Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse, published by the National Water Research Institute, Second Edition, unless otherwise approved by the DDW.

iii. Coliform:

The Discharger shall comply with the following:

- (a) The weekly median concentration of total coliform bacteria shall not exceed an MPN of 2.2 total coliform bacteria per 100 ml.
To comply with the limit, the 7-day median MPN must not exceed 2.2 per 100 ml on any day during the week. However, only one violation is recorded for each calendar week, even if the 7-day median MPN value is greater than 2.2 for more than one day in the week.
- (b) The number of total coliform bacteria shall not exceed an MPN of 23 total coliform bacteria per 100 ml in more than one sample in any 30-day period.
- (c) No total coliform bacteria sample shall exceed an MPN of 240 total coliform bacteria per 100 ml.

- d. Recycled water supplied for irrigation of food crops where the edible portion is produced above ground and not contacted by the recycled water shall at all times be adequately oxidized and disinfected so that the average weekly total coliform bacteria in the disinfected effluent does not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total

coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30-day period.

- e. Recycled water supplied for the uses listed below shall be an oxidized and disinfected water so that the average weekly total coliform bacteria in the disinfected effluent does not exceed an MPN of 23 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 240 per 100 milliliters in more than one sample in any 30-day period.

The uses are:

- i. Industrial boiler feed, nonstructural fire-fighting, backfill consolidation around nonpotable piping, soil compaction, mixing concrete, dust control on roads and streets, cleaning roads, sidewalks and outdoor work areas and industrial process water that will not come into contact with workers.
 - ii. Irrigation of cemeteries, freeway landscaping, restricted access golf courses, ornamental nursery stock and sod farms where access by the general public is not restricted, pasture for animals producing milk for human consumption, and any nonedible vegetation where access is controlled so that irrigated area cannot be used as if it were part of a park, playground or school yard.
- f. Recycled water supplied for uses specified in Sections 60304 and 60307 of Title 22 where filtration is provided pursuant Section 60301.320(a) and coagulation is not used as part of the treatment process, shall at all times comply with the following:
 - i. The turbidity of the influent to the filters is continuously measured and the influent turbidity does not exceed 5 NTU for more than 15 minutes and never exceeds 10 NTU;
 - ii. The filtered effluent turbidity shall not exceed 2 NTU within any 24-hour period; and
 - iii. Should the filter influent turbidity exceed 5 NTU for more than 15 minutes, chemical addition shall be automatically activated if available, if not, the wastewater shall be diverted.
3. For new reuse sites, the use of recycled water shall only commence after the California State Water Resources Control Board's (SWRCB's) Division of Drinking Water (DDW) grants final approval for such use. If SWRCB's DDW does not respond or does not explicitly disapprove the use of recycled water at new reuse sites within 30 days of receipt of the information required in IV.C.8., below, then the Discharger may assume final approval by SWRCB's DDW and may commence distribution of recycled water at the new site(s). The Discharger shall provide the Regional Water Board with a copy of the SWRCB's DDW approval letter, if provided, within 30 days of the approval notice.

4. The Discharger shall be responsible for assuring that recycled water is delivered and utilized in conformance with this Order and the recycling criteria contained in Title 22, Division 4, Chapter 3, Sections 60301 through 60355, California Code of Regulations. The Discharger shall conduct periodic inspections of the facilities of the recycled water users to monitor compliance by the users with this Order.
5. The Discharger shall establish and enforce the Rules and Regulations for Recycled Water Users, governing the design and construction of recycled water use facilities and the use of recycled water in accordance with the uniform statewide recycling criteria established pursuant to California Water Code Section 13521.
 - a. Use of recycled water by the Discharger shall be consistent with its Rules and Regulations for Recycled Water Use.
 - b. Any revisions made to the Rules and Regulations shall be subject to the review of the Regional Water Board, the SWRCB's DDW, and the County Environmental Health Department. The revised Rules and Regulations or a letter certifying that the Discharger's Rules and Regulations contain the updated provisions in this Order, shall be submitted to the Regional Water Board within 60 days of adoption of this Order by the Regional Water Board.
6. The Discharger shall, within 60 days of the adoption of this Order, review and update as necessary its program to conduct compliance inspections of recycled water reuse sites. Inspections shall determine the status of compliance with the Discharger's Rules and Regulations for Recycled Water Use.
7. The storage, delivery, or use of recycled water shall not individually or collectively, directly or indirectly, result in a pollution or nuisance, or adversely affect water quality, as defined in the California Water Code.
8. Prior to delivering recycled water to any new user, the Discharger shall submit to the SWRCB's DDW and the Riverside County Environmental Health Department a report containing the following information for review and approval. The Discharger shall maintain this new user information and make it available onsite during inspection upon request by Regional Water Board, SWRCB's DDW and/or County Environmental Health Department staff. This new user information shall be submitted to the Regional Water Board upon request by the Executive Officer:
 - a. The average number of persons estimated to be served at each use site area on a daily basis.
 - b. The specific boundaries of the proposed use site area, including a map showing the location of each facility, drinking water fountain, and impoundment to be used.
 - c. The person or persons responsible for operation of the recycled water system at each use area.

- d. The specific use to be made of the recycled water at each use area.
- e. The methods to be used to assure that the installation and operation of the recycled system will not result in cross connections between the recycled water and potable water piping systems. This shall include a description of the pressure, dye or other test methods to be used to test the system.
- f. Plans and specifications which include the following:
 - i. Proposed piping system to be used.
 - ii. Pipe locations of both the recycled and potable systems.
 - iii. Type and location of the outlets and plumbing fixtures that will be accessible to the public.
 - iv. The methods and devices to be used to prevent backflow of recycled water into the potable water system.
 - v. Plan notes relating to specific installation and use requirements.
- 9.** The Discharger shall require the user(s) to designate an on-site supervisor responsible for the operation of the recycled water distribution system within the recycled water use area. The supervisor shall be responsible for enforcing this Order, prevention of potential hazards, the installation, operation and maintenance of the distribution system, maintenance of the distribution and irrigation system plans in "as-built" form, and for the distribution of the recycled wastewater in accordance with this Order.
- 10.** Recycled water shall at all times be maintained within the property lines of any user. There shall be no direct or indirect discharge of recycled water into drainage systems that could affect surface water quality standards.
- 11.** Uses of recycled water with frequent or routine application (for example: agricultural or landscape irrigation uses) shall be at agronomic rates and shall consider soil, climate, and plant demand. In addition, application of recycled water and use of fertilizers shall be at a rate that takes into consideration nutrient levels in recycled water and nutrient demand by plants. This Regional Water Board may require the Discharger to submit an Implementation or Operations and Management Plan specifying agronomic rates and nutrient application for the use area(s) and a set of reasonably practicable measures to ensure compliance with this Order. The Discharger must implement the following to ensure that recycled water and fertilizer are applied in use sites at agronomic rates:
 - a. Monitor nutrient concentrations in recycled water supplies and notify recycled water site supervisors of the nutrient concentrations of recycled water.
 - b. Conduct periodic inspections of end use sites to verify the agronomic application rates of recycled water considering fertilizer application and the nutrient level of the recycled water applied to the landscape or provide

monthly water budgets to each use site based on agronomic rates, provide monthly reporting to each use site of actual use compared with the agronomic water budget for each use site, and target sites with recycled water consistently above the agronomic rate for follow-up.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

1. Receiving water limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this Order. The discharge shall not cause the following in Prado Basin Management Zone, Temescal Creek, and Santa Ana River Reach 3, or in downstream Reaches of the Santa Ana River:
 - a. Coloration of the receiving waters, which causes a nuisance or adversely affects beneficial uses.
 - b. Deposition of oil, grease, wax or other materials in the receiving waters in concentrations which result in a visible film or in coating objects in the water, or which cause a nuisance or affect beneficial uses.
 - c. An increase in the amounts of suspended or settleable solids in the receiving waters, which will cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.
 - d. Taste or odor-producing substances in the receiving waters at concentrations, which cause a nuisance or adversely affect beneficial uses.
 - e. The presence of radioactive materials in the receiving waters in concentrations, which are deleterious to human, plant or animal life.
 - f. The depletion of the dissolved oxygen concentration below 5.0 mg/L.
 - g. The temperature of the receiving waters to be raised above 90°F (32°C) during the period of June through October, or above 78°F (26°C) during the rest of the year.
 - h. The concentration of pollutants in the water column, sediments, or biota to adversely affect the beneficial uses of the receiving water. The discharge shall not result in the degradation of inland surface water communities and populations, including vertebrate, invertebrate, and plant species.
2. The discharge of wastes shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or State Water Board, as required by the Clean Water Act and regulations adopted thereunder.
3. Pollutants not specifically mentioned and limited in this Order shall not be discharged at levels that will bioaccumulate in aquatic resources to levels, which are harmful to human health.

4. The discharge shall not contain constituent concentrations of mercury that will result in the bioaccumulation of methylmercury in fish flesh tissue greater than 0.3 milligram methylmercury/kilogram. (See also Section VI.C.1.e. and VI.C.2.a, below).

B. Groundwater Limitations

The discharge of waste or use of recycled water shall not cause the underlying groundwater to be degraded, to exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. The Discharger shall comply with the following provisions. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:
 - a. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
 - b. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, discharge limitations (e.g., maximum daily effluent limitation), or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (951) 782-4130 or by email to info8@waterboards.ca.gov within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification with the details discussed above with the next self-monitoring report.
 - c. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by Section 13050 of the CWC.
 - d. The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be

necessary to determine the nature and impact of the noncomplying discharge.

- e. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
 - i. Violation of any terms or conditions of this Order;
 - ii. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts; or
 - iii. In addition to any other grounds specified herein, this Order may be modified or revoked at any time if, on the basis of any data, the Regional Water Board determines that the continued discharges may cause unreasonable degradation of water quality.
- f. If an effluent standard or discharge prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge, and such standard or prohibition is more stringent than any limitation for that pollutant in this Order, this Order may be modified or revoked and reissued to conform to the effluent standard or discharge prohibition.
- g. The Discharger shall file with the Regional Water Board a Report of Waste Discharge at least 180 days before making any material change in the character, location, or volume of the discharge. A material change includes, but is not limited to, the following:
 - i. Adding a major industrial waste discharge to a discharge of essentially domestic sewage, or adding a new process or product by an industrial facility resulting in a change in the character of the waste.
 - ii. Significantly changing the disposal method or location, such as changing the disposal to another drainage area or waterbody.
 - iii. Significantly changing the method of treatment.
 - iv. Increasing the treatment plant design capacity beyond that specified in this Order.
- h. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
- i. The Discharger shall maintain a copy of this Order at the site so that it is available to site operating personnel at all times. Key operating personnel shall be familiar with its content.
- j. The Discharger shall optimize chemical additions needed in the treatment process to meet waste discharge requirements so as to minimize total dissolved solid increases in the treated wastewater.

- k. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Regional Water Board's Executive Officer.
- l. In the event of any change in control or ownership of land or waste discharge facility presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Water Board.
- m. The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods within a 100-year return frequency.

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order. This monitoring and reporting program may be modified by the Executive Officer at any time during the term of this Order, and may include an increase in: 1) the number of parameters to be monitored, 2) the frequency of the monitoring or 3) the number and size of samples to be collected. Any increase in the number of parameters to be monitored, the frequency of the monitoring or the number and size of samples to be collected may be reduced back to the levels specified in the original monitoring and reporting program at the discretion of the Executive Officer.

C. Special Provisions

1. Reopener Provisions

- a. This Order will be reopened to address any changes in State or federal statutes, plans, policies or regulations that would affect the quality requirements for the discharges.
- b. This Order may be reopened to include effluent limitations for pollutants determined to be present in the discharge in concentrations that pose a reasonable potential to cause or contribute to violations of water quality objectives.
- c. This Order may be reopened and modified in accordance with the requirements set forth at 40 CFR 122 and 124, to include the appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any EPA-approved new State water quality standards applicable to effluent toxicity.
- d. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.

- e. This Order may be reopened to include an appropriate bioaccumulation based effluent limit for mercury if test results (as required in Attachment E of this Order) show that the concentration levels of methylmercury in the fish tissue are at or above 0.3 milligrams per kilogram.
- f. This Order may be reopened to incorporate appropriate biosolids requirements if the State Water Resources Control Board and the Regional Water Board are given the authority to implement regulations contained in 40 CFR 503.
- g. This Order may be reopened, if necessary and appropriate, to specify revised waste discharge requirements based on the results of the investigations as required above.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. By July 1, 2020, the Discharger shall notify the Executive Officer of its continued involvement with the comprehensive mercury investigation program currently being conducted by a group of Santa Ana River system dischargers. If the Discharger discontinues its involvement with this comprehensive program, the Discharger shall, within 60 days of that date, submit for the approval of the Executive Officer its plan for the annual testing of mercury levels in fish flesh samples collected from the Santa Ana River, upstream of, at, and downstream of the point of the discharge point. Upon approval, the Discharger shall implement the plan.
- b. **Toxicity Reduction Requirements**
 - i. The Discharger shall update, as necessary, its Initial Investigation Toxicity Reduction Evaluation (IITRE) work plan that describes the steps the Discharger intends to follow if required by Section VI.C.2.b.ii. below. The work plan shall include at a minimum:
 - (a) A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of the exceedance, effluent variability, and/or efficiency of the treatment system in removing toxic substances. This shall include a description of an accelerated chronic toxicity testing program.
 - (b) A description of the methods to be used for investigating and maximizing in-house treatment efficiency and good housekeeping practices.
 - (c) A description of the evaluation process to be used to determine if implementation of a more detailed TRE/TIE is necessary.
 - ii. The Discharger shall implement the IITRE work plan whenever the results of chronic toxicity tests of the effluent exceed:
 - (a) A two month median value of 1.0 TUc for survival or reproduction endpoint or,

- (b) Any single test value of 1.7 TUc for survival endpoint.
- iii. The Discharger shall develop a detailed Toxicity Reduction Evaluation and Toxicity Identification Evaluation (TRE/TIE) work plan that shall describe the steps the Discharger intends to follow if the implemented IITRE fails to identify the cause of, or to rectify, the toxicity.
- iv. The Discharger shall use as guidance, at a minimum, EPA manuals EPA/600/2-88/070 (industrial), EPA/600/4-89-001A (municipal), EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III) to identify the cause(s) of toxicity. If during the life of this Order the aforementioned EPA manuals are revised or updated, the revised/updated manuals may also be used as guidance. The detailed TRE/TIE work plan shall include:
 - (a) Further actions to investigate and identify the cause of toxicity;
 - (b) Actions the Discharger will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and
 - (c) A schedule for these actions.
- v. The Discharger shall implement the TRE/TIE workplan if the IITRE fails to identify the cause of, or rectify, the toxicity, or if in the opinion of the Executive Officer the IITRE does not adequately address an identified toxicity problem.
- vi. The Discharger shall assure that adequate resources are available to implement the required TRE/TIE.

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program

- i. The Discharger shall develop and conduct a Pollutant Minimization Program (PMP) as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:
 - (a) A sample result is reported as DNQ and the effluent limitation is less than the RL; or
 - (b) A sample result is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section X.B.2.
- ii. The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

- (a) An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;
- (b) Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;
- (c) Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;
- (d) Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and
- (e) An annual status report that shall be sent to the Regional Water Board including:
 - (1) All PMP monitoring results for the previous year;
 - (2) A list of potential sources of the reportable priority pollutant(s);
 - (3) A summary of all actions undertaken pursuant to the control strategy; and
 - (4) A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications

- a. The Discharger's wastewater treatment plant shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23, Division 3, Chapter 14, California Code of Regulations.
- b. The Discharger shall provide safeguards to assure that should there be reduction, loss, or failure of electric power, the Discharger will comply with the requirements of this Order.
- c. The Discharger shall update as necessary, the "Operation and Maintenance Manual (O&M Manual)" which it has developed for the treatment facility to conform to latest plant changes and requirements. The O&M Manual shall be readily available to operating personnel onsite. The O&M Manual shall include the following:
 - i. Description of the treatment plant table of organization showing the number of employees, their duties and qualifications, and plant attendance schedules (daily, weekends and holidays, part-time, etc.). The description should include documentation that the personnel are knowledgeable and qualified to operate the treatment facility so as to achieve the required level of treatment at all times.
 - ii. Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.
 - iii. Description of laboratory and quality assurance procedures.

- iv. Process and equipment inspection and maintenance schedules.
- v. Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the Discharger will be able to comply with requirements of this Order.
- vi. Description of preventive (fail-safe) and contingency (response and cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. These plans shall identify the possible sources (such as loading and storage areas, power outage, waste treatment unit failure, process equipment failure, tank and piping failure) of accidental discharges, untreated or partially treated waste bypass, and polluted drainage.

5. Special Provisions for Publicly-Owned Treatment Works (POTWs)

- a. **Sewer Collection System Requirements:** The Discharger's collection system is part of the system that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system (40 CFR 122.41(e)). The Discharger must report any non-compliance (40 CFR 122.41(l)(6) and (7)) and mitigate any discharge from the collection system in violation of this Order (40 CFR 122.41(d)). See the Order at Standard Provision VI.A.2.b. and Attachment D, sections I.C, I.D, V.E, and V.H.

Furthermore, the Discharger is subject to the requirements of, and must comply with, State Water Resources Control Board (State Water Board) Order 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems as amended by State Water Board Order WQ 2013-0058-EXEC and any subsequent order. The Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. While the Discharger must comply with both Order No. 2006-0003 DWQ as amended by State Water Board Order WQ 2013-0058-EXEC and any subsequent order, and this Order, the General Collection System WDR more clearly and specifically stipulates requirements for operation and maintenance and for reporting and mitigating sanitary sewer overflows. The Discharger and other governmental agencies that are discharging wastewater into the facility are required to obtain enrollment for regulation under Order No. 2006-0003-DWQ as amended by State Water Board Order WQ 2013-0058-EXEC and any subsequent order.

- b. **Biosolids Disposal Requirements**

- i. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with State Water Resources Control Board and California Department of Resources Recycling and Recovery's joint regulations (Title 27) of the California Code of Regulations and approved by the Regional Water Board's Executive Officer.

- ii. The use and disposal of biosolids shall comply with existing Federal and State laws and regulations and local government ordinances, including conditions in 40 CFR 503, which include pollutant, pathogen reduction, and vector attraction reduction requirements for the use or disposal practice selected.
 - iii. Any proposed change in biosolids use or disposal practice from a previously approved practice should be reported to the Executive Officer and EPA Regional Administrator at least 90 days in advance of the change. The Discharger must submit a detailed use or disposal plan to this Regional Water Board and EPA Regional Administrator for review and approval prior to changing the use or disposal practice.
 - iv. The Discharger shall take all reasonable steps to minimize or prevent any discharge or biosolids use or disposal that has the potential of adversely affecting human health or the environment.
- c. **Pretreatment Program**
- i. The Discharger shall update as necessary and implement an acceptable pretreatment program.
 - ii. The Discharger shall update as necessary the appropriate contractual agreements with all governmental agencies⁷. The contractual agreements shall give the Discharger the authority to implement and enforce the USEPA approved pretreatment program within the sewer service areas of the treatment facility. The Discharger shall assure that any other steps necessary to provide this implementation and enforcement authority (e.g. adoption of ordinances, etc.) are taken by all governmental agencies. If a governmental agency has an USEPA approved pretreatment program for any portion of the service area of the treatment facility, the Discharger's pretreatment program shall contain provisions ensuring that that governmental agency's program is implemented. In the event that any agency discharging to the Discharger's facility fails to effectively implement its individual USEPA approved pretreatment program, the Discharger shall implement and enforce its approved program within that agency's service area.
 - iii. The Discharger shall ensure that the pretreatment programs for all contributory agencies discharging to the Discharger's treatment facility are implemented and enforced. The Discharger shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR 403, including any subsequent regulatory revisions to Part 403. Where Part 403 or subsequent

⁷ Member agencies and sewerage agencies discharging wastewater into the facility.

revisions place mandatory actions upon the Discharger as Control Authority but does not specify a timetable for completion of the actions, the Discharger shall submit for approval of the Regional Water Board's Executive Officer, a schedule for implementation of the required actions and shall implement the approved schedule. The schedule for implementation shall be submitted within six months from the date that such mandatory actions are established. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines and other remedies by the USEPA, or other appropriate parties, as provided in the CWA, as amended (33 USC 1351 et seq.). The USEPA or the Regional Water Board may also initiate enforcement action against an industrial user (IU) for non-compliance with applicable standards and requirements as provided in the CWA.

