

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

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ORDER NO. R8-