- iv. The Discharger shall perform the pretreatment functions as required in 40 CFR Part 403 including, but not limited to:
 - (a) Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;
 - (b) Implement the necessary legal authorities as provided in 40 CFR 403.8(f)(1);
 - (c) Implement the programmatic functions as provided in 40 CFR 403.8(f)(2);
 - (d) Publish a list of significant non-compliance as required by 40 CFR 403.8(f)(2)(vii); and
 - (e) Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3).
- v. The following wastes shall not be introduced into the treatment works:
 - (a) Wastes which create a fire or explosion hazard in the treatment works;
 - (b) Wastes which will cause corrosive structural damage to treatment works, but, in no case, wastes with a pH lower than 5.0 unless the works are designed to accommodate such wastes;
 - (c) Wastes at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency;
 - (d) Solid or viscous wastes in amounts that would cause obstruction to the flow in sewers or otherwise interfere with the proper operation of the treatment works.

- vi. The Discharger shall ensure compliance with any existing or future pretreatment standard promulgated by USEPA under Section 307 of the CWA or amendments thereto for any discharge to the municipal system.
- vii. 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.
- viii. The Discharger shall require each user not in compliance with any pretreatment standard to submit periodic notice (over intervals not to exceed nine months) of progress toward compliance with applicable toxic and pretreatment standards developed pursuant to the CWA or amendments thereto. The Discharger shall forward a copy of such notice to the Regional Water Board and to the USEPA Regional Administrator.

6. Other Special Provisions – Not Applicable

7. Compliance Schedules – Not Applicable

VII. COMPLIANCE DETERMINATION

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

A. General

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the minimum (ML).

B. Average Monthly Effluent Limitation (AMEL)

If the average, or when applicable, the median for multiple sample data (see subsection G, below), of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, 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). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger may be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

C. Average Weekly Effluent Limitation (AWEL)

If the average, or when applicable, the median for multiple sample data (see subsection G, below), of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger may be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger may be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

D. Maximum Daily Effluent Limitation (MDEL)

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

E. Instantaneous Minimum Effluent Limitation

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, 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).

F. Instantaneous Maximum Effluent Limitation

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger may be considered out of compliance for that parameter for that single sample. Non-compliance for each sample may 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).

G. Multiple Sample Data

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

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

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

H. 12-Month Running Average Effluent TDS Limitation

Compliance with the 12-month running average limits under Effluent Limitations and Discharge Specifications IV.A.1.c., IV.B.2., and IV.C.2.b. shall be determined by the arithmetic mean of the last twelve monthly averages.

I. TDS Increment Limit

Compliance with Effluent Limitations and Discharge Specifications IV.A.1.c.ii., IV.B.2.b., and IV.C.2.b.ii. may be determined by comparing the flow weighted TDS quality of the influent or secondary effluent to the flow weighted TDS water supply quality.

J. Total Chlorine Residual Limitation (TCR)

Compliance determinations for total chlorine residual shall be based on 99% compliance. To determine 99% compliance with the effluent limitation for total chlorine residual, the following conditions shall be satisfied:

1. The total time during which the total chlorine residuals values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month;
2. No individual excursion from 0.1 mg/L value shall exceed 5 minutes; and
3. No individual excursion shall exceed 5.0 mg/L.

K. Turbidity Limitations

The Discharger shall be considered in compliance with Discharge Specifications IV.A.1.e.i., IV.B.5.a. and IV.C.2.c.i. if the following conditions are met. If the Discharger is using a properly operating backup turbidimeter, the reading of the backup turbidimeter shall be considered in determining whether there has been an actual noncompliance:

1. There are no excursions above the limits specified in Discharge Specifications IV.A.1.e.i.(a) and (b), IV.B.5.a.i. and ii., and IV.C.2.c.i.(a) and (b);
2. Exceedances of the "10 NTU at any time" turbidity requirement do not exceed a duration of one minute.
3. The apparent exceedance was caused by interference with, or malfunction of, the monitoring instrument.

L. Coliform Organism Effluent Limitations

1. Compliance with the 7-day median total coliform limit expressed in Discharge Specification IV.A.1.e.iii, IV.A.2.c., IV.B.5.c., and IV.C.2.c.iii. shall be based on a median of test results from the previous 7 days. To comply with the limit, the 7-day median MPN must not exceed 2.2 per 100 milliliters on any day during the week. However, only one violation is recorded for each calendar week, even if the 7-day median MPN value is greater than 2.2 for more than one day in the week.
2. Compliance with the 7-day median total coliform limit expressed in Discharge Specification IV.A.2.c. shall be based on a median of test results from the previous 7 days. To comply with the limit, the 7-day median MPN must not exceed 23 per 100 milliliters on any day during the week. However, only one violation is recorded for each calendar week, even if the 7-day median MPN value is greater than 23 for more than one day in the week.

M. pH Effluent Limitations

Pursuant to 40 CFR 401.17, the Discharger shall be in compliance with the pH limitations specified in the Discharge Specification IV.A.1.g., provided that both of the following conditions are satisfied:

1. The total time during which the pH values are outside the required range of 6.5-8.5 pH values shall not exceed 7 hours and 26 minutes in any calendar month; and
2. No individual excursion from the range of pH values shall exceed 60 minutes.

N. Priority Pollutants

The Discharger shall be deemed out of compliance with an effluent limitation if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation.

1. Compliance determination shall be based on the reporting level selected from minimum level (ML)⁸ specified in Attachment H of this Order, unless an alternative reporting level is approved by the Regional Water Board's Executive Officer. When there is more than one ML value for a given substance, the Discharger shall select the ML value that is below the calculated effluent limitation, and use its associated analytical method, listed in Attachment H of this Order. If no ML value is below the effluent limitation, then the Regional Water

⁸ Minimum level is the concentration at which the entire analytical system must give a recognizable signal and acceptable 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.

Board will select as the reporting level the lowest ML value and its associated analytical method.

2. When determining compliance with an average monthly limit and more than one sample result is available in a month, 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, 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. If a sample result, or the arithmetic mean or median of multiple sample results, is below the reporting level, and there is evidence that the priority pollutant is present in the effluent above an effluent limitation and the Discharger conducts a pollutant minimization program (PMP)⁹ the Discharger shall not be deemed out of compliance.

O. Compliance Determination

Compliance determinations shall be based on available analyses for the time interval associated with the effluent limitation. Where only one sample analysis is available in a specified time interval (e. g., monthly or weekly average), that sample shall serve to characterize the discharge for the entire interval. If quarterly sample results show noncompliance with the average monthly limit and that sample result is used for compliance determinations for each month of the quarter, then three separate violations of the average monthly limit shall be deemed to have occurred.

Compliance with a single effluent limitation which applies to a group of chemicals (e.g., PCBs), based on a single sample shall be determined by considering the concentrations of individual members of the group to be zero if the analytical response for the individual chemical falls below the method detection limit (MDL) for that chemical.

⁹ 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.

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)

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

$$\text{Arithmetic mean} = \mu = \Sigma x / n$$

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

Average Monthly Effluent Limitation (AMEL)

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

Average Weekly Effluent Limitation (AWEL)

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

Best Management Practices (BMPs)

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 storm water. BMPs include structural and non-structural controls, and operation and maintenance procedures, which can be applied before, during, and/or after pollution producing activities.

Bioaccumulative Pollutants

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

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.

Criteria Continuous Concentration (CCC)

CCC equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects.

Criteria Maximum Concentration (CMC)

CMC equals the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects.

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.

Dilution Ratio is the critical low flow of the upstream receiving water divided by the flow of the effluent discharged.

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 USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays

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

Estimated Chemical Concentration

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

Estuaries

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

Existing Discharger

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

Infeasible

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

Inland Surface Waters

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

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

Load Allocation (LA)

Portion of receiving water’s total maximum daily load that is allocated to one of its nonpoint sources of pollution or to natural background sources.

Maximum Daily Flow

Maximum flow sample of all samples collected in a calendar day.

Maximum Daily Effluent Limitation (MDEL)

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

the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median

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

Method Detection Limit (MDL)

MDL is the minimum concentration of a substance that can be 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.

Not Detected (ND)

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

Persistent Pollutants

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

Pollutant Minimization Program (PMP)

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

Pollution Prevention

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

Process Optimization

Process optimization means minor changes to the existing facility and treatment plant operations that optimize the effectiveness of the existing treatment processes.

Public Entity

Public entity includes the federal government or a state, county, city and county, city, district, public authority, or public agency.

Reporting Level (RL)

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

Source of Drinking Water

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

Standard Deviation (σ)

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

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

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

Total Maximum Daily Load (TMDL)

The sum of the individual WLAs for point sources and LAs for non point sources and natural background. If a receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure. If Best Management Practices (BMPs) or other nonpoint source pollution controls make more stringent load allocations practicable, then waste load allocations can be made less stringent. Thus, the TMDL process provides for nonpoint source control tradeoffs.

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.)

Use Attainability Analysis

Use Attainability Analysis is a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological and economic factors as described in 40 CFR 131.10(g) (40 CFR 131.3, revised as of July 1, 1997).

Wasteload Allocation (WLA)

Portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation.

Water Effect Ratio (WER)

An appropriate measure of the toxicity of a material obtained in a site water divided by the same measure of the toxicity of the same material obtained simultaneously in a laboratory dilution water.

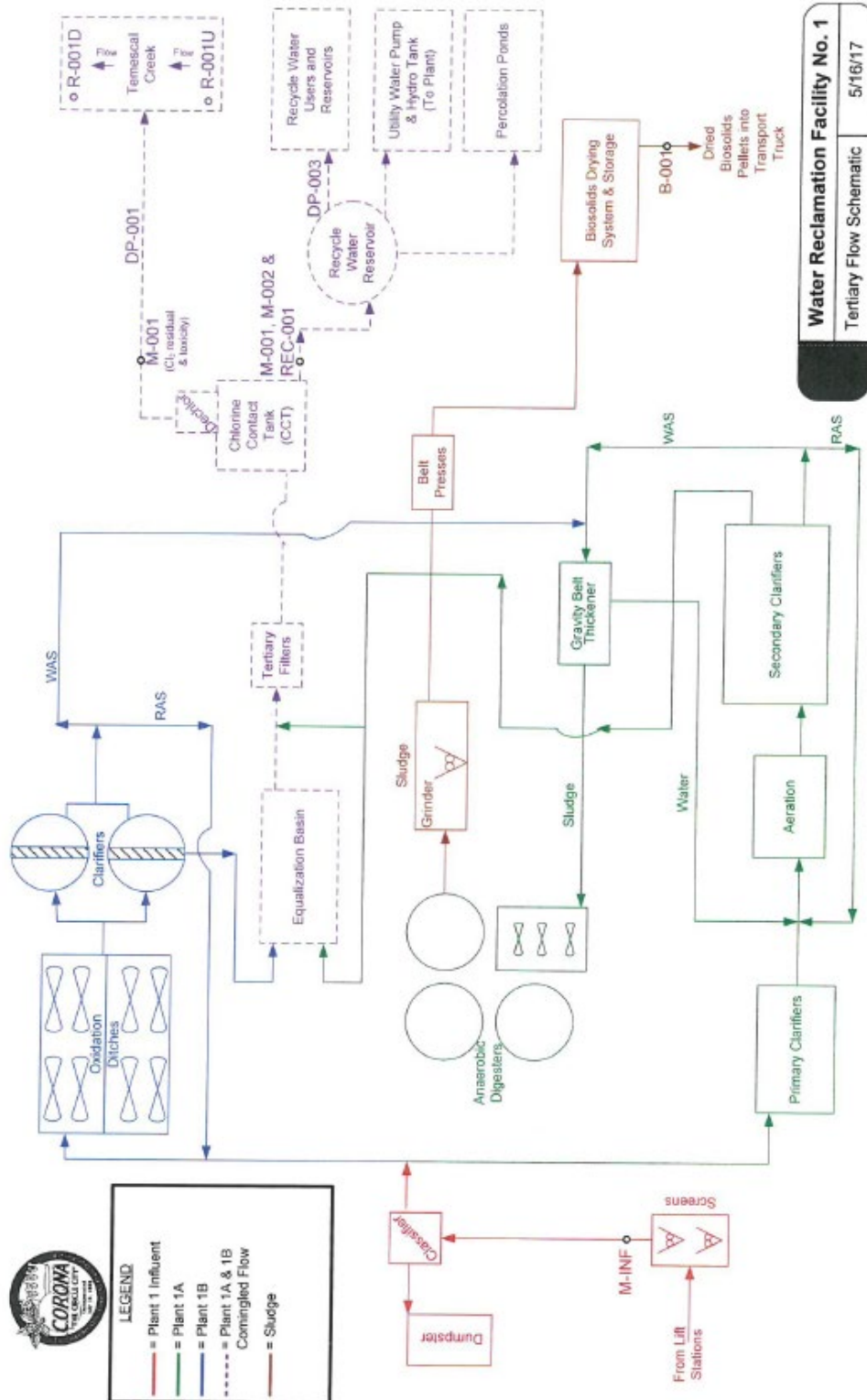
12-Month Running Average Effluent Limitation (12-MRAEL):

Highest allowable average of monthly discharges over last twelve months, calculated as the sum of all monthly discharges measured during last twelve months divided by the number of monthly discharges measured during that time period.

Attachment B – Map



Attachment C – Flow Schematic



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

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

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

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

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, U.S. EPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (33 U.S.C. § 1318(a)(4)(B); 40 CFR § 122.41(i); Wat. Code, §§ 13267, 13383):

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

G. Bypass

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

- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR § 122.41(m)(4)(i)(B)); and
 - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 122.41(m)(4)(ii).)
5. Notice
- a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass. The notice shall be sent to the Regional Water Board. As of December 21, 2020, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(m)(3)(i).)
 - b. Unanticipated bypass. The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). The notice shall be sent to the Regional Water Board. As of December 21, 2020, all notices must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(m)(3)(ii).)

H. Upset

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

- 1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that

noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR § 122.41(n)(2).)

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

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

III. STANDARD PROVISIONS – MONITORING

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

- B.** Monitoring must be conducted according to test procedures approved under 40 CFR part 136 for the analyses of pollutants unless another method is required under 40 CFR chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 CFR part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:
1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
 2. The method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter 1, subchapter N for the measured pollutant or pollutant parameter.

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

IV. STANDARD PROVISIONS – RECORDS

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

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

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or U.S. EPA within a reasonable time, any information which the Regional Water Board, State Water Board, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or U.S. EPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); Wat. Code, §§ 13267, 13383.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, V.B.5, and V.B.6 below. (40 CFR § 122.41(k).)
2. All permit applications shall be signed by 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).)
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR § 122.22(b)(1));
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR § 122.22(b)(2)); and
 - c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 CFR § 122.22(b)(3).)

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

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

6. Any person providing the electronic signature for documents described in Standard Provisions – V.B.1, V.B.2, or V.B.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting V.B, and shall ensure that all relevant requirements of 40 CFR part 3 (Cross-Media Electronic Reporting) and 40 CFR part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R § 122.22(e).)

C. Monitoring Reports

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

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

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

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

As of December 21, 2020, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted to the Regional Water Board and must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J. The reports shall comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 CFR § 122.41(l)(6)(i).)

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

F. Planned Changes

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

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

G. Anticipated Noncompliance

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

H. Other Noncompliance

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

I. Other Information

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

J. Initial Recipient for Electronic Reporting Data

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

VI. STANDARD PROVISIONS – ENFORCEMENT

The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13268, 13350, 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 CFR § 122.42(b)):

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 CFR § 122.42(b)(1)); and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 CFR § 122.42(b)(2).)
3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 CFR § 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

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

I. GENERAL MONITORING PROVISIONS

- A. All sampling and sample preservation shall be in accordance with the current edition of “*Standard Methods for the Examination of Water and Wastewater*” (American Public Health Association), or 40 CFR 136 “Guidelines Establishing Test Procedures for the Analysis of Pollutants,” promulgated by the United States Environmental Protection Agency (USEPA).
- B. All laboratory analyses shall be performed in accordance with test procedures under 40 CFR 136 “Guidelines Establishing Test Procedures for the Analysis of Pollutants,” promulgated by the USEPA, unless otherwise specified in this MRP. In addition, the Regional Water Board and/or USEPA, at their discretion, may specify test methods that are more sensitive than those specified in 40 CFR 136 (see also I.F., below).
- C. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the California State Water Resources Control Board’s (State Water Board’s) Division of Drinking Water (DDW) in accordance with Water Code Section 13176, or at laboratories approved by the Regional Water Board’s Executive Officer or the USEPA.
- D. In conformance with federal regulations 40 CFR 122.45(c), analyses to determine compliance with the effluent limitations for metals shall be conducted using the total recoverable method. For Chromium (VI), the dissolved method in conformance with 40 CFR 136 may be used to measure compliance with the Chromium (VI) limitation.
- E. The Discharger shall require its laboratory to participate in the annual DMR-QA Study Program. There are two options to satisfy the requirements of the DMR-QA Study Program: (1) The Discharger can require its laboratory to obtain and analyze a DMR-QA sample as part of the DMR-QA Study; or (2) Per the waiver issued by USEPA to the State Water Board, the Discharger can submit the results of the most recent Water Pollution Performance Evaluation Study from its laboratory. The Discharger shall ensure that the results of the DMR-QA Study or the results of the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board.
- F. For all monitoring required by this MRP, including effluent monitoring, receiving water monitoring and for those priority pollutants without effluent limitations:
 - 1. The Discharger shall select a sufficiently sensitive test method from Attachment H, a method described in the current edition of 40 CFR part 136 or approved by

USEPA (such as the 1600 series) if authorized by the Regional Water Board, unless a particular method and/or minimum level (ML)¹ is required in the MRP. The Discharger shall further require its testing laboratory to quantify constituent concentrations to the lowest achievable ML and MDL² that corresponds to the selected method and the ML must be equal or lower than the effluent limitations, or for analysis of priority pollutants without effluent limitation, the ML must be equal or lower than the trigger concentration value listed in Attachment I of this Order. In situations where the priority pollutant trigger concentration value, as specified for that pollutant in Attachment I is below the ML and the Discharger cannot achieve a MDL for the pollutant below the ML value, the Discharger shall submit justification why a lower MDL value cannot be achieved. Justification shall be submitted together with monthly monitoring reports. Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Water Board will reject the quantified laboratory data if quality control data is unavailable or unacceptable.

2. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
 - a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
 - b. Sample results less than the reported ML, but greater than or equal to the laboratory's current Method Detection Limit (MDL), shall be reported as "Detected, but Not Quantified," or "DNQ." The estimated chemical concentration of the sample shall also be reported.
 - c. Sample results not detected above the laboratory's MDL shall be reported as "not detected" or "ND."
3. The Discharger shall submit to the Regional Water Board reports necessary to determine compliance with effluent limitations in this Order and shall follow the chemical nomenclature and sequential order of priority pollutant constituents shown in Attachment "G" – Priority Pollutant Lists. The Discharger shall report with each sample result:
 - a. The minimum level achieved by the testing laboratory; and

¹ Minimum level is the concentration at which the entire analytical system must give a recognizable signal and acceptable 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.

² MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analytical concentration is greater than zero, as defined in 40 CFR 136, Appendix B.

- b. The laboratory’s current MDL, as determined by the procedure found in 40 CFR 136.
- G. For non-priority pollutants monitoring, all analytical data shall be reported with identification of practical quantitation levels and with method detection limits, as determined by the procedure found in 40 CFR 136.
- H. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. When requested by the Regional Water Board or USEPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study.
- I. The Discharger shall multiply each measured or estimated congener concentration by its respective toxic equivalency factor (TEF) as shown below and report the sum of these values. The discharger shall use the USEPA approved test method 1613 for dioxins and furans.

Toxic Equivalency Factors for 2,3,7,8-TCDD Equivalents	
Congener	TEF ³
2,3,7,8-TCDD	1.0
1,2,3,7,8-PeCDD	1.0
1,2,3,4,7,8-HxCDD	0.1
1,2,3,6,7,8-HxCDD	0.1
1,2,3,7,8,9-HxCDD	0.1
1,2,3,4,6,7,8-HpCDD	0.01
OCDD	0.0003
2,3,7,8-TCDF	0.1
1,2,3,7,8-PeCDF	0.03
2,3,4,7,8-PeCDF	0.3
1,2,3,4,7,8-HxCDF	0.1
1,2,3,6,7,8-HxCDF	0.1
1,2,3,7,8,9-HxCDF	0.1
2,3,4,6,7,8-HxCDF	0.1
1,2,3,4,6,7,8-HpCDF	0.01
1,2,3,4,7,8,9-HpCDF	0.01
OCDF	0.0003

The Discharger shall require its testing laboratory to follow the nomenclature and sequential order of the congeners shown in the TEF table above.

- J. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, the

³ These values are based on the 2005 World Health Organization (WHO) dioxin toxicity equivalence factors (TEFs).

actions undertaken or proposed that will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when compliance with the time schedule has been achieved.

- K.** The Discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years (this retention period supersedes the retention period specified in Section IV.A. of Attachment D) from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Regional Water Board at any time. Records of monitoring information shall include:
1. The information listed in Attachment D – IV Standard Provisions – Records, subparagraph B. of this Order;
 2. The laboratory which performed the analyses;
 3. The date(s) analyses were performed;
 4. The individual(s) who performed the analyses;
 5. The modification(s) to analytical techniques or methods used;
 6. All sampling and analytical results, including:
 - a. Units of measurement used;
 - b. Minimum reporting level for the analysis (minimum level, practical quantitation level (PQL));
 - c. Results less than the reporting level but above the method detection limit (MDL);
 - d. Data qualifiers and a description of the qualifiers;
 - e. Quality control test results (and a written copy of the laboratory quality assurance plan);
 - f. Dilution factors, if used; and
 - g. Sample matrix type.
 7. All monitoring equipment calibration and maintenance records;
 8. All original strip charts from continuous monitoring devices;
 9. All data used to complete the application for this Order; and
 10. Copies of all reports required by this Order.
 11. Electronic data and information generated by the Supervisory Control and Data Acquisition (SCADA) System.
- L.** The flow measurement system shall be calibrated at least once per year or more frequently, to ensure continued accuracy.
- M.** All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to

ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for greater than a 24-hour period, the Discharger shall obtain a representative grab sample each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. In its monitoring report, the Discharger shall specify the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.

N. Monitoring and reporting shall be in accordance with the following:

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. The monitoring and reporting of influent, effluent, and sludge shall be done more frequently as necessary to maintain compliance with this Order and/or as specified in this Order.
3. Whenever the Discharger monitors any pollutant more frequently than is required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Regional Water Board's Executive Officer.
4. A "grab" sample is defined as any individual sample collected in less than 15 minutes.
5. A composite sample is defined as a combination of no fewer than eight individual grab samples obtained over the specified sampling period. The volume of each individual grab sample shall be proportional to the discharge flow rate at the time of sampling. The compositing period shall equal the specific sampling period, or 24 hours, if no period is specified.
6. 24-hour composite samples shall be collected during a 24-hour operation of the facility.
7. Daily samples shall be collected on each day of the week.
8. Monthly samples shall be collected on any representative day of each month.
9. Quarterly samples: A representative grab sample shall be taken on any representative day of January, April, July, and October and test results shall be reported in either micrograms/liter ($\mu\text{g/L}$) or milligrams/liter (mg/L), as appropriate, by the last day of the month following the month that the sample was taken.
10. Semi-annual samples shall be collected in January and July.

11. Annual samples shall be collected in accordance with the following schedule:

Table E-1. Annual Sampling Schedule

Year	Annual Samples
2021	April
2022	July
2023	October
2024	January
2025	April

In the event that the permit is administratively continued beyond 2025, this pattern for Annual Sampling months, as shown in the table above, shall continue to be followed.

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

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

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

II. MONITORING LOCATIONS

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

Table E-2. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description	Latitude	Longitude
--	M-INF	Plant No. 1 influent at the headworks	33°53'25" N	117°36'35" W
001	M-001	Discharge to Temescal Creek after dichlorination chamber	33°53'43" N	117°36'38" W
002	M-002	Discharge to percolation ponds	33°53'34" N	117°36'36" W
003	REC-001	Recycled Water in the effluent chamber of chlorine contact tank	33°53'35" N	117°36'34" W

Discharge Point Name	Monitoring Location Name	Monitoring Location Description	Latitude	Longitude
--	R-001U	100 feet upstream of Creek discharge	33°53'42" N	117°36'33" W
--	R-001D	500 feet downstream of Creek discharge	33°53'42" N	117°36'42" W

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location M-INF

1. Sampling stations shall be established for the points of inflow to the treatment plant. The sampling station(s) shall be located upstream of any in-plant return flows and where representative sample(s) of the influent of the treatment plant can be obtained.
2. The Discharger shall monitor the influent to the facility at M-INF 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-3. Influent Monitoring at M-INF

Parameter	Units	Sample Type	Minimum Sampling Frequency (See I.N., above)	Required Analytical Test Method
Flow	MGD	Totalizer/Recorder	Continuous	--
Specific Conductance	µmhos/cm	Recorder	"	See I.B., above
pH	pH units	"	"	"
Biochemical Oxygen Demand, 5-day @ 20°C (BOD ₅)	mg/L	Composite	Weekly	"
Total Suspended Solids (TSS)	mg/L	Composite	Weekly	"
Total Inorganic Nitrogen (TIN)	mg/L	Grab	Monthly	"
Ammonia-Nitrogen	mg/L	Grab	"	"
Total Dissolved Solids (TDS)	mg/L	Composite	"	"
Aluminum	mg/L	Composite	Quarterly	"
Boron	"	"	"	"
Chloride	"	"	"	"
Manganese	"	"	"	"
Sulfate	"	"	"	"
Total Hardness	"	"	"	"
Fluoride	"	"	"	"

Parameter	Units	Sample Type	Minimum Sampling Frequency (See I.N., above)	Required Analytical Test Method
Arsenic	µg/L	“	“	“
Total Chromium or Chromium (VI)	µg/L	“	“	“
Total Recoverable Copper	“	“	“	“
Total Recoverable Lead	“	“	“	“
Total Recoverable Selenium	“	“	“	“
Cyanide (Free) ⁴	“	Grab	“	“
2,3,7,8-TCDD (Dioxins/Furans TEQs) ⁵	pg/L	Composite	“	“
Chlorodibromomethane	µg/L	“	“	“
Dichlorobromomethane	“	“	“	“
Bis(2-ethylhexyl) Phthalate	“	“	“	“
beta-BHC	“	“	“	“
4,4'-DDT	“	“	“	“
4,4'-DDE	“	“	“	“
Dieldrin	“	“	“	“
Heptachlor	“	“	“	“
Heptachlor Epoxide	“	“	“	“
Volatile Organic Portion of EPA Priority Pollutants (See Attachment G)	µg/L	Grab	Annually	See I.B. above, of this MRP
Remaining Priority Pollutants (See Attachment G)	“	Composite	“	“

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location M-001

1. The Discharger shall monitor tertiary treated effluent at M-001 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:

⁴ Free cyanide is measured as aquatic free cyanide (ASTM Method D7237) without sodium hydroxide (NaOH) preservation.

⁵ The reported 2,3,7,8-TCDD concentration shall be the sum of the dioxin toxicity equivalence (TEQ) concentrations of the 17 chlorinated dibenzo-p-dioxins (CDDs) and chlorinated dibenzofurans (CDFs) detected and calculated with the use of the 2005 World Health Organization (WHO) dioxin toxicity equivalence factors (TEFs), as listed in Section I.J. of the MRP, above.

Table E-4. Effluent Monitoring at M-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Flow	MGD	Recorder/Tot alizer	Continuous	--
Specific Conductance	µmhos/cm	Recorder	"	See I.B., above
pH	pH units	"	"	"
Turbidity ⁶	NTU	"	"	"
CT ⁷	mg/L-min	"	"	"
Total Residual Chlorine	mg/L	"	"	"
Coliform Organisms	MPN/100 ml	Grab	Daily	"
Total Suspended Solids	mg/L	Composite	"	"
Ammonia-Nitrogen	"	"	"	"
BOD ₅	"	"	Weekly	"
Total Dissolved Solids	"	"	Monthly	"
Total Hardness	"	"	"	"
Total Inorganic Nitrogen	"	"	"	"
Nitrate-Nitrogen	"	"	"	"
Toxicity Monitoring	TUc	"	"	See Section V., below
Total Chromium or Chromium (VI)	µg/L	"	"	See I.B. and I.F., above
Total Recoverable Copper	"	"	"	"
Total Recoverable Lead	"	"	"	"

⁶ Turbidity analysis shall be continuous, performed by a continuous recording turbidimeter. Compliance with the daily average operating filter effluent turbidity shall be determined by averaging the levels of recorded turbidity taken at a minimum of four-hour intervals over a 24-hour period. The results of the daily average turbidity determinations shall be reported monthly.

⁷ CT is the product of total chlorine residual and modal contact time measured at the same point.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Total Recoverable Selenium	“	“	“	“
Cyanide (Free)	“	Grab	“	“
2,3,7,8-TCDD (Dioxins/Furans TEQs) ⁸	pg/L	Composite	“	“
Chlorodibromomethane	µg/L	“	Monthly	“
Dichlorobromomethane	“	“	Monthly	“
Bis (2-ethylhexyl) Phthalate	“	“	Monthly	“
beta-BHC	“	“	Monthly	“
4,4'-DDT	“	“	Monthly	“
4,4'-DDE	“	“	Monthly	“
Dieldrin	“	“	Monthly	“
Heptachlor	“	“	Monthly	“
Heptachlor Epoxide	“	“	Monthly	“
Aluminum	mg/L	“	Quarterly	See I.B., above
Bicarbonate	“	“	“	“
Boron	“	“	“	“
Calcium	“	“	“	“
Carbonate	“	“	“	“
Chloride	“	“	“	“
Fluoride	“	“	“	“
Iron	“	“	“	“
Magnesium	“	“	“	“
Manganese	“	“	“	“
Sodium	“	“	“	“

⁸ The reported 2,3,7,8-TCDD concentration shall be the sum of the dioxin toxicity equivalence (TEQ) concentrations of the 17 chlorinated dibenzo-p-dioxins (CDDs) and chlorinated dibenzofurans (CDFs) detected and calculated with the use of the 2005 World Health Organization (WHO) dioxin toxicity equivalence factors (TEFs), as listed in Section I.J. of the MRP, above.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Sulfate	"	"	"	"
Barium	"	"	"	"
Cobalt	"	"	"	"
Antimony	µg/L	"	"	"
Arsenic	"	"	"	"
Total Recoverable Cadmium	"	"	"	"
Total Recoverable Silver	"	"	"	"
Total Recoverable Zinc	"	"	"	"
Acrolein	µg/L	"	Quarterly (See Section IV.A.3., below)	See I.B. and I.F., above
Acrylonitrile	"	"	"	"
Bromoform	"	"	"	"
Carbon Tetrachloride	"	"	"	"
Chloroethane	"	"	"	"
Chloroform	"	"	"	"
4,4'-DDD	"	"	"	"
1,3-Dichloropropylene	"	"	"	"
Ethylbenzene	"	"	"	"
Methyl Bromide	"	"	"	"
Methyl Chloride	"	"	"	"
Methylene Chloride	"	"	"	"
Toluene	"	"	"	"
N-Nitrosodimethylamine	"	"	"	"
alpha-BHC	"	"	"	"
gamma-BHC	"	"	"	"
delta-BHC	"	"	"	"
alpha-Endosulfan	"	"	"	"
Endosulfan Sulfate	"	"	"	"
Endrin	"	"	"	"

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Remaining Volatile Organic Portion of EPA Priority Pollutants (See Attachment G)	“	Grab	Annually (See Section IV.A.3., below)	“
Remaining Priority Pollutants (See Attachment G)	“	Composite	“	“

2. The monitoring frequency for those priority pollutants that are detected during the required quarterly monitoring at a concentration greater than the concentration specified for that pollutant⁹ in Attachment I shall be accelerated to monthly. To return to the monitoring frequency specified, the Discharger shall request and receive approval from the Regional Water Board’s Executive Officer or designee.
3. The monitoring frequency for those priority pollutants that are detected during the required annual monitoring at a concentration greater than the concentration specified for that pollutant⁹ in Attachment I shall be accelerated to quarterly for one year. To return to the monitoring frequency specified, the Discharger shall request and receive approval from the Regional Water Board’s Executive Officer or designee.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity Testing.

1. The Discharger shall conduct critical life stage chronic toxicity testing in accordance with Method 1002.0 - Survival and Reproduction test for water flea, *Ceriodaphnia dubia* as specified in "Short term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", Fourth Edition, Environmental Monitoring Systems Laboratory, U.S. Environmental Protection Agency 2002, Cincinnati, Ohio (October 2002, EPA-821-R-02-013).
2. The Discharger shall establish procedures to ensure that the toxicity testing laboratory notifies the Discharger of the results of toxicity testing within twenty-four hours of completing such tests.
3. A minimum of one monthly chronic toxicity test shall be conducted on representative composite samples. The chronic toxicity test results shall be submitted with monthly Self-Monitoring Reports.

⁹ For those priority pollutants without specified criteria values, accelerated monitoring is not required.

4. Results for both survival and reproduction endpoints shall be reported in TUc, where TUc = 100/NOEC or 100/ICp or ECp (p is the percent effluent). The no observed effect concentration (NOEC) is the highest concentration of toxicant to which organisms are exposed in a chronic test, that causes no observable adverse effect on the tests organisms (e.g., the highest concentration of toxicant to which the values for the observed responses are not statistically significant different from the controls). The inhibition concentration (IC) is a point estimate of the toxicant concentration that causes a given percent reduction in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (the EPA Interpolation Method). The effective concentration (EC) is a point estimate of the toxicant concentration that would cause a given percent reduction in quantal biological measurement (e.g., larval development, survival) calculated from a continuous model (e.g., probit).
5. The Discharger shall increase the frequency of chronic toxicity testing to every two weeks whenever any test result exceeds 1.0 TUc. The first test under the accelerated schedule shall be conducted within two weeks of receiving notice of the test which exceeds 1.0 TUc, and every two weeks thereafter. The Discharger may resume the regular test schedule when two consecutive chronic toxicity tests result in 1.0 TUc, or when the results of the Initial Investigation Reduction Evaluation conducted by the Discharger have adequately addressed the identified toxicity problem.
6. The presence of chronic toxicity shall be estimated as specified in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. EPA-821-R-02-013.
7. Additional Testing Requirements:
 - a. A series of at least five dilutions and a control will be tested. The series shall be within 60% to 100% effluent concentration.
 - b. If organisms are not cultured in-house, concurrent testing with reference toxicants shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicants shall also be conducted using the same test conditions as the effluent toxicity test (e.g., same test duration, etc.).
 - c. If either of the reference toxicant test or the effluent tests do not meet all test acceptability criteria as specified in the manual¹⁰, then the Discharger must re-sample and re-test within 14 days or as soon as the Discharger receives notification of failed tests.
 - d. Control and dilution water should be receiving water or lab water, as appropriate, as described in the manual. If the dilution water used is different

¹⁰ Refers to U.S. EPA Manual "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. 4th Edition. October 2002, EPA-821-R-02-013."

from the culture water, a second control, using culture water shall also be used.

8. Quality Assurance/Control:

- a. A quality assurance/quality control (QA/QC) program shall be instituted to verify the results of the effluent toxicity monitoring program. The QA/QC program shall include but shall not be limited to the following: (1) Selection of an independent testing laboratory; (2) Approval by the Regional Water Board's Executive Officer or Executive Officer's designee of the independent testing laboratory; (3) Once during the year, the Discharger shall split samples with the independent laboratory for conducting chronic toxicity testing; (4) Results from the independent laboratory shall be submitted to the Regional Water Board and the Discharger for evaluation; (5) The Discharger shall review the test acceptability criteria in accordance with the EPA test protocols, EPA-821-R-02-013.
 - b. Results from the independent laboratory of the annual QA/QC split samples are to be used for Quality Assurance/Quality Control (QA/QC) purposes only and not for purposes of determining compliance with other requirements of this Order.
- 9.** The use of alternative methods for measuring chronic toxicity may be considered by the Executive Officer on a case-by-case basis. The use of a different test species, in lieu of conducting the required test species may be considered/approved by the Regional Water Board Executive Officer on a case-by case basis upon submittal of the documentation supporting the Discharger's determination that a different species is more sensitive and appropriate.
- 10.** Reporting: Results of all toxicity testing conducted within the month following the reporting period shall be submitted monthly in accordance with "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", third edition, Environmental Monitoring Systems Laboratory, U.S. Environmental Protection Agency 1994, Cincinnati, Ohio (July 1994, EPA/600/4-91/002). The report shall include a determination of the median value of all chronic toxicity testing results conducted during the two previous months.
- 11.** Whenever an Initial Investigation Reduction Evaluation is conducted, the results of the evaluation shall be submitted upon completion. In addition, monthly status reports shall be submitted as part of the Discharger's monitoring report for the previous month.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

A. Monitoring Location M-002

The Discharger shall monitor tertiary treated effluent at Monitoring Location M-002 as follows:

Table E-5. Land Discharge Monitoring Requirements at M-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Recorder/Totalizer	Continuous	--
pH	pH units	Recorder	"	See I.B., above
Turbidity	NTU	"	"	"
CT	mg/L-min	"	"	"
Coliform	MPN/100 ml	Grab	Daily	"
TSS	mg/L	Composite	"	"
BOD ₅	"	"	Weekly	"
TDS	"	"	Monthly	"
TIN	"	"	"	"
Antimony	µg/L	"	Quarterly	See I.B. and I.F., above
Total Recoverable Cadmium	"	"	"	"
Cobalt	"	"	"	"
Total Recoverable Copper	"	"	"	"
Total Chromium or Chromium (VI)	"	"	"	"
Total Recoverable Lead	"	"	"	"
Total Recoverable Mercury	µg/L	"	"	"
Total Recoverable Selenium	"	"	"	"
Total Recoverable Silver	"	"	"	"
Cyanide (Free)	"	"	"	"
Remaining Priority Pollutants	"	"	Annually	"

VII. RECYCLING MONITORING REQUIREMENTS

A. Monitoring Location REC-001

The Discharger shall monitor recycled water at Monitoring Location REC-001 only when there is no effluent flow from Discharge Point 001. If monitoring is conducted at M-001 at the same time, then only the flow rate shall be measured at REC-001.

Table E-6. Recycled Water Monitoring Requirements at REC-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Recorder/Totalizer	Continuous	--
pH	pH units	Recorder	"	See I.B., above
CT	mg/L-min	"	"	"
Turbidity	NTU	"	"	"
TSS	mg/L	Composite	Daily	"
Coliform Organisms	MPN/100 ml	Grab	"	"
BOD ₅	mg/L	Composite	Weekly	"
TIN	"	"	Monthly	"
TDS	"	"	"	"

B. Monitoring Users

Whenever recycled water is supplied to a user, the Discharger shall record on a permanent log: the volume of recycled water supplied; the user of recycled water; the locations of those sites including the names of the groundwater management zones underlying the recycled water use sites; type of use (e.g. irrigation, industrial, etc.); and the dates at which water is supplied. The Discharger shall submit annually a summary report of the recorded information by groundwater management zone to the Regional Water Board by March 1 of each year.

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Location – Upstream Surface Water Monitoring

1. The Discharger shall monitor the flow in Butterfield Drain at Monitoring Location R-001U as follows:

Table E-7. Receiving Water Monitoring Requirements at R-001U

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dissolved Oxygen	mg/L	Grab	Weekly	--
Temperature	°C	"	"	--

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	pH units	“	“	--
Total Hardness	mg/L	“	Monthly	See I.B., above
EPA Priority Pollutants (see VIII.A.2., below)	µg/L	“	Quarterly	See I.B., I.C., and I.F., above

2. For the quarterly monitoring of the heavy metals EPA Priority Pollutants, the total recoverable metal concentrations shall be determined.

B. Monitoring Location – Downstream Surface Water Monitoring

The Discharger shall monitor the flow in Temescal Creek at Monitoring Location R-001D as follows:

Table E-8. Receiving Water Monitoring Requirements at R-001D

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dissolved Oxygen	mg/L	Grab	Weekly	--
Temperature	°C	“	“	--
pH	pH units	“	“	--
Color change, foam, deposition of material, odor	--	Observation	“	--

C. Regional Monitoring for Fish Flesh Testing

Unless otherwise directed by the Regional Water Board Executive Officer, the Discharger shall implement the approved plan for the annual sampling and testing of mercury levels in fish flesh samples collected from the Santa Ana River. The frequency of monitoring and submission of reports shall be as stipulated in the approved plan.

IX. OTHER MONITORING REQUIREMENTS

A. Biosolids Monitoring

1. The Discharger shall conduct biosolids monitoring as follows:

Table E-9. Biosolids Monitoring Requirements			
Parameter	Units	Sample Type	Minimum Sampling Frequency
Priority Pollutants	mg/kg	Grab	Semi-annual
Moisture Content	% solids	Grab	Quarterly

2. The Discharger shall maintain a permanent log of all the solids pumped and/or hauled away from the Facility for use/disposal elsewhere, including the date hauled, the volume or weight (in gallons or dry tons), type (screenings, grit, raw sludge, biosolids), application (agricultural, composting, etc.), and destination. The information shall be reported quarterly.
3. If biosolids are used for land application, including composting, the Discharger must monitor for the pollutants included in Table 1 of 40 CFR Section 503.13 at the frequencies specified in 40 CFR 503.16, which is determined by the amount (tonnage) of biosolids that is land applied or bagged/containerized for distribution, and demonstrate pollutant (40 CFR 503.13), pathogen and vector (40 CFR 503.15) attraction reductions that are specified for land application. In addition, if the biosolids are disposed at a landfill, the Discharger must conduct a paint filter test on a representative biosolids sample to determine if the biosolids are suitable for this type of disposal. The monitoring results must be submitted to USEPA Region 9 at the specified reporting frequency and format. The monitoring report must include details regarding the biosolids sample type (composite or grab) and monitoring location.

B. Stormwater Monitoring – Not Applicable

C. Water Supply Monitoring

1. At least once per year a sample of each source of the water supplied to the sewer area shall be obtained and analyzed for total dissolved solids.
2. Monthly reports shall be submitted stating the amount (in percentage or acre-feet) supplied to the sewer area from each source of water and the resulting flow-weighted water supply quality for total dissolved solids.

D. Pretreatment Monitoring and Reporting

1. The Discharger shall submit to the Regional Water Board and USEPA Region 9, a quarterly compliance status report. The quarterly compliance status reports shall cover the periods January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31. Each report shall be submitted by the end of the month following the quarter. This quarterly reporting requirement shall commence for the first full quarter following issuance of this Order. The reports shall identify:

- a. All significant industrial users (SIUs) which violated any standards or reporting requirements during that quarter;
 - b. The violations committed (distinguish between categorical and local limits);
 - c. The enforcement actions undertaken; and
 - d. The status of active enforcement actions from previous periods, including closeouts (facilities under previous enforcement actions which attained compliance during the quarter).
2. Annually, the Discharger shall submit a report to the Regional Water Board, the State Water Board and the USEPA Region 9 describing the pretreatment activities within the service area during the previous year. In the event that any control authority within the service area is not in compliance with any conditions or requirements of this Order or their approved pretreatment program (such as due to industrial user discharges, interjurisdictional agency agreement implementation issues, or other causes,) then the Discharger shall also include the reasons for non-compliance and state how and when the Discharger and the control authority shall comply with such conditions and requirements. This annual report shall cover operations from July 1 through June 30 of each fiscal year and is due on September 1 of each year. The report shall contain, but not be limited to the following information:
- a. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the POTW's influent and effluent wastewaters for those pollutants which are known or suspected to be discharged by industrial users (IUs) as identified by USEPA under Section 307(a) of the CWA. The summary will include the result of annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants¹¹ detected in the full scan. The Discharger shall also provide any influent or effluent monitoring data for non-priority pollutants that the Discharger believes may be causing or contributing to interference or pass-through, or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto.
 - b. A discussion of any upset, interference, or pass-through incidents at the treatment plant (if any), which the Discharger knows or suspects were caused by IUs of the POTW system. The discussion shall include the following:
 - i. The reasons why the incidents occurred, the corrective actions taken, and, if known, the name and address of the IU(s) responsible.
 - ii. A review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be

¹¹ The Discharger is not required to analyze for asbestos.

necessary to prevent pass through, interference or noncompliance with sludge disposal requirements.

- c. A complete and updated list of the Discharger's significant industrial users (SIUs), including names, Standard Industrial Classification (SIC) code(s) and addresses, and a list of any SIU deletions and/or additions. The Discharger shall provide a brief explanation for each deletion. The SIU list shall identify the SIUs subject to Federal Categorical Standards by specifying which set(s) of standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limitations more stringent than Federal Categorical Standards and those which are not subject to local limits.
- d. A list or table characterizing the industrial compliance status of each SIU, including:
 - i. SIU name;
 - ii. Industrial category;
 - iii. The type (processes) of wastewater treatment in place;
 - iv. Number of samples taken by the POTW during the year;
 - v. Number of samples taken by the SIU during the year;
 - vi. Whether all needed certifications (if allowed) were provided by SIUs which have limits for total toxic organics;
 - vii. Federal and Regional Standards violated during the year, reported separately;
 - viii. Whether the SIU at any time in the year was in Significant Noncompliance (SNC)¹², as defined by 40 CFR 403.12 (f)(2)(vii); and
 - ix. A summary of enforcement actions against the SIU taken during the year, including the type of action, final compliance date, and amount of fines assessed/collected (if any). Proposed actions, if known, should be included.
 - x. Number of inspections conducted at each SIU during the year.
- e. A compliance summary table which includes:
 - i. SIU's which were in SNC at any time during the year;
 - ii. The total number of SIUs which are in SNC with pretreatment compliance schedules during the year;
 - iii. The total number of notices of violation and administrative orders issued against SIUs during the year;

¹² SNC is determined at the beginning of each quarter based on data of the previous six months.

- iv. The total number of civil and criminal judicial actions filed against SIUs during the year;
 - v. The number of SIUs which were published as being in SNC during the year; and
 - vi. The number of IUs from which penalties were collected during the year.
 - f. A short description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to changes concerning:
 - i. The program's administrative structure;
 - ii. Local industrial discharge limitations;
 - iii. Monitoring program or monitoring frequencies;
 - iv. Legal authority or enforcement policy;
 - v. Funding mechanisms; and
 - vi. Resource requirements and/or staffing levels.
 - g. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.
 - h. A summary of public participation activities to involve and inform the public.
 - i. A description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report.
3. The cumulative number of industrial users that the Discharger has notified regarding Baseline Monitoring Reports and the cumulative number of industrial user responses.
4. The Discharger shall submit the quarterly compliance status reports and the annual pretreatment report to USEPA Region 9, the State Water Board, and the Regional Water Board.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. All analytical data shall be reported with method detection limit¹³ (MDLs) and with identification of either reporting level or limits of quantitation (LOQs).
3. Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Water Board will reject

¹³ The standardized test procedure to be used to determine the method detection limit (MDL) is given at Appendix B, 'Definition and Procedure for the Determination of the Method Detection Limit' of 40 CFR 136.

the quantified laboratory data if quality control data is unavailable or unacceptable.

4. Discharge monitoring data shall be submitted in a format acceptable by the Regional Water Board. Specific reporting format may include preprinted forms and/or electronic media. The results of all monitoring required by this Order shall be reported to the Regional Water Board and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order.
5. The Discharger shall tabulate the monitoring data to clearly illustrate compliance and/or noncompliance with the requirements of the Order.
6. The Discharger shall submit to the Regional Water Board reports necessary to determine compliance with effluent limitations in this Order and shall follow the chemical nomenclature and sequential order of priority pollutant constituents shown in Attachment G – Priority Pollutant Lists. The Discharger shall report with each sample result:
 - a. The minimum level achieved by the testing laboratory; and
 - b. The laboratory's current MDL, as determined by the procedure found in 40 CFR 136.
 - c. For receiving water monitoring and for those priority pollutants without effluent limitations, the Discharger shall require its testing laboratory to quantify constituent concentrations to the lowest achievable MDL as determined by the procedure found in 40 CFR 136. In situations where the most stringent applicable receiving water objective, freshwater or human health (consumption of organisms only), as specified for that pollutant in 40 CFR 131.38¹⁴, is below the minimum level value specified in Attachment "H" and the Discharger cannot achieve an MDL value for that pollutant below or equal to the ML value, the Discharger shall submit justification why a lower MDL value cannot be achieved. Justification shall be submitted together with monthly monitoring reports.
7. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, and of the actions undertaken or proposed that will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when compliance with the time schedule has been achieved.
8. The reports for June and December shall include a roster of plant personnel, including job titles, duties, and level of State certification for each individual.
9. The Discharger shall report monitoring results for specific parameters in accordance with the following table:

¹⁴ See Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations.

Table E-10. Monitoring Periods and Reporting Schedule

Parameter	Measurement
Flow	Daily Total Flow
pH	Daily High and Daily Low
Total Residual Chlorine	Daily Maximum
Electrical Conductivity	Daily High
Turbidity	Daily Maximum

10. The Discharger shall file a written report with the Regional Water Board within ninety (90) days after the average dry-weather waste flow for any month equals or exceeds 75 percent of the design capacity of the waste treatment and/or disposal facilities. The Discharger's senior administrative officer shall sign a letter which transmits that report and certifies that the policy making body is adequately informed about it. The report shall include:
 - a. Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for the day.
 - b. The Discharger's best estimate of when the average daily dry-weather flow rate will equal or exceed the design capacity of the treatment facilities.
 - c. The Discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

B. Self-Monitoring Reports (SMRs)

1. The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website https://www.waterboards.ca.gov/water_issues/programs/ciwqs/. The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. Additionally, the Discharger shall report in the SMR the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required by Special Provisions – VI.C. of this Order. The Discharger shall submit monthly, quarterly, and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

3. The Discharger shall report in a tabular format within CIWQS the duration of which the turbidity limits are exceeded (in minutes). The information shall be reported whenever the turbidity exceeds the effluent limits as specified in Effluent Limitations and Discharge Specifications section IV.A.1.e.i. of this Order
4. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-11. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Continuous	The effective date of this Order	All	Submit with monthly SMR
Daily	The effective date of this Order	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly SMR
Weekly	The effective date of this Order	Sunday through Saturday	Submit with monthly SMR
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1 st day of calendar month through last day of calendar month	First day of the second month following the reporting period, submit as monthly SMR
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	First day of the second month following the reporting period, submit as monthly SMR
Semiannually	Closest of January 1 or July 1 following (or on) permit effective date	January 1 through June 30 July 1 through December 31	First day of the second month following the reporting period, submit as monthly SMR
Annually	The effective date of this Order	January 1 through December 31	First day of the second month following the reporting period,

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
			submit as monthly SMR
Pretreatment Annual Report	The effective date of this Order	January 1 through December 31	September 1 st of each year

5. 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.
6. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
 - a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
 - b. Sample results less than the RL, but greater than or equal to the laboratory’s MDL, shall be reported as “Detected, but Not Quantified,” or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (\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.
7. Multiple Sample Data. When determining compliance with an AMEL, AWEL, or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of “Detected, but Not Quantified” (DNQ) or “Not Detected” (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
 - a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified

values (if any). The order of the individual ND or DNQ determinations is unimportant.

- b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
8. The Discharger shall submit SMRs in accordance with the following requirements:
- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

C. Discharge Monitoring Reports (DMRs)

1. DMRs are USEPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the DMR website at:

https://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring/

D. Other Reports

1. The Discharger shall report the results of any special studies, acute and chronic toxicity testing, TRE/TIE, and PMP, and Pollution Prevention Plan required by Special Provisions – VI.C. of this Order. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date in compliance with SMR reporting requirements described in subsection X.B.3, above.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Discharger/Facility Information

WDID	8 330108001
Discharger	City of Corona, Department of Water and Power
Name of Facility	Water Reclamation Facility No. 1
Facility Address	2205 Railroad Street
	Corona, CA 92880
	Riverside County
Legally Responsible Official	Tom Moody, General Manager, (951) 736-2477
Facility Contact, Title and Phone	Frank Garza, Chief Reclamation Officer, (951) 279-3665
Mailing Address	755 Public Safety Way, Corona, CA 92880
Billing Address	SAME
Type of Facility	Publicly Owned Treatment Works
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	Y
Recycling Requirements	Producer/User
Facility Permitted Flow	11.5 million gallons per day (MGD)
Facility Design Flow	11.5 MGD
Watershed	Santa Ana River Watershed
Receiving Water	Prado Basin Management Zone, Santa Ana River, Reach 3; Temescal and Bedford Groundwater Management Zones

Receiving Water Type	Freshwater River; Groundwater
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- A. The City of Corona, Department of Water & Power (hereinafter Discharger) is the owner and operator of the Water Reclamation Facility No. 1 (hereinafter Facility), a publicly owned treatment works (POTW) with tertiary treatment processes. The City of Corona leases the land from the U.S. Army Corps of Engineers at 2205 Railroad Street, Corona, CA 92880 on which the Facility is located.

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

- B. The Facility discharges wastewater to the Butterfield Drain, which is within the Prado Basin Management Zone (PBMZ). All surface water flows in the PBMZ ultimately enter Reach 3 of the Santa Ana River. The Santa Ana River and other surface streams within the PBMZ are waters of the United States. The Discharger was previously regulated by Order R8-2012-0008 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA8000383. The Discharger filed a report of waste discharge and submitted an application for reissuance of its waste discharge requirements (WDRs) and NPDES permit on June 26, 2017. Since the Discharger filed a timely application for renewal of its permit, the terms and conditions of Order No. R8-2012-0008 have been automatically continued and remain in effect until new Waste Discharge Requirements and Water Reclamation Requirements and NPDES permit are adopted pursuant to this Order.
- C. When applicable, state law requires dischargers to file a petition with the State Water Resources Control Board (State Water Board), Division of Water Rights and receive approval for any change in the point of discharge, place of use, or purpose of use of treated wastewater that decreases the flow in any portion of a watercourse. The State Water Board retains separate jurisdictional authority to enforce any applicable requirements under Water Code section 1211. This is not an NPDES permit requirement.
- D. 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.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment and Controls

1. Service Area

Water Reclamation Facility No. 1 treats wastewater flows from the western part of the City of Corona, which is approximately 11,725 acres. The sewer area tributary to the Facility consists of low to high density residential, commercial, office professional and general and light industries. The Discharger reported on the permit renewal application

(EPA Form 2A, dated June 26, 2017) that the annual average wastewater flow to the Facility was 11.5 MGD and the maximum daily flow was 15.5 MGD.

The Discharger also operates two additional water reclamation facilities, Water Reclamation Facilities No. 2 and No. 3. If necessary, flows from Water Reclamation Facility No. 2 can be diverted to Water Reclamation Facility No. 1. The water reclamation facilities service a total population of 166,785.

The Discharger implements an approved pretreatment program and reported on the NPDES Permit Renewal Application (EPA Form 2A, Part F) that the Facility accepts waste from two non-categorical Significant Industrial Users (SIU)s¹ and ten categorical industrial users.

2. Wastewater Design Characteristics and Treatment Capacity

Water Reclamation Facility No. 1 is located at 2205 Railroad Street, Corona. The current design treatment capacity of the Facility is 11.5 MGD for secondary treatment and 15.0 MGD for tertiary filtration. Chlorine is used for disinfection.

The treatment system includes the headworks, two secondary treatment plants (Plant 1A and Plant 1B), tertiary filters, and a chlorine contact basin. The headworks consist of a rotating screen unit and a grit removal system that are designed for 14.5 MGD treatment capacity. A flow splitter separates up to 5.5 MGD of the effluent from the headworks to Plant 1A, while the remainder of the flow is sent to Plant 1B.

The design capacity of Plant 1A is 5.5 MGD. Treatment processes consists of two rectangular primary sedimentation units; an activated sludge process with nutrient removal capabilities operated in a serpentine step-feed mode (three aeration basins), and secondary clarification provided by six rectangular units. Both the primary and secondary clarifier units are equipped for sludge recovery and conveyance to onsite biosolids handling facilities.

The design capacity for Plant 1B is 6.0 MGD. Secondary treatment consists of two parallel oxidation ditches with separate oxic and anoxic zones, and two circular secondary clarifier units with sludge recovery.

Secondary treated wastewater from Plants 1A and 1B is discharged to a flow equalization basin. Water from the equalization basin is pumped directly to the tertiary filters. The tertiary treatment train consists of coagulation, continuous backwash sand filtration, and chlorination with sodium hypochlorite in two serpentine chlorine contact

¹ Non-categorical SIUs include SIUs that discharge an average of 25,000 gallons per day (gpd) or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blowdown wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry-weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority on the basis that the Industrial User has a reasonable potential to adversely affect the POTW's operation; or for violating any Pretreatment Standard or Requirement.

tanks followed by dechlorination with sodium bisulfate. Effluent from the tertiary treatment train can either be pumped to the three offsite percolation ponds or the city-wide recycled water distribution system. One of the percolation ponds is located along Lincoln Avenue and the other two ponds are located at the end of Rincon Street near Cota Street.

On March 15, 2010, the Discharger requested the California State Water Resources Control Board's (SWRCB's) Division of Drinking Water (DDW) to re-rate the tertiary treatment capacity from its original approved capacity of 9 MGD to its design capacity of 15 MGD. Regional Water Board staff has evaluated the Dischargers' request and considers the tertiary treatment train re-rating to be reasonable; however, the total plant treatment capacity is controlled by the secondary treatment process of 11.5 MGD.

The Discharger reported in their Report of Waste Discharge and Permit Renewal Application that the annual average effluent flow to the ponds was 2.917 MGD and the annual average effluent flow to the creek was 4.277 MGD.

3. Biosolids Handling Practices

Primary sludge and waste activated sludge from Plant 1A and 1B is thickened with a gravity belt thickener prior to being sent to one of three anaerobic digesters. Digested sludge is dewatered with a belt press or centrifuge. Waste activated sludge from Plant 1B is pumped to the gravity belt thickeners prior to being sent to the anaerobic digesters. All belt press filtrate is reintroduced to the oxidation ditches and sludge cake is diverted to a thermal dryer or is transported to an approved composting facility. Water Reclamation Facility No. 1 currently receives sludge from Water Reclamation Facility No. 2.

4. Recycled Water Storage Tank

Disinfected tertiary water flows to an on-site four million gallon recycled water storage tank. Water can be pumped from the storage tank to recycled water users or to the ponds.

5. On-Site Storm Water Runoff

Stormwater runoff from the Facility is contained within the plant property. All stormwater from the Facility is directed to one of two catch basins and allowed to percolate/evaporate.

B. Discharge Points and Receiving Waters

1. Discharge Points

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Tertiary treated wastewater	33°53'44" N	117°36'35" W	Butterfield Drain within Prado Basin Management Zone, Reach 3 of Santa Ana River
002	Tertiary treated wastewater	33°53'34" N	117°34'36" W	Temescal Groundwater Management Zone (GMZ)
003	Tertiary treated recycled wastewater	33°53'35" N	117°36'34" W	Prado Basin Management Zone, Bedford GMZ, and Temescal GMZ

2. Receiving Waters

Surface Waters. Tertiary treated wastewater from the Facility is normally discharged to the Prado Basin Management Zone (PBMZ). Surface water flows within the PBMZ enter Reach 3 of the Santa Ana River.

Groundwater. The Discharger distributes reclaimed water throughout the City of Corona. The reclaimed water use areas may overlie the Bedford and Temescal Groundwater Management Zones (GMZ) and may also be within the PBMZ.

In addition, the Discharger discharges tertiary treated wastewater to the Lincoln/Cota ponds. These percolation ponds overlie the Temescal GMZ and are adjacent to the PBMZ and an unlined reach of Temescal Creek.

C. Compliance Summary

Based on a review of effluent monitoring data submitted by the Discharger, the wastewater discharged from the Facility was generally in compliance with the effluent limitations specified in the current waste discharge requirements, Order No. R8-2012-0008, with the exception of coliform and 2,3,7,8-TCDD limits.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California 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. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (CWC) commencing with section 13260 and as a master reclamation permit pursuant to section 13523.1 of article 4, chapter 7, division 7 of the California Water Code. This Order, as a master reclamation permit, includes Producer/User Reclamation Requirements to regulate recycled water use for irrigation and other industrial uses.

B. California Environmental Quality Act (CEQA)

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

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

1. Water Quality Control Plan. The Regional Water Board adopted a Water Quality Control Plan for the Santa Ana Basin (hereinafter Basin Plan) that became effective on January 24, 1995 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Plan. The Basin Plan was updated in February 2008, June 2011, February 2016, and June 2019. In addition, the Basin Plan implements State Water Board Resolution 88-63 (Sources of Drinking Water Policy), which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Based on the exception criteria specified in Resolution No. 88-63, the Regional Water Board excepted Reach 5 of the Santa Ana River downstream of Orange Avenue (Redlands), and further downstream reaches from the municipal and domestic supply beneficial use.

On January 22, 2004, the Regional Water Board adopted Resolution No. R8-2004-0001, amending the Basin Plan to incorporate revised boundaries for groundwater subbasins, now termed “management zones”, new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. The State Water Board and Office of Administrative Law approved the N/TDS Amendment on September 30, 2004 and December 23, 2004, respectively. Accordingly, these waste discharge requirements implement relevant, groundwater-related components of the N/TDS Amendment. Specifically, effluent limitations for TDS and TIN in this Order are based on N and TDS wasteload allocations

included in the N/TDS Amendment and are at least as stringent as the limits in the prior Order.

As previously discussed, the Facility discharges ultimately into Reach 3 of the Santa Ana River and affects downstream receiving surface and ground waters. Beneficial uses applicable to these affected water bodies are as follows:

Table F-2. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Prado Basin Management Zone	<u>Present or Potential:</u> Warm freshwater habitat (WARM); wildlife habitat (WILD), water contact ² recreation (REC-1) and non-contact water recreation (REC-2); and rare, threatened or endangered species (RARE). Excepted from municipal and domestic supply (MUN)
	Reach 3 of Santa Ana River	<u>Present or Potential:</u> Agricultural supply (AGR); ground water recharge (GWR); water contact recreation (REC-1); non-contact water recreation (REC-2); warm freshwater habitat (WARM); wildlife habitat (WILD); rare, threatened or endangered species (RARE); and spawning, reproduction and development (SPWN). Excepted from municipal and domestic supply (MUN)
002	Temescal Management Zone	<u>Present or Potential:</u> Municipal and domestic water supply (MUN), agricultural supply (AGR), industrial service supply (IND), industrial process supply (PROC).
003	Prado Basin Management Zone	<u>Present or Potential:</u> Warm freshwater habitat (WARM); wildlife habitat (WILD), water contact ³ recreation (REC-1) and non-contact

² Access is prohibited in some areas by Riverside County Flood Control.

³ Access is prohibited in some areas by Riverside County Flood Control.

		water recreation (REC-2); and rare, threatened or endangered species (RARE). Excepted from municipal and domestic supply (MUN)
	Temescal and Bedford Groundwater Management Zones	<u>Present or Potential:</u> Municipal and domestic water supply (MUN), agricultural supply (AGR), industrial service supply (IND), industrial process supply (PROC).

Requirements of this Order implement the Basin Plan.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA 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, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain federal water quality criteria for priority pollutants.
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 USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
4. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
5. **Antidegradation Policy.** 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 Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution 68-16.

All effluent limitations in this Order are at least as stringent as those in prior waste discharge requirements for the Facility. Based on data currently available, discharges in compliance with the terms and conditions of this Order should not result in a lowering of water quality and are therefore consistent with antidegradation provisions.

- 6. Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require 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. Effluent limitations in this Order are at least as stringent as those established in the previous Order.
- 7. Monitoring and Reporting Requirements.** Sections 13267 and 13383 of the CWC authorize the Regional Water Board to require technical and monitoring reports. 40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement State and federal requirements. This MRP is provided in Attachment E.
- 8. Pretreatment.** This Order contains requirements for the implementation of an effective pretreatment program pursuant to Section 307 of the Federal Clean Water Act; 40 CFR, Parts 35 and 403; and/or Section 2233, Title 23, California Code of Regulations. The Discharger has established an approved regional pretreatment program. The approved pretreatment program and its components, such as Ordinance No. 2330, local limits (adopted by the Discharger in April 18, 1985), and control mechanisms, among others, are an enforceable condition of this Order.
- 9. Sewage Sludge and Biosolids.** This Order does not authorize any act that results in violation of requirements administered by USEPA to implement 40 CFR Part 503, Standards for the Use or Disposal of Sewage Sludge. These standards regulate the final use or disposal of sewage sludge that is generated during the treatment of domestic sewage in a municipal wastewater treatment facility. The Discharger is responsible for meeting all applicable requirements of 40 CFR Part 503 that are under USEPA's enforcement authority.
- 10. Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of

waters of the state, including protecting rare, threatened, or endangered species. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

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

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

The USEPA approved the State's 2014 and 2016 CWA section 303(d) list of impaired water bodies on April 6, 2018. The 303(d) list identifies water bodies where water quality standards are not expected to be met after implementation of TBELs by point sources (water quality-limited water bodies). The 2016 California CWA section 303(d) List includes Reach 3 of the Santa Ana River as water quality impaired due to Copper and Lead. During the 2017 review of the 303(d) List, the State Water Board did not approve the action of delisting the Santa Ana River, Reach 3, for Copper and Lead.

E. Other Plans, Policies and Regulations – Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 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.

A. Discharge Prohibitions

The discharge prohibitions are based on the Federal Clean Water Act, Basin Plan, State Water Resources Control Board's plans and policies, USEPA guidance and regulations, and the previous waste discharge requirements, Order No. R8-2012-0008, and are consistent with the discharge prohibitions set for other discharges regulated by waste discharge requirements adopted by the Regional Water Board.

B. Technology-Based Effluent Limitations

1. Scope and Authority

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

meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 CFR part 133 and/or Best Professional Judgment (BPJ) in accordance with 40 CFR section 125.3.

Regulations promulgated in 40 CFR 125.3(a)(1) require technology-based effluent limitations for municipal dischargers to be placed in waste discharge requirements based on Secondary Treatment Standards or Equivalent to Secondary Treatment Standards.

The Federal Water Pollution Control Act Amendments of 1972 (PL 92-500) established the minimum performance requirements for POTWs [defined in Section 304(d)(1)]. Section 301(b)(1)(B) of that Act requires that such treatment works must, as a minimum, meet effluent limitations based on secondary treatment as defined by the USEPA Administrator. Based on this statutory requirement, USEPA developed secondary treatment regulations, which are specified in 40 CFR Part 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of biochemical oxygen demand (BOD₅), total suspended solids (TSS), and pH.

2. Applicable Technology-Based Effluent Limitations

As noted in section IV.C.2.c., below, tertiary treatment is required to protect beneficial uses of the PBMZ and the Santa Ana River, Reach 3, for discharges from Discharge Point 001. The technology-based limits, more restrictive than the above mentioned federal standards for BOD₅ and TSS, which are based on BPJ for levels achievable with tertiary treatment, summarized in the Table below are applicable.

Table F-3. Summary of Technology-Based Effluent Limits for Tertiary Treatment

Constituent	Average Weekly (mg/L)	Average Monthly (mg/L)	Average Monthly Removal Rate (%)
Biochemical Oxygen Demand, 5-day @ 20°C (BOD ₅)	30	20	85
Total Suspended Solids (TSS)	30	20	85

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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

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

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.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

- a. **The Basin Plan.** Table F-2, above, lists the beneficial uses of the PBMZ and the Santa Ana River, Reach 3. The Basin Plan specifies narrative and numeric water quality objectives for all inland surface waters, including the PBMZ and the Santa Ana River. Some of those that applicable to these receiving waters are listed in the following table.

Table F-4. Summary of Applicable Water Quality Criteria

Constituents	Basis for Limitations
Ammonia Nitrogen	“Un-ionized ammonia (NH ₃ or UIA) is toxic to fish and other aquatic organisms. In water, UIA exists in equilibrium with ammonia (NH ₄ ⁺) and hydroxide (OH ⁻) ions. The proportions of each change with temperature, pH and salinity of the water change.” Thus, ammonia discharges to surface water pose a threat to aquatic life and instream beneficial uses, as well as to the beneficial uses of affected groundwater. Table 5-6 of the Basin Plan specifies total ammonia nitrogen and un-ionized ammonia objectives and an effluent limit of 5.0 mg/L for discharges to Reach 3 of the Santa Ana River.
Hydrogen Ion (pH)	Hydrogen Ion (pH) is a measure of the Hydrogen Ion concentration in the water. Extreme pH levels can have adverse effects on aquatic biota and can corrode pipes and concrete. The Basin Plan specifies that the pH in inland surface waters shall not be depressed below 6.5, nor raised above 8.5 as a result of controllable water quality factors.

Constituents	Basis for Limitations
Total Chlorine Residual	Chlorine and its reaction product are toxic to aquatic life. To protect aquatic life, the Basin Plan specifies that for wastewater discharged into inland surface waters, the chlorine residual should not exceed 0.1 mg/L.
Total Dissolved Solids	The Basin Plan specifies a wasteload allocation of 700 mg/L for Total Dissolved Solids for discharges from this Facility.
Total Inorganic Nitrogen	The Basin Plan specifies a wasteload allocation of 10.0 mg/L for Total Inorganic Nitrogen for discharges from this Facility.

In accordance with 40 CFR Section 122.45(d), there may be instances in which the basis for a limit for a particular continuous discharge may be impracticable to be stated as a maximum daily, average weekly, or average monthly effluent limitation. The Regional Water Board has determined that it is not practicable to express TDS and TIN effluent limitations as average weekly and average monthly effluent limitations because the TDS and TIN objectives in the Basin Plan were established primarily to protect the underlying groundwater. Consequently, a 12-month average period is believed to be more appropriate.

Effluent limitations for ammonia nitrogen, pH, total residual chlorine, TDS, and TIN are carried forward from the previous Order, R8-2012-0008.

- b. **NTR, CTR and SIP.** The National Toxics Rule, California Toxics Rule (CTR), and State Implementation Policy 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 to determine the need for effluent limitations for priority and non-priority pollutants.
- c. **Requirement to Meet Title 22, Tertiary Treatment.** Article 3, Section 60305 of Title 22, Chapter 3, "Use of Recycled Water for Impoundments" of the California Code of Regulations specifies that recycled water used as a source of supply in a non-restricted recreational impoundment shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater (tertiary treated). The degree of treatment specified represents an approximately 5-log reduction in the virus content of the water. The California State Water Board's Division of Drinking Water (DDW) has determined that this degree of virus removal is necessary to protect the health of people using these impoundments for water contact recreation. The DDW has developed wastewater disinfection guidelines ("Wastewater Disinfection for Health Protection", Department of Health Services, Sanitary Engineering Branch, February 1987) for discharges of wastewater to surface waters where water contact recreation (REC-1) is a beneficial use. The disinfection guidelines recommend the same treatment requirements for wastewater discharges to REC-1 waters as those stipulated in Title 22 for supply of reclaimed water to non-

restricted recreational impoundments, since the public health risks under both scenarios are analogous. The disinfection guidelines are based on sound science and are widely used as guidance to assure public health and beneficial use protection.

Neither the PBMZ nor the Santa Ana River, Reach 3, are “non-restricted recreational impoundments,” nor is “recycled water” being used as a supply source for the PBMZ or the River pursuant to the definitions in Title 22. However, except during major storms, most of the flow in the PBMZ and the River is composed of treated municipal wastewater discharges. The PBMZ and the River are used for water contact recreation and, accordingly, are designated REC-1 (water contact beneficial use). People recreating in the PBMZ and the River face an exposure similar to those coming in contact with reclaimed water in an impoundment. Therefore, to protect the water contact recreation beneficial use and to prevent nuisance and health risk, it is necessary and appropriate to require the same degree of treatment for wastewater discharges to the PBMZ and River as would be required for the use of reclaimed water in a non-restricted recreational impoundment. Thus, this Order specifies requirements based on tertiary or equivalent treatment.

The Regional Water Board has consulted with the DDW regarding the applicability of the process design standards (specifically filter rates, CT, and modal contact) for discharges of waste to flowing streams. DDW has determined that although compliance with these standards is necessary to protect public health when recycled water is used, compliance with these standards is not necessary to protect public health for discharges into water bodies that provide dilution of the wastewater, provided the performance standards are consistently met. During periods when the receiving water can provide a 1:1 dilution of the wastewater discharge, the Order provides that the specified filter rates, CT, and modal contact time do not apply to wastewater discharges to surface water. The specified filter rates, CT, and modal contact time applies to recycled water use.

3. Determining the Need for WQBELs

In accordance with Section 1.3 of the SIP, Regional Water Board staff conducted a reasonable potential analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the Order. The staff analyzed effluent data to determine if a pollutant in a discharge has the reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have the reasonable potential to cause or contribute to an excursion above a water quality standard, numeric WQBELs are required. The RPA considers criteria from the CTR, and when applicable, water quality objectives specified in the Basin Plan. Some freshwater metals criteria in the CTR are expressed as a function of total hardness. The metals criteria are equations in which hardness is the variable. The actual numeric value of the criterion is calculated using hardness measurements. The use of a fixed hardness value results in a fixed numerical effluent limit for each metal,

thereby simplifying the effluent limitation and facilitating the determination of compliance. To calculate the metals criteria, the minimum effluent hardness of 110⁴ mg/L was used.

A reasonable potential analysis was conducted on effluent data submitted by the Discharger through the State Water Board’s California Integrated Water Quality System (CIWQS) during the prior permit term. These data were used in the RPA and are summarized in the following table. Priority pollutants Chromium (VI), Selenium, Cyanide, 2,3,7,8-TCDD, Chlorodibromomethane, Dichlorobromomethane, Bis(2-ethylhexyl)Phthalate, beta-BHC, 4,4’-DDT, 4,4’-DDE, Dieldrin, Heptachlor, and Heptachlor Epoxide were determined to have reasonable potential to exceed water quality objectives. Consequently, effluent limits for Chromium (VI), Selenium, Cyanide, 2,3,7,8-TCDD, Chlorodibromomethane, Dichlorobromomethane, Bis(2-ethylhexyl)Phthalate, beta-BHC, 4,4’-DDT, 4,4’-DDE, Dieldrin, Heptachlor, and Heptachlor Epoxide are included in the Order. For beta-BHC, 4,4’-DDT, 4,4’-DDE, and Heptachlor Epoxide, although there was only one exceedance and it was reported as DNQ, an effluent limit is still needed because the estimated concentration exceeds the water quality criteria. Detailed compliance data from CIWQS for the constituents that have been determined to have reasonable potential to cause or contribute to an excursion above a water quality standard is included in Attachment J.

In addition, this Order establishes effluent limitations for Copper and Lead to protect the waterbody, as Reach 3 of the Santa Ana River is listed in the California 303(d) List as being impaired by Copper and Lead.

Table F-5. RPA Evaluation

Parameter	Unit	Effluent	California Toxics Rule (CTR)			Is Effluent Limit Required?		
		Maximum Effluent Concentration (MEC)	Criterion Maximum Concentration (CMC) ⁵	Criterion Continuous Concentration (CCC)	Human Health for Consumption of Organisms	CMC	CCC	Human Health
Chromium (VI)	µg/L	18	16.29	11.43			Yes	
Total Recoverable Copper	µg/L	4.5	15.31	10.12		See footnote	See footnote 6, below	

⁴ The electronic SMR data downloaded from CIWQS included an effluent hardness value of 16 mg/L; however, given that this value is the only value at this concentration and is far below all other effluent hardness values, the next lowest effluent hardness value (110 mg/L) was selected for the RPA.

⁵ The minimum effluent hardness value of 110 mg/L (during the period from 2013 through 2018) was used to determine certain metals criteria.

Parameter	Unit	Effluent	California Toxics Rule (CTR)			Is Effluent Limit Required?		
		Maximum Effluent Concentration (MEC)	Criterion Maximum Concentration (CMC) ⁵	Criterion Continuous Concentration (CCC)	Human Health for Consumption of Organisms	CMC	CCC	Human Health
						6, below		
Total Recoverable Lead	µg/L	0.37	92.18	3.59		See footnote 6, below	See footnote 6, below	
Mercury	µg/L	0.033			0.051			No
Total Recoverable Selenium	µg/L	10	20	5			Yes	
Cyanide, Free	µg/L	10	22	5.2	220,000		Yes	
2,3,7,8-TCDD (equivalents)	pg/L	8.1E-07			1.4E-08			Yes
Chlorodibromomethane	µg/L	46			34			Yes
Dichlorobromomethane	µg/L	76			46			Yes
Bis(2-Ethylhexyl)Phthalate	µg/L	75			5.9			Yes
Dibenzo(a,h)Anthracene	µg/L	0.033			0.049			No
beta-BHC	µg/L	0.054			0.046			Yes
4,4'-DDT	µg/L	0.01	1.1	0.001	0.00059			Yes
4,4'-DDE	µg/L	0.01			0.00059			Yes
Dieldrin	µg/L	0.012	0.24	0.056	0.00014			Yes
Heptachlor	µg/L	0.04	0.52	0.0038	0.00021			Yes
Heptachlor Epoxide	µg/L	0.01	0.52	0.0038	0.00011			Yes

4. WQBEL Calculations

For priority pollutants, water quality based effluent limits are based on monitoring results and the calculation process outlined in Section 1.4 of the California Toxics Rule and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California, which is summarized in the following table.

⁶ Effluent limitations for Copper and Lead are required because the receiving water is listed on the 303(d) List for impairment by Copper and Lead.

Table F-6. Criteria Calculation based on CTR

CTR Values			Long-Term Average Values			Aquatic Life Limits		Human Health Limits		Permit Limits		
Constituents	Freshwater					Human Health Organisms Only	Acute	Chronic	Min.	MDEL	AMEL	MDEL
	Chromium (VI)	16.29	11.43		5.23					6.03	5.23	16.3
Total Recoverable Copper	15.31	10.12		4.92	5.34	4.92	15.3	7.6			15.3	7.6
Total Recoverable Lead	92.18	3.59		29.6	1.89	1.89	5.9	2.9			5.9	2.9
Total Recoverable Selenium	20	5		6.42	2.64	2.64	8.2	4.1			8.2	4.1
Cyanide, Free	22	5.2		7.06	2.74	2.74	8.4	4.3			8.5	4.3
2,3,7,8-TCDD (equivalents)			1.4E-08						2.8E-08	1.4E-08	2.8E-08	1.4E-08
Chlorodibromo methane			34						68	34	68	34
Dichlorobromo methane			46						92	46	92	46
Bis(2-Ethylhexyl) Phthalate			5.9						11.8	5.9	11.8	5.9
beta-BHC			0.046						0.092	0.046	0.092	0.046
4,4'-DDT	1.1	0.001	0.00059	0.35	0.00053	0.00053	0.0016	0.00082	0.00118	0.00059	0.00118	0.00059
4,4'-DDE			0.00059						0.00118	0.00059	0.00118	0.00059
Dieldrin	0.24	0.056	0.00014	0.08	0.03	0.03	0.091	0.046	0.00028	0.00014	0.00028	0.00014
Heptachlor	0.52	0.0038	0.00021	0.17	0.002	0.002	0.006	0.003	0.00042	0.00021	0.00042	0.00021
Heptachlor Epoxide	0.52	0.0038	0.00011	0.17	0.002	0.002	0.006	0.003	0.00022	0.00011	0.00022	0.00011

5. Whole Effluent Toxicity (WET)

This Order does not specify WET limits but requires continued chronic toxicity monitoring. Effluent monitoring data indicated that the two-month median value of 1.0 TU_C for the survival or reproduction endpoint has only been exceeded twice, in 2015 (both median values were 1.5 TU_C). This Order requires that if chronic toxicity thresholds are not met, the Discharger will accelerate toxicity monitoring consistent with the Initial Investigation Toxicity Identification/Reduction Evaluation (IITRE) workplan. If the implemented IITRE fails to identify the cause of, or to rectify, the toxicity, the Discharger shall implement the more rigorous Toxicity Reduction Evaluation and Toxicity Identification Evaluation (TRE/TIE) work plan.

D. Final Effluent Limitation Considerations

1. Satisfaction of Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. The effluent

limitations in this Order are at least as stringent as the effluent limitations in the previous Order. Effluent limitations for Mercury and Dibenzo(a,h)Anthracene are discontinued in this Order based on the consideration of new information (i.e., current discharge monitoring data and reasonable potential analysis). This relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

2. Satisfaction of Antidegradation Policy

Discharges in conformance with the requirements of this Order will not result in a lowering of water quality and therefore conform to antidegradation requirements specified in Resolution No. 68-16, which incorporates the federal antidegradation policy at 40 CFR 131.12. The Discharger is implementing a program to enhance recycled water use. No lowering of groundwater quality is projected to occur as the result of recycled water use. Discharges in excess of the TDS and/or TIN limits are required to be fully offset by the operation of the Temescal Desalter, which has been determined to be an acceptable offset to mitigate that water quality effect.

3. Stringency of Requirements for Individual Pollutants

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

4. Summary of Effluent Limitations

Table F-7. Summary of Effluent Limitations at Discharge Point 001

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Max Daily	Instantaneous Minimum	Instantaneous Maximum	
BOD ₅	mg/l	20	30	--	--	--	BPJ
Total Suspended Solids	mg/l	20	30	--	--	--	BPJ
Total Residual Chlorine	mg/l	--	--	--	--	0.1	BP
TDS	mg/l	700 (12-M Ave.), or	--	--	--	--	BP

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Max Daily	Instantaneous Minimum	Instantaneous Maximum	
		250+TDS in water supply					
Total Inorganic Nitrogen	mg/l	10 (12-M Ave.)	--	--	--	--	BP
Ammonia-Nitrogen	mg/l	4.5					BP
pH	unit	--	--	--	6.5	8.5	BP
Chromium (VI)	µg/L	8.1	--	16.3	--	--	CTR, SIP
Total Recoverable Copper	µg/L	7.6	--	15.3	--	--	CTR, SIP
Total Recoverable Lead	µg/L	2.9	--	5.9	--	--	CTR, SIP
Total Recoverable Selenium	µg/L	4.1	--	8.2	--	--	CTR, SIP
Free Cyanide	µg/L	4.3	--	8.5	--	--	CTR, SIP
2,3,7,8-TCDD (equivalents)	pg/l	0.014	--	0.028	--	--	CTR, SIP
Chlorodibromo methane	µg/L	34	--	68	--	--	CTR, SIP
Dichlorobromo methane	µg/L	46	--	92	--	--	CTR, SIP
Bis (2-ethylhexyl) Phthalate	µg/L	5.9	--	11.8	--	--	CTR, SIP
beta-BHC	µg/L	0.046	--	0.092	--	--	CTR, SIP
4,4'-DDT	µg/L	0.00059	--	0.0012	--	--	CTR, SIP
4,4'-DDE	µg/L	0.00059	--	0.0012	--	--	CTR, SIP
Dieldrin	µg/L	0.00014	--	0.00028	--	--	CTR, SIP
Heptachlor	µg/L	0.00021	--	0.00042	--	--	CTR, SIP
Heptachlor Epoxide	µg/L	0.00011	--	0.00022	--	--	CTR, SIP
Coliform	MPN	--	2.2 Median of last 7 days	--	--	--	Title 22

Notes: BPJ = Best Professional Judgment; BP = Basin Plan; CTR = California Toxics Rule; SIP = State Implementation Policy.

E. Interim Effluent Limitations – Not Applicable

F. Land Discharge Specifications

1. Discharge Prohibitions

The discharge prohibitions are based on the Basin Plan and State Water Board plans and policies. These prohibitions are consistent with the prohibitions set for other discharges regulated by WDRs adopted by the Regional Water Board.

2. Technology-Based Effluent Limitations

As noted in section IV.F.3, below, tertiary treatment is required to protect beneficial uses of the PBMZ and Temescal Creek for discharges from Discharge Point 002 to the percolation ponds. The technology-based limits, based on BPJ for values achievable with tertiary treatment, summarized in the table below are applicable.

Table F-8. Summary of Technology-based Effluent Limitations for Discharge Point 002

Constituent	Average Weekly (mg/L)	Average Monthly (mg/L)	Average Monthly Removal Rate (%)
BOD ₅	30	20	85
TSS	30	20	85

3. Water Quality-Based Effluent Limitations

a. TDS and TIN.

The majority of the percolation ponds overlie the Temescal Groundwater Management Zone. The TDS and TIN limitations specified in the Order are carried forward from the previous Order (R8-2012-0008) and are based on the water quality objectives for this management zone. The previous Order indicates that a 25% nitrogen loss coefficient was used to calculate the TIN limit, based on the 10 mg/L NO₃-N objective.

4. Summary of Effluent Limitations for Discharge Point 002

Table F-9. Summary of Effluent Limitations for Discharge Point 002

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
BOD ₅	mg/L	20	30	--	--	--	PO, BPJ
TSS	mg/L	20	30	--	--	--	PO, BPJ
TDS	mg/L	770 (12-M Avg)	--	--	--	--	BP
TIN	mg/L	13.3 (12-M Avg)	--	--	--	--	BP
pH	pH units	--	--	--	6.0	9.0	BP

Notes: PO = Previous Order; BPJ = Best Professional Judgment; BP = Basin Plan

G. Reclamation Specifications – DP 003

1. Section 13523 of the California Water Code provides that a Regional Water Board, after consulting with and receiving the recommendations from the DDW and any party who has requested in writing to be consulted, and after any necessary hearing, may prescribe water reclamation requirements for the distribution of water which is used or proposed to be used as recycled water, if, in the judgment of the Regional Water Board, such requirements are necessary to protect the public health, safety, or welfare. Section 13523 further provides that such requirements shall include, or be in conformance with, the statewide uniform water recycling criteria established by the DDW pursuant to California Water Code Section 13521.
2. Reclamation specifications in this Order are based upon the recycling criteria contained in Title 22, Division 4, Chapter 3, Sections 60301 through 60355, California Code of Regulations and pursuant to the California Water Code Section 13521. Because the recycled water is or will be used in school yards and similar sites, tertiary treatment is appropriate.
3. Recycled water use sites overlie the Temescal and Bedford Groundwater Management Zones. The TDS limits for recycled water use are based on the water quality objectives for the Temescal GMZ. There are insufficient groundwater data to establish TDS objectives for the Bedford GMZ. Studies are ongoing to collect sufficient data to establish water quality objectives for the Bedford GMZ. This Order may be reopened if it is found that more restrictive limits are necessary to protect that GMZ.
4. This Order does not specify a nitrogen limit for recycled water when it is used for irrigation, since it is assumed that all of the nitrogen will be used by plants and the lack of nitrogen in the water that percolates beyond the root zone will not adversely affect water quality.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The surface water receiving water limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan.

B. Groundwater

The receiving groundwater limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan.

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

A. Influent Monitoring

This Order carries forward the treatment plant influent monitoring requirements specified in the previous Order without change. Influent monitoring is required to help determine the effectiveness of the pretreatment program and assess treatment plant performance.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Pollutants to be monitored include all pollutants for which effluent limitations are specified. Further, in accordance with Section 1.3 of the SIP, periodic monitoring is required at DP 001 for all priority pollutants defined by the CTR, for which criteria apply and for which no effluent limitations have been established, to evaluate reasonable potential to cause or contribute to an excursion above a water quality standard.

This Order continues the monitoring requirements specified in Order No. R8-2012-0008, with modifications. This Order requires the Discharger to conduct accelerated monitoring for those constituents that are detected during the quarterly and annual priority pollutant scan.

C. Whole Effluent Toxicity Testing Requirements

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

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

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Therefore, in accordance with the SIP, this Order requires the Discharger to conduct chronic toxicity testing. In addition, the Order establishes thresholds that when exceeded requires the Discharger to conduct accelerated toxicity testing and/or conduct toxicity identification evaluation (TIE) studies.

This Order requires the Discharger to conduct chronic toxicity testing of the effluent on a monthly basis. The Order also requires the Discharger to conduct an Initial Investigation Toxicity Reduction Evaluation (IITRE) program when either the two-month median of toxicity test results exceeds 1 TU_c or any single test exceeds 1.7 TU_c for survival endpoint. Based on the results of this investigation program and at the discretion of the Executive Officer, a more

rigorous Toxicity Reduction Evaluation/Toxicity Identification Evaluation (TRE/TIE) may be required. A re-opener provision is included in the Order to incorporate a chronic toxicity effluent limitation if warranted by the toxicity test results.

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water. Requirements are based on the Basin Plan.

2. Groundwater – Not Applicable

E. Other Monitoring Requirements

1. Water Supply Monitoring

The Discharger will be required to collect a sample of each source of water supplied and analyze for total dissolved solids. The result of this monitoring will enable the Discharger to show compliance with the TDS incremental limitation in the Order.

2. Biosolids Monitoring

The Discharger is required to monitor for the pollutants included in Table 1 of 40 CFR Section 503.13 at the frequencies specified in 40 CFR 503.16. The Discharger must also demonstrate pollutant (40 CFR 503.13), pathogen and vector attraction reductions (40 CFR 503.15) that are specified for land application. Discharger is also required to maintain a permanent log of solids hauled away from the Facility for use/disposal elsewhere, including the date hauled, the volume or weight (in dry tons), type (screening, grit, raw sludge, biosolids), application (agricultural, composting, etc.), and destination. This information is required be reported quarterly.

3. Pretreatment Monitoring

These monitoring and reporting requirements are established pursuant to 40 CFR 403 regulations.

4. Discharge Monitoring Report-Quality Assurance (DMR-QA) Study Program

Under the authority of section 308 of the CWA (33 U.S.C. § 1318), USEPA requires major and selected minor dischargers under the NPDES Program to participate in the annual DMR-QA Study Program. The DMR-QA Study evaluates the analytical ability of laboratories that routinely perform or support self-monitoring analyses required by NPDES permits. There are two options to satisfy the requirements of the DMR-QA Study Program: (1) The Discharger can obtain and analyze a DMR-QA sample as part of the DMR-QA Study; or (2) Per the waiver issued by USEPA to the State Water Board, the Discharger can submit the results of the most recent Water Pollution Performance Evaluation Study from its own laboratories or its contract laboratories. A Water Pollution Performance Evaluation Study is similar to the DMR-QA Study. Thus, it also evaluates a laboratory's ability to analyze wastewater samples to produce quality data that ensure the integrity of the NPDES Program. The Discharger shall ensure that the results of the

DMR-QA Study or the results of the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board. The State Water Board's Quality Assurance Program Officer will send the DMR-QA Study results or the results of the most recent Water Pollution Performance Evaluation Study to USEPA's DMR-QA Coordinator and Quality Assurance Manager.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Federal 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).

B. Special Provisions

1. Reopener Provisions

The reopener provisions are based on 40 CFR 122.44(c) and 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

This Order also requires the Discharger to update, as necessary, its procedures to conduct Toxicity Identification and Reduction Evaluations. This provision is based on the SIP, Section 4, Toxicity Control Provisions.

3. Best Management Practices and Pollution Prevention

These requirements are based on the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, Section 2.4.5.1 and are applicable to POTW facilities including the Discharger.

4. Construction, Operation, and Maintenance Specifications

The requirements are based on requirements that were specified in the prior Order and industry standards.

5. Special Provisions for Municipal Facility – POTWs Only

- a. **Sewer Collection System Requirements:** The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-0003-DWQ on May 2, 2006 and amended it by Order No. WQ 2008-0002-EXEC. The General Order requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions.

Furthermore, the General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. Inasmuch that the Discharger's collection system is part of the system that is subject to this Order, certain standard provisions are applicable as specified in Provisions, section VI.C.5. For instance, the 24-hour reporting requirements in this Order are not included in the General Order. The Discharger must comply with both the General Order and this Order. The Discharger and public agencies that are discharging wastewater into the facility were required to obtain coverage for regulation under the General Order.

- b. **Biosolids Disposal Requirements:** On February 19, 1993, the USEPA issued a final rule for the use and disposal of sewage sludge, 40 CFR, Part 503. This rule requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. The State of California has not been delegated the authority to implement this program, therefore, the USEPA is the implementing agency.
- c. **Pretreatment Program.** These program requirements are established pursuant EPA 40 CFR 403 regulations.

6. Other Special Provisions – Not Applicable

7. Compliance Schedules – Not Applicable

VIII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

IX. PUBLIC PARTICIPATION

The Regional Water Board has considered the issuance of WDRs that will serve as an NPDES permit for the City of Corona Department of Water and Power, Water Reclamation Facility No. 1. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs and has encouraged public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through the posting of the Notice of Public Hearing in the area of discharge, in the local newspaper; and at the Regional Water Board website: <https://www.waterboards.ca.gov/santaana/>

B. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the Regional Water Board at the address on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, the written comments were due at the Regional Water Board office by 5:00 p.m. on June 2, 2020.

C. Public Hearing

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

Date: June 19, 2020
Time: 9:00 A.M.
Location: City of Loma Linda
25541 Barton Road
Loma Linda, CA 92354

Interested persons were invited to attend. At the public hearing, the Regional Water Board heard testimony pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address <https://www.waterboards.ca.gov/santaana> where you can access the current agenda for changes in dates and locations.

D. Reconsideration of Waste Discharge Requirements

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

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

Or by email at waterqualitypetitions@waterboards.ca.gov

For instructions on how to file a petition for review, see: http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

E. Information and Copying

The Report of Waste Discharge, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (951) 782-4130.

F. Register of Interested Persons

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

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Kathleen Fong at (951) 774-0114.

ATTACHMENT G – U.S. EPA PRIORITY POLLUTANT LIST

EPA PRIORITY POLLUTANT LIST		
Metals	Acid Extractibles	Base/Neutral Extractibles (continuation)
1. Antimony	45. 2-Chlorophenol	91. Hexachloroethane
2. Arsenic	46. 2,4-Dichlorophenol	92. Indeno (1,2,3-cd) Pyrene
3. Beryllium	47. 2,4-Dimethylphenol	93. Isophorone
4. Cadmium	48. 2-Methyl-4,6-Dinitrophenol	94. Naphthalene
5a. Chromium (III)	49. 2,4-Dinitrophenol	95. Nitrobenzene
5b. Chromium (VI)	50. 2-Nitrophenol	96. N-Nitrosodimethylamine
6. Copper	51. 4-Nitrophenol	97. N-Nitrosodi-N-Propylamine
7. Lead	52. 3-Methyl-4-Chlorophenol	98. N-Nitrosodiphenylamine
8. Mercury	53. Pentachlorophenol	99. Phenanthrene
9. Nickel	54. Phenol	100. Pyrene
10. Selenium	55. 2, 4, 6 – Trichlorophenol	101. 1,2,4-Trichlorobenzene
11. Silver	Base/Neutral Extractibles	Pesticides
12. Thallium	56. Acenaphthene	102. Aldrin
13. Zinc	57. Acenaphthylene	103. Alpha BHC
Miscellaneous	58. Anthracene	104. Beta BHC
14. Cyanide	59. Benzidine	105. Delta BHC
15. Asbestos (not required unless requested)	60. Benzo (a) Anthracene	106. Gamma BHC
16. 2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD by dioxins TEQs)	61. Benzo (a) Pyrene	107. Chlordane
Volatile Organics	62. Benzo (b) Fluoranthene	108. 4, 4' - DDT
17. Acrolein	63. Benzo (g,h,i) Perylene	109. 4, 4' - DDE
18. Acrylonitrile	64. Benzo (k) Fluoranthene	110. 4, 4' - DDD
19. Benzene	65. Bis (2-Chloroethoxy) Methane	111. Dieldrin
20. Bromoform	66. Bis (2-Chloroethyl) Ether	112. Alpha Endosulfan
21. Carbon Tetrachloride	67. Bis (2-Chloroisopropyl) Ether	113. Beta Endosulfan
22. Chlorobenzene	68. Bis (2-Ethylhexyl) Phthalate	114. Endosulfan Sulfate
23. Chlorodibromomethane	69. 4-Bromophenyl Phenyl Ether	115. Endrin
24. Chloroethane	70. Butylbenzyl Phthalate	116. Endrin Aldehyde
25. 2-Chloroethyl Vinyl Ether	71. 2-Chloronaphthalene	117. Heptachlor
26. Chloroform	72. 4-Chlorophenyl Phenyl Ether	118. Heptachlor Epoxide
27. Dichlorobromomethane	73. Chrysene	119. PCB 1016
28. 1,1-Dichloroethane	74. Dibenzo (a,h) Anthracene	120. PCB 1221
29. 1,2-Dichloroethane	75. 1,2-Dichlorobenzene	121. PCB 1232
30. 1,1-Dichloroethylene	76. 1,3-Dichlorobenzene	122. PCB 1242
31. 1,2-Dichloropropane	77. 1,4-Dichlorobenzene	123. PCB 1248
32. 1,3-Dichloropropylene	78. 3,3'-Dichlorobenzidine	124. PCB 1254
33. Ethylbenzene	79. Diethyl Phthalate	125. PCB 1260
34. Methyl Bromide	80. Dimethyl Phthalate	126. Toxaphene
35. Methyl Chloride	81. Di-n-Butyl Phthalate	
36. Methylene Chloride	82. 2,4-Dinitrotoluene	
37. 1,1,2,2-Tetrachloroethane	83. 2,6-Dinitrotoluene	
38. Tetrachloroethylene	84. Di-n-Octyl Phthalate	
39. Toluene	85. 1,2-Diphenylhydrazine	
40. 1,2-Trans-Dichloroethylene	86. Fluoranthene	
41. 1,1,1-Trichloroethane	87. Fluorene	
42. 1,1,2-Trichloroethane	88. Hexachlorobenzene	

EPA PRIORITY POLLUTANT LIST		
43. Trichloroethylene	89. Hexachlorobutadiene	
44. Vinyl Chloride	90. Hexachlorocyclopentadiene	

ATTACHMENT H – MINIMUM LEVELS

MINIMUM LEVELS IN PPB (µg/l)

Table 1- VOLATILE SUBSTANCES¹	GC	GCMS
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromomethane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Dichlorobromomethane	0.5	2
1,1 Dichloroethane	0.5	1
1,2 Dichloroethane	0.5	2
1,1 Dichloroethylene	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichloropropylene (volatile)	0.5	2
Ethylbenzene	0.5	2
Methyl Bromide (<i>Bromomethane</i>)	1.0	2
Methyl Chloride (<i>Chloromethane</i>)	0.5	2
Methylene Chloride (<i>Dichloromethane</i>)	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
Tetrachloroethylene	0.5	2
Toluene	0.5	2
trans-1,2 Dichloroethylene	0.5	1
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
Trichloroethylene	0.5	2
Vinyl Chloride	0.5	2
1,2 Dichlorobenzene (volatile)	0.5	2
1,3 Dichlorobenzene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2

Selection and Use of Appropriate ML Value:

ML Selection: When there is more than one ML value for a given substance, the discharger may select any one of those ML values, and their associated analytical methods, listed in this Attachment that are below the calculated effluent limitation for compliance determination. If no ML value is below the effluent limitation, then the discharger shall select the lowest ML value, and its associated analytical method, listed in the PQL Table.

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

ML Usage: The ML value in this Attachment represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interferences. Assuming that all method-specific analytical steps are followed, the ML value will also represent, after the appropriate application of method-specific factors, the lowest standard in the calibration curve for that specific analytical technique. Common analytical practices sometimes require different treatment of the sample relative to calibration standards.

Note: chemical names in parenthesis and italicized is another name for the constituent.

MINIMUM LEVELS IN PPB (µg/l)

Table 2 – Semi-Volatile Substances²	GC	GCMS	LC
2-Chloroethyl vinyl ether	1	1	
2 Chlorophenol	2	5	
2,4 Dichlorophenol	1	5	
2,4 Dimethylphenol	1	2	
4,6 Dinitro-2-methylphenol	10	5	
2,4 Dinitrophenol	5	5	
2- Nitrophenol		10	
4- Nitrophenol	5	10	
4 Chloro-3-methylphenol	5	1	
2,4,6 Trichlorophenol	10	10	
Acenaphthene	1	1	0.5
Acenaphthylene		10	0.2
Anthracene		10	2
Benzidine		5	
Benzo (a) Anthracene (1,2 <i>Benanthracene</i>)	10	5	
Benzo(a) pyrene (3,4 <i>Benzopyrene</i>)		10	2
Benzo (b) Flouranthene (3,4 <i>Benzofluoranthene</i>)		10	10
Benzo(g,h,i)perylene		5	0.1
Benzo(k)fluoranthene		10	2
bis 2-(1-Chloroethoxyl) methane		5	
bis(2-chloroethyl) ether	10	1	
bis(2-Chloroisopropyl) ether	10	2	
bis(2-Ethylhexyl) phthalate	10	5	
4-Bromophenyl phenyl ether	10	5	
Butyl benzyl phthalate	10	10	
2-Chloronaphthalene		10	
4-Chlorophenyl phenyl ether		5	
Chrysene		10	5
Dibenzo(a,h)-anthracene		10	0.1
1,2 Dichlorobenzene (semivolatile)	2	2	
1,3 Dichlorobenzene (semivolatile)	2	1	
1,4 Dichlorobenzene (semivolatile)	2	1	
3,3' Dichlorobenzidine		5	
Diethyl phthalate	10	2	
Dimethyl phthalate	10	2	
di-n-Butyl phthalate		10	
2,4 Dinitrotoluene	10	5	
2,6 Dinitrotoluene		5	
di-n-Octyl phthalate		10	
1,2 Diphenylhydrazine		1	

Table 2 – Semi-Volatile Substances²	GC	GCMS	LC
Fluoranthene	10	1	0.05
Fluorene		10	0.1
Hexachloro-cyclopentadiene	5	5	
1,2,4 Trichlorobenzene	1	5	

MINIMUM LEVELS IN PPB (µg/l)

Table 2 - SEMI-VOLATILE SUBSTANCES²	GC	GCMS	LC	COLOR
Pentachlorophenol	1	5		
Phenol ³	1	1		50
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
N-Nitroso diphenyl amine	10	1		
Phenanthrene		5	0.05	
Pyrene		10	0.05	

Table 3– INORGANICS⁴	FAA	GFA A	IC P	ICPM S	SPGFA A	HYDRID E	CVAA	COLO R	DCP
Antimony	10	5	50	0.5	5	0.5			1000
Arsenic		2	10	2	2	1		20	1000
Beryllium	20	0.5	2	0.5	1				1000
Cadmium	10	0.5	10	0.25	0.5				1000
Chromium (total)	50	2	10	0.5	1				1000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1000
Lead	20	5	5	0.5	2				10000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1000

² With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1000, therefore, the lowest standards concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1000.

³ Phenol by colorimetric technique has a factor of 1.

⁴ The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 3– INORGANICS⁴	FAA	GFA A	IC P	ICPM S	SPGFA A	HYDRID E	CVAA	COLO R	DCP
Selenium		5	10	2	5	1			1000
Silver	10	1	10	0.25	2				1000
Thallium	10	2	10	1	5				1000
Zinc	20		20	1	10				1000
Cyanide								5	

MINIMUM LEVELS IN PPB (µg/l)

Table 4- PESTICIDES – PCBs⁵	GC
Aldrin	0.005
alpha-BHC (<i>a</i> -Hexachloro-cyclohexane)	0.01
beta-BHC (<i>b</i> -Hexachloro-cyclohexane)	0.005
Gamma-BHC (<i>Lindane</i> ; <i>g</i> -Hexachloro-cyclohexane)	0.02
Delta-BHC (<i>d</i> -Hexachloro-cyclohexane)	0.005
Chlordane	0.1
4,4'-DDT	0.01
4,4'-DDE	0.05
4,4'-DDD	0.05
Dieldrin	0.01
Alpha-Endosulfan	0.02
Beta-Endosulfan	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

Techniques:

⁵ The normal method-specific factor for these substances is 100, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

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

ATTACHMENT I – TRIGGERS FOR MONITORING PRIORITY POLLUTANTS

	CONSTITUENT	µg/L
1	<i>Antimony</i>	6
2	<i>Arsenic</i>	10
3	<i>Beryllium</i>	4
4	Cadmium	1.3
5a	Chromium III	112
5b	Chromium VI	5.7
6	Copper	5.1
7	Lead	1.8
8	Mercury	0.026
9	Nickel	28
10	Selenium	2.5
11	Silver	2.4
12	<i>Thallium</i>	2
13	Zinc	65
14	Cyanide	2.6
15	Asbestos	--
16	2,3,7,8-TCDD (Dioxin)	0.0000000 07
17	Acrolein	390
18	Acrylonitrile	0.33
19	<i>Benzene</i>	1
20	Bromoform	180
21	<i>Carbon Tetrachloride</i>	0.5
22	<i>Chlorobenzene</i>	70
23	Chlorodibromomethane	17
24	Chloroethane	--
25	2-Chloroethyl vinyl ether	--
26	Chloroform	--
27	Dichlorobromomethane	23
28	<i>1,1-Dichloroethane</i>	5
29	<i>1,2-Dichloroethane</i>	0.5
30	1,1-Dichloroethylene	1.6
31	<i>1,2-Dichloropropane</i>	5
32	<i>1,3-Dichloropropylene</i>	0.5
33	<i>Ethylbenzene</i>	300
34	Methyl Bromide	2,000
35	Methyl Chloride	--
36	<i>Methylene Chloride</i>	5
37	<i>1,1,2,2-Tetrachloroethane</i>	1

	CONSTITUENT	µg/L
38	<i>Tetrachloroethylene</i>	5
39	<i>Toluene</i>	150
40	<i>1,2-Trans-Dichloroethylene</i>	10
41	<i>1,1,1-Trichloroethane</i>	200
42	<i>1,1,2-Trichloroethane</i>	5
43	<i>Trichloroethylene</i>	5
44	<i>Vinyl Chloride</i>	0.5
45	2-Chlorophenol	200
46	2,4-Dichlorophenol	395
47	2,4-Dimethylphenol	1,150
48	2-Methy-4,6-Dinitrophenol	383
49	2,4-Dinitrophenol	7,000
50	2-Nitrophenol	--
51	4-Nitrophenol	--
52	3-Methyl-4-Chlorophenol	--
53	<i>Pentachlorophenol</i>	1
54	Phenol	2,300,000
55	2,4,6-Trichlorophenol	3.3
56	Acenaphthene	1,350
57	Acenaphthylene	--
58	Anthracene	55,000
59	Benzidine	0.00027
60	Benzo (a) anthracene	0.025
61	Benzo (a) pyrene	0.025
62	Benzo (b) fluoranthene	0.025
63	Benzo (g,h,i) perylene	--
64	Benzo (k) fluoranthene	0.025
65	Bis(2-Chloroethoxy) methane	--
66	Bis(2-Chloroethyl) ether	0.7
67	Bis(2-Chloroisopropyl) ether	85,000
68	<i>Bis(2-ethylhexyl) phthalate</i>	4
69	4-Bromophenyl phenyl ether	--
70	Butyl benzyl phthalate	2,600
71	2- Chloronaphthalene	2,150
72	4-Chlorophenyl phenyl ether	--
73	Chrysene	0.025
74	Dibenzo (a,h) anthracene	0.025
75	<i>1,2-Dichlorobenzene</i>	600

See notes below for italicized constituents.

	CONSTITUENT	µg/L
76	1,3-Dichlorobenzene	1,300
77	<i>1,4-Dichlorobenzene</i>	<i>5</i>
78	3,3-Dichlorobenzidine	0.039
79	Diethyl phthalate	60,000
80	Dimethyl phthalate	1,450,000
81	Di-N-butyl phthalate	6,000
82	2,4-Dinitrotoluene	4.6
83	2,6-Dinitrotoluene	--
84	Di-N-octyl phthalate	--
85	1,2-Diphenylhydrazine	0.27
86	Fluoranthene	185
87	Fluorene	7,000
88	Hexachlorobenzene	0.00039
89	Hexachlorobutadiene	25
90	<i>Hexachlorocyclopentadiene</i>	<i>50</i>
91	Hexachloroethane	4.5
92	Indeno (1,2,3-cd) pyrene	0.025
93	Isophorone	300
94	<i>Naphthalene</i>	<i>17</i>
95	Nitrobenzene	950
96	<i>N-Nitrosodimethylamine</i>	<i>0.01</i>
97	<i>N-Nitrosodi-N-propylamine</i>	<i>0.01</i>
98	N-Nitrosodiphenylamine	8
99	Phenanthrene	--

	CONSTITUENT	µg/L
100	Pyrene	5,500
101	<i>1,2,4-Trichlorobenzene</i>	<i>5</i>
102	Aldrin	0.00007
103	BHC Alpha	0.0065
104	BHC Beta	0.023
105	BHC Gamma	0.032
106	BHC Delta	--
107	Chlordane	0.0003
108	4,4-DDT	0.0003
109	4,4-DDE	0.0003
110	4,4-DDD	0.00042
111	Dieldrin	0.00007
112	Endosulfan Alpha	0.028
113	Endosulfan Beta	0.028
114	Endosulfan Sulfate	120
115	Endrin	0.018
116	Endrin Aldehyde	0.405
117	Heptachlor	0.00011
118	Heptachlor Epoxide	0.00005 5
119	PCB 1016	0.00008 5
120	PCB 1221	0.00008 5
125	PCB 1260	0.00008 5
126	Toxaphene	0.0001

Notes:

1. For constituents not shown italicized, the values shown in the Table are fifty percent of the most stringent applicable receiving water objectives (freshwater or human health (consumption of organisms only) as specified for that pollutant in 40 C.F.R. 131.38¹).
2. For constituents shown bold and italicized, the values shown in the Table are based on the California State Water Resources Control Board's Division of Drinking Water maximum contaminant levels (MCLs) or Notification Level. Notification Level-based trigger is underlined.
3. For hardness dependent metals, the hardness value used is 110 mg/L and for pentachlorophenol, the pH value used is 6.7 standard units.

¹ See Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations.

ATTACHMENT J – REASONABLE POTENTIAL ANALYSIS EVALUATION

Chromium (VI)								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC ¹	CCC ¹	Organisms Only	
1/10/2013	µg/L	0.08	0.0129	1	16.29	11.43		No
4/4/2013	µg/L	0.13	0.0129	1	16.29	11.43		No
8/8/2013	µg/L	18	4.3	5	16.29	11.43		Yes
10/17/2013	µg/L	0.13	0.009	0.02	16.29	11.43		No
1/14/2014	µg/L	0.27	0.009	0.02	16.29	11.43		No
4/8/2014	µg/L	0.09	0.009	0.02	16.29	11.43		No
7/8/2014	µg/L	0.09	0.009	0.02	16.29	11.43		No
10/7/2014	µg/L	0.09	0.009	0.02	16.29	11.43		No
1/13/2015	µg/L	0.09	0.009	0.02	16.29	11.43		No
4/21/2015	µg/L	0.11	0.009	0.02	16.29	11.43		No
7/7/2015	µg/L	0.14	0.009	0.02	16.29	11.43		No
10/15/2015	µg/L	0.15	0.009	0.02	16.29	11.43		No
1/7/2016	µg/L	0.26	0.009	0.02	16.29	11.43		No
4/14/2016	µg/L	0.18	0.009	0.02	16.29	11.43		No
7/7/2016	µg/L	0.11	0.009	0.02	16.29	11.43		No
7/14/2016	µg/L	0.28	0.009	0.02	16.29	11.43		No
10/13/2016	µg/L	0.13	0.009	0.02	16.29	11.43		No
1/19/2017	µg/L	0.082	0.009	0.02	16.29	11.43		No
4/13/2017	µg/L	0.1	0.009	0.02	16.29	11.43		No
7/11/2017	µg/L	0.2	0.009	0.02	16.29	11.43		No
7/20/2017	µg/L	0.17	0.009	0.02	16.29	11.43		No
10/12/2017	µg/L	0.16	0.009	0.02	16.29	11.43		No
10/30/2017	µg/L	0.2	0.009	0.02	16.29	11.43		No
4/10/2018	µg/L	0.11	0.009	0.02	16.29	11.43		No
7/10/2018	µg/L	0.17	0.009	0.02	16.29	11.43		No

CMC = Criterion Maximum Concentration

CCC = Criterion Continuous Concentration

¹ The minimum effluent hardness value of 110 mg/L (during the period from 2013 through 2018) was used to determine certain metals criteria.

Copper ²								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
1/10/2013	µg/L	2	0.0381	0.5	15.31	10.12		No
4/4/2013	µg/L	1.7	0.0381	0.5	15.31	10.12		No
8/8/2013	µg/L	1.3	0.197	2	15.31	10.12		No
10/17/2013	µg/L	2.5	0.197	2	15.31	10.12		No
1/14/2014	µg/L	1.3	0.197	2	15.31	10.12		No
4/8/2014	µg/L	1.8	0.197	2	15.31	10.12		No
7/8/2014	µg/L	0.37	0.197	2	15.31	10.12		No
10/7/2014	µg/L	1.4	0.197	2	15.31	10.12		No
1/13/2015	µg/L	1.6	0.197	2	15.31	10.12		No
4/14/2015	µg/L	1.2	0.197	2	15.31	10.12		No
7/7/2015	µg/L	1.3	0.197	2	15.31	10.12		No
10/15/2015	µg/L	1.5	0.197	2	15.31	10.12		No
1/7/2016	µg/L	1.7	0.197	2	15.31	10.12		No
4/14/2016	µg/L	1.7	0.197	2	15.31	10.12		No
7/14/2016	µg/L	1.1	0.197	2	15.31	10.12		No
10/13/2016	µg/L	1	0.197	2	15.31	10.12		No
1/19/2017	µg/L	4.5	0.197	2	15.31	10.12		No
4/13/2017	µg/L	ND	0.985	10	15.31	10.12		No
7/20/2017	µg/L	0.96	0.197	2	15.31	10.12		No
10/12/2017	µg/L	0.81	0.197	2	15.31	10.12		No
4/10/2018	µg/L	1	0.197	2	15.31	10.12		No
7/10/2018	µg/L	0.75	0.197	2	15.31	10.12		No

² Effluent limitations for Copper and Lead are required because the Facility discharges treated wastewater from DP-001 to Butterfield Drain within Prado Basin Management Zone, a tributary of Reach 3 of the Santa Ana River that is listed on the Clean Water Act 303(d) list as being impaired for Copper and Lead.

Lead ³								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Heath	
					CMC	CCC	Organisms Only	
1/10/2013	µg/L	0.1	0.0261	0.5	92.18	3.59		No
4/4/2013	µg/L	0.07	0.0261	0.5	92.18	3.59		No
8/8/2013	µg/L	0.1	0.038	0.5	92.18	3.59		No
10/17/2013	µg/L	0.16	0.038	0.5	92.18	3.59		No
1/14/2014	µg/L	0.13	0.038	0.5	92.18	3.59		No
4/8/2014	µg/L	0.23	0.038	0.5	92.18	3.59		No
7/8/2014	µg/L	0.12	0.038	0.5	92.18	3.59		No
10/7/2014	µg/L	0.1	0.038	0.5	92.18	3.59		No
1/13/2015	µg/L	0.14	0.038	0.5	92.18	3.59		No
4/14/2015	µg/L	0.11	0.038	0.5	92.18	3.59		No
7/7/2015	µg/L	0.37	0.038	0.5	92.18	3.59		No
10/15/2015	µg/L	ND	0.038	0.5	92.18	3.59		No
1/7/2016	µg/L	0.12	0.038	0.5	92.18	3.59		No
4/14/2016	µg/L	0.11	0.038	0.5	92.18	3.59		No
7/14/2016	µg/L	0.12	0.038	0.5	92.18	3.59		No
10/13/2016	µg/L	0.1	0.038	0.5	92.18	3.59		No
1/19/2017	µg/L	0.12	0.038	0.5	92.18	3.59		No
4/13/2017	µg/L	ND	0.19	2.5	92.18	3.59		No
7/20/2017	µg/L	0.08	0.038	0.5	92.18	3.59		No
10/12/2017	µg/L	0.09	0.038	0.5	92.18	3.59		No
4/10/2018	µg/L	0.15	0.038	0.5	92.18	3.59		No
7/10/2018	µg/L	0.17	0.038	0.5	92.18	3.59		No

³ Effluent limitations for Copper and Lead are required because the Facility discharges treated wastewater from DP-001 to Butterfield Drain within Prado Basin Management Zone, a tributary of Reach 3 of the Santa Ana River that is listed on the Clean Water Act 303(d) list as being impaired for Copper and Lead.

Selenium								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
1/10/2013	µg/L	2.3	0.1127	1	20	5		No
4/4/2013	µg/L	2	0.1127	1	20	5		No
8/8/2013	µg/L	0.97	0.153	5	20	5		No
10/10/2013	µg/L	1.5	0.153	5	20	5		No
1/7/2014	µg/L	1	0.153	5	20	5		No
4/8/2014	µg/L	1.2	0.153	5	20	5		No
7/8/2014	µg/L	1.4	0.153	5	20	5		No
10/7/2014	µg/L	1.1	0.153	5	20	5		No
1/13/2015	µg/L	1	0.153	5	20	5		No
4/14/2015	µg/L	1.4	0.153	5	20	5		No
7/7/2015	µg/L	ND	0.153	5	20	5		No
10/15/2015	µg/L	ND	0.153	5	20	5		No
1/7/2016	µg/L	0.97	0.153	5	20	5		No
4/14/2016	µg/L	1	0.153	5	20	5		No
7/7/2016	µg/L	0.78	0.153	5	20	5		No
7/14/2016	µg/L	ND	0.153	5	20	5		No
10/13/2016	µg/L	0	0.153	5	20	5		No
1/19/2017	µg/L	0	0.153	5	20	5		No
4/13/2017	µg/L	10	0.765	25	20	5		Yes
6/21/2017	µg/L	0.78	0.153	5	20	5		No
7/11/2017	µg/L	0.96	0.153	5	20	5		No
7/20/2017	µg/L	0.28	0.153	5	20	5		No
10/12/2017	µg/L	1.4	0.153	5	20	5		No
10/30/2017	µg/L	ND	0.153	5	20	5		No
4/10/2018	µg/L	0	0.153	5	20	5		No
7/10/2018	µg/L	0	0.153	5	20	5		No

Cyanide								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
6/30/2015	µg/L	0			22	5.2	220,000	No
7/2/2015	µg/L	0			22	5.2	220,000	No
8/7/2015	µg/L	0			22	5.2	220,000	No
9/3/2015	µg/L	ND			22	5.2	220,000	No
10/27/2015	µg/L	ND			22	5.2	220,000	No
11/5/2015	µg/L	ND			22	5.2	220,000	No
12/3/2015	µg/L	3.3			22	5.2	220,000	No
1/14/2016	µg/L	ND			22	5.2	220,000	No
2/4/2016	µg/L	ND			22	5.2	220,000	No
3/3/2016	µg/L	ND			22	5.2	220,000	No
4/7/2016	µg/L	ND			22	5.2	220,000	No
5/5/2016	µg/L	ND			22	5.2	220,000	No
6/9/2016	µg/L	ND			22	5.2	220,000	No
7/5/2016	µg/L	ND			22	5.2	220,000	No
8/4/2016	µg/L	3.9			22	5.2	220,000	No
9/6/2016	µg/L	ND			22	5.2	220,000	No
10/5/2016	µg/L	ND			22	5.2	220,000	No
11/3/2016	µg/L	ND			22	5.2	220,000	No
12/8/2016	µg/L	ND			22	5.2	220,000	No
1/5/2017	µg/L	ND			22	5.2	220,000	No
2/9/2017	µg/L	ND			22	5.2	220,000	No
3/2/2017	µg/L	ND			22	5.2	220,000	No
4/6/2017	µg/L	2.1			22	5.2	220,000	No
5/9/2017	µg/L	4.4			22	5.2	220,000	No
6/8/2017	µg/L	ND			22	5.2	220,000	No
7/6/2017	µg/L	ND			22	5.2	220,000	No
8/2/2017	µg/L	2.1			22	5.2	220,000	No
9/7/2017	µg/L	2.6			22	5.2	220,000	No
10/5/2017	µg/L	ND			22	5.2	220,000	No
11/2/2017	µg/L	10			22	5.2	220,000	Yes
12/7/2017	µg/L	ND			22	5.2	220,000	No
1/4/2018	µg/L	ND			22	5.2	220,000	No
2/6/2018	µg/L	2			22	5.2	220,000	No
3/8/2018	µg/L	ND			22	5.2	220,000	No
4/5/2018	µg/L	ND			22	5.2	220,000	No
5/3/2018	µg/L	2.1			22	5.2	220,000	No
6/6/2018	µg/L	3.3			22	5.2	220,000	No
7/4/2018	µg/L	ND			22	5.2	220,000	No
8/7/2018	µg/L	ND			22	5.2	220,000	No
9/6/2018	µg/L	ND			22	5.2	220,000	No
10/4/2018	µg/L	ND			22	5.2	220,000	No

2,3,7,8 TCDD								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
1/10/2013	µg/L	1.30E-08					1.40E-08	No
2/7/2013	µg/L	4.66E-10					1.40E-08	No
3/7/2013	µg/L	5.23E-10					1.40E-08	No
4/4/2013	µg/L	2.66E-10					1.40E-08	No
5/9/2013	µg/L	1.88E-08					1.40E-08	Yes
6/6/2013	µg/L	3.81E-08					1.40E-08	Yes
7/11/2013	µg/L	ND					1.40E-08	No
8/15/2013	µg/L	ND					1.40E-08	No
9/12/2013	µg/L	ND					1.40E-08	No
10/10/2013	µg/L	ND					1.40E-08	No
11/7/2013	µg/L	ND					1.40E-08	No
12/5/2013	µg/L	ND					1.40E-08	No
1/9/2014	µg/L	ND					1.40E-08	No
2/13/2014	µg/L	ND					1.40E-08	No
3/5/2014	µg/L	ND					1.40E-08	No
4/3/2014	µg/L	ND					1.40E-08	No
5/8/2014	µg/L	ND					1.40E-08	No
6/5/2014	µg/L	ND					1.40E-08	No
7/1/2014	µg/L	8.10E-07					1.40E-08	Yes
8/7/2014	µg/L	4.00E-09					1.40E-08	No
9/4/2014	µg/L	ND					1.40E-08	No
10/9/2014	µg/L	ND					1.40E-08	No
11/6/2014	µg/L	ND					1.40E-08	No
12/4/2014	µg/L	ND					1.40E-08	No
1/8/2015	µg/L	3.60E-07					1.40E-08	Yes
2/5/2015	µg/L	ND					1.40E-08	No
3/5/2015	µg/L	4.00E-07					1.40E-08	Yes
4/9/2015	µg/L	4.00E-08					1.40E-08	Yes
5/7/2015	µg/L	6.30E-07					1.40E-08	Yes
6/2/2015	µg/L	3.50E-07		1.92E-06			1.40E-08	Yes
7/2/2015	µg/L	ND		2.07E-06			1.40E-08	No
8/6/2015	µg/L	ND		1.95E-06			1.40E-08	No
9/3/2015	µg/L	ND	3.29E-07	1.98E-06			1.40E-08	No
10/8/2015	µg/L	5.00E-07					1.40E-08	Yes
11/5/2015	µg/L	6.80E-07	4.11E-07	1.98E-06			1.40E-08	Yes
12/3/2015	µg/L	ND	3.51E-07	2.03E-06			1.40E-08	No
1/14/2016	µg/L	ND					1.40E-08	No
2/4/2016	µg/L	ND					1.40E-08	No
3/3/2016	µg/L	ND					1.40E-08	No
4/7/2016	µg/L	ND					1.40E-08	No
5/5/2016	µg/L	ND					1.40E-08	No
6/9/2016	µg/L	9.10E-08					1.40E-08	Yes
7/5/2016	µg/L	ND					1.40E-08	No
8/4/2016	µg/L	ND					1.40E-08	No

2,3,7,8 TCDD								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
9/6/2016	µg/L	ND					1.40E-08	No
10/5/2016	µg/L	ND					1.40E-08	No
11/3/2016	µg/L	ND					1.40E-08	No
12/8/2016	µg/L	ND					1.40E-08	No
1/5/2017	µg/L	ND					1.40E-08	No
2/9/2017	µg/L	1.00E-07					1.40E-08	Yes
3/2/2017	µg/L	ND					1.40E-08	No
4/6/2017	µg/L	ND					1.40E-08	No
5/9/2017	µg/L	ND					1.40E-08	No
6/8/2017	µg/L	ND					1.40E-08	No
7/6/2017	µg/L	ND					1.40E-08	No
8/2/2017	µg/L	ND					1.40E-08	No
9/7/2017	µg/L	ND					1.40E-08	No
10/5/2017	µg/L	ND					1.40E-08	No
11/2/2017	µg/L	ND					1.40E-08	No
12/7/2017	µg/L	ND					1.40E-08	No
1/4/2018	µg/L	ND					1.40E-08	No
2/6/2018	µg/L	ND					1.40E-08	No
3/8/2018	µg/L	ND	3.60E-08	1.96E-06			1.40E-08	No
4/5/2018	µg/L	2.60E-07	1.22E-07	2.00E-06			1.40E-08	Yes
5/3/2018	µg/L	ND	1.07E-07	2.01E-06			1.40E-08	No
6/6/2018	µg/L	ND	1.55E-07	4.79E-06			1.40E-08	No
7/4/2018	µg/L	ND	9.70E-08	4.90E-06			1.40E-08	No
8/7/2018	µg/L	ND	1.24E-07	3.81E-06			1.40E-08	No
9/6/2018	µg/L	5.70E-07	1.05E-07	4.33E-06			1.40E-08	Yes
10/4/2018	µg/L	ND	1.00E-07	3.85E-06			1.40E-08	No

Chlorodibromomethane								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
10/17/2013	µg/L	7.4	0.062	0.5			34	No
1/14/2014	µg/L	10	0.062	0.5			34	No
1/14/2014	µg/L	10	0.062	0.5			34	No
7/8/2014	µg/L	6.2	0.062	0.5			34	No
10/7/2014	µg/L	9.4	0.062	0.5			34	No
1/13/2015	µg/L	5.5	0.062	0.5			34	No
4/14/2015	µg/L	10	0.062	0.5			34	No
7/7/2015	µg/L	7.6	0.062	0.5			34	No
10/15/2015	µg/L	13	0.062	0.5			34	No
1/7/2016	µg/L	5.5	0.062	0.5			34	No
4/14/2016	µg/L	8.7	0.062	0.5			34	No
7/14/2016	µg/L	8.1	0.062	0.5			34	No
7/22/2016	µg/L	5.4	0.062	0.5			34	No
10/31/2016	µg/L	4.5	0.062	0.5			34	No
1/19/2017	µg/L	3.1	0.062	0.5			34	No
4/13/2017	µg/L	8	0.062	0.5			34	No
7/11/2017	µg/L	7.8	0.062	0.5			34	No
7/20/2017	µg/L	11	0.062	0.5			34	No
10/12/2017	µg/L	8.3	0.062	0.5			34	No
10/30/2017	µg/L	4.8	0.062	0.5			34	No
12/31/2017	µg/L	11	0.062	0.5			34	No
4/10/2018	µg/L	16	4	10			34	No
7/10/2018	µg/L	46	0.4	1			34	Yes

Dichlorobromomethane								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
10/10/2013	µg/L	23	0.117	0.5			46	No
1/7/2014	µg/L	17	0.117	0.5			46	No
7/8/2014	µg/L	24	0.117	0.5			46	No
10/7/2014	µg/L	30	0.117	0.5			46	No
1/13/2015	µg/L	18	0.117	0.5			46	No
4/14/2015	µg/L	32	0.117	0.5			46	No
7/7/2015	µg/L	21	0.585	2.5			46	No
10/15/2015	µg/L	37	0.117	0.5			46	No
1/7/2016	µg/L	16	0.117	0.5			46	No
4/14/2016	µg/L	29	0.117	0.5			46	No
7/14/2016	µg/L	25	0.117	0.5			46	No
7/22/2016	µg/L	15	0.117	0.5			46	No
10/31/2016	µg/L	22	0.117	0.5			46	No
1/19/2017	µg/L	15	0.117	0.5			46	No
4/13/2017	µg/L	34	0.117	0.5			46	No
7/11/2017	µg/L	29	0.12	0.5			46	No
7/20/2017	µg/L	40	0.117	0.5			46	No
10/12/2017	µg/L	30	0.117	0.5			46	No
10/30/2017	µg/L	22	0.117	0.5			46	No
12/31/2017	µg/L	40	0.4	1			46	No
4/10/2018	µg/L	29	4	10			46	No
7/10/2018	µg/L	76	0.4	1			46	Yes

Bis(2-Ethylhexyl)Phthalate								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
1/10/2013	µg/L	ND	2.337	5			5.9	No
4/4/2013	µg/L	ND	2.337	5			5.9	No
8/8/2013	µg/L	ND	0.149	0.6			5.9	No
10/17/2013	µg/L	ND	0.149	0.6			5.9	No
1/14/2014	µg/L	ND	0.149	0.6			5.9	No
4/8/2014	µg/L	ND	0.149	0.6			5.9	No
7/8/2014	µg/L	ND	0.149	0.6			5.9	No
10/7/2014	µg/L	ND	0.149	0.6			5.9	No
1/13/2015	µg/L	ND	0.149	0.6			5.9	No
6/2/2015	µg/L	62	2.98	12			5.9	Yes
7/2/2015	µg/L	75	2.98	12			5.9	Yes
10/8/2015	µg/L	ND	0.149	0.6			5.9	No
1/14/2016	µg/L	ND	0.149	0.6			5.9	No
4/7/2016	µg/L	ND	0.149	0.6			5.9	No

Bis(2-Ethylhexyl)Phthalate								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
7/5/2016	µg/L	ND	0.149	0.6			5.9	No
10/5/2016	µg/L	ND	0.149	0.6			5.9	No
1/5/2017	µg/L	ND	0.149	0.6			5.9	No
4/6/2017	µg/L	ND	0.149	0.6			5.9	No
7/6/2017	µg/L	ND	0.149	0.6			5.9	No
10/5/2017	µg/L	ND	0.149	0.6			5.9	No
4/5/2018	µg/L	ND	0.149	0.6			5.9	No
7/4/2018	µg/L	ND	0.149	0.6			5.9	No

beta-BHC								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
10/10/2013	µg/L	0.03	0.0049	0.01			0.046	No
1/7/2014	µg/L	0	0.0049	0.01			0.046	No
4/8/2014	µg/L	0	0.0049	0.01			0.046	No
7/8/2014	µg/L	0.03	0.0049	0.01			0.046	No
10/7/2014	µg/L	0.03	0.0049	0.01			0.046	No
1/13/2015	µg/L	0.02	0.0049	0.01			0.046	No
4/14/2015	µg/L	0.02	0.0049	0.008			0.046	No
7/7/2015	µg/L	ND	0.0049	0.017			0.046	No
10/15/2015	µg/L	ND	0.025	0.025			0.046	No
1/7/2016	µg/L	ND	0.013	0.013			0.046	No
4/14/2016	µg/L	ND	0.019	0.019			0.046	No
7/7/2016	µg/L	ND	0.03	0.03			0.046	No
7/14/2016	µg/L	0.024	0.005	0.01			0.046	No
10/13/2016	µg/L	ND	0.02	0.02			0.046	No
1/19/2017	µg/L	ND	0.009	0.01			0.046	No
4/13/2017	µg/L	0.025	0.005	0.01			0.046	No
7/11/2017	µg/L	ND	0.015	0.015			0.046	No
7/20/2017	µg/L	0.019	0.004	0.008			0.046	No
10/12/2017	µg/L	0.054	0.005	0.01			0.046	Yes
10/30/2017	µg/L	0.034	0.005	0.01			0.046	No
4/27/2018	µg/L	ND	0.004	0.008			0.046	No
7/10/2018	µg/L	ND	0.02	0.02			0.046	No

4,4-DDT								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
1/10/2013	µg/L	ND	0.01	0.01	1.1	0.001	0.00059	No
4/4/2013	µg/L	ND	0.01	0.01	1.1	0.001	0.00059	No
8/8/2013	µg/L	ND	0.0052	0.02	1.1	0.001	0.00059	No
10/17/2013	µg/L	ND	0.0052	0.02	1.1	0.001	0.00059	No
1/14/2014	µg/L	ND	0.0052	0.02	1.1	0.001	0.00059	No
4/8/2014	µg/L	ND	0.0052	0.019	1.1	0.001	0.00059	No
7/8/2014	µg/L	ND	0.0052	0.02	1.1	0.001	0.00059	No
10/7/2014	µg/L	ND	0.0052	0.02	1.1	0.001	0.00059	No
1/13/2015	µg/L	ND	0.0052	0.02	1.1	0.001	0.00059	No
4/14/2015	µg/L	ND	0.0052	0.016	1.1	0.001	0.00059	No
7/7/2015	µg/L	ND	0.0052	0.019	1.1	0.001	0.00059	No
10/15/2015	µg/L	0.01	0.005	0.02	1.1	0.001	0.00059	Yes
1/7/2016	µg/L	ND	0.005	0.02	1.1	0.001	0.00059	No
4/14/2016	µg/L	ND	0.005	0.02	1.1	0.001	0.00059	No
7/7/2016	µg/L	ND	0.005	0.02	1.1	0.001	0.00059	No
7/14/2016	µg/L	ND	0.005	0.02	1.1	0.001	0.00059	No
10/13/2016	µg/L	ND	0.005	0.019	1.1	0.001	0.00059	No
1/19/2017	µg/L	ND	0.005	0.019	1.1	0.001	0.00059	No
4/13/2017	µg/L	0	0.005	0.02	1.1	0.001	0.00059	No
7/11/2017	µg/L	ND	0.005	0.02	1.1	0.001	0.00059	No
7/20/2017	µg/L	ND	0.004	0.016	1.1	0.001	0.00059	No
10/30/2017	µg/L	ND	0.005	0.02	1.1	0.001	0.00059	No
11/20/2017	µg/L	ND	0.005	0.02	1.1	0.001	0.00059	No
4/27/2018	µg/L	ND	0.004	0.016	1.1	0.001	0.00059	No
7/10/2018	µg/L	ND	0.005	0.021	1.1	0.001	0.00059	No

4,4-DDE								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
10/10/2013	µg/L	ND	0.005	0.02			0.00059	No
1/7/2014	µg/L	ND	0.005	0.019			0.00059	No
4/21/2015	µg/L	ND	0.004	0.016			0.00059	No
7/7/2016	µg/L	0.0061	0.005	0.02			0.00059	Yes

Dieldrin								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
10/10/2013	µg/L	ND	0.0051	0.02	0.24	0.056	0.00014	No
1/7/2014	µg/L	ND	0.0051	0.019	0.24	0.056	0.00014	No
4/21/2015	µg/L	0.0091	0.004	0.016	0.24	0.056	0.00014	Yes
7/7/2016	µg/L	0.0088	0.0050	0.02	0.24	0.056	0.00014	Yes
10/13/2016	µg/L	ND	0.005	0.019	0.24	0.056	0.00014	No
1/19/2017	µg/L	ND	0.005	0.019	0.24	0.056	0.00014	No
4/13/2017	µg/L	ND	0.005	0.02	0.24	0.056	0.00014	No
7/11/2017	µg/L	ND	0.005	0.02	0.24	0.056	0.00014	No
7/20/2017	µg/L	ND	0.004	0.016	0.24	0.056	0.00014	No
10/12/2017	µg/L	0.006	0.005	0.02	0.24	0.056	0.00014	Yes
10/30/2017	µg/L	0.012	0.005	0.02	0.24	0.056	0.00014	Yes
4/27/2018	µg/L	ND	0.004	0.016	0.24	0.056	0.00014	No
7/10/2018	µg/L	ND	0.005	0.021	0.24	0.056	0.00014	No

Heptachlor								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
10/10/2013	µg/L	ND	0.0026	0.047	0.52	0.0038	0.00021	No
1/7/2014	µg/L	ND	0.0026	0.01	0.52	0.0038	0.00021	No
12/31/2015	µg/L	ND	0.006	0.008	0.52	0.0038	0.00021	No
7/7/2016	µg/L	0.029	0.003	0.01	0.52	0.0038	0.00021	Yes
10/13/2016	µg/L	0.03	0.003	0.01	0.52	0.0038	0.00021	Yes
1/19/2017	µg/L	ND	0.003	0.01	0.52	0.0038	0.00021	No
4/13/2017	µg/L	0.03	0.003	0.01	0.52	0.0038	0.00021	Yes
7/11/2017	µg/L	0.01	0.003	0.01	0.52	0.0038	0.00021	Yes
7/20/2017	µg/L	0.02	0.002	0.008	0.52	0.0038	0.00021	Yes
10/12/2017	µg/L	0.02	0.003	0.01	0.52	0.0038	0.00021	Yes
10/30/2017	µg/L	0.04	0.003	0.01	0.52	0.0038	0.00021	Yes
4/27/2018	µg/L	0.029	0.0020	0.0080	0.52	0.0038	0.00021	Yes
7/10/2018	µg/L	0.04	0.003	0.01	0.52	0.0038	0.00021	Yes

Heptachlor Epoxide								
Sample Date	Unit	Result	MDL	ML	CTR Criteria			CTR Criteria Exceeded?
					Freshwater		Human Health	
					CMC	CCC	Organisms Only	
10/10/2013	µg/L	ND	0.0026	0.0098	0.52	0.0038	0.00011	No
1/7/2014	µg/L	ND	0.0026	0.0096	0.52	0.0038	0.00011	No
4/21/2015	µg/L	0.0097	0.0021	0.008	0.52	0.0038	0.00011	Yes
7/7/2016	µg/L	ND	0.0025	0.0098	0.52	0.0038	0.00011	No
10/30/2017	µg/L	ND	0.0026	0.01	0.52	0.0038	0.00011	No
4/27/2018	µg/L	ND	0.0021	0.0080	0.52	0.0038	0.00011	No
7/10/2018	µg/L	ND	0.0026	0.01	0.52	0.0038	0.00011	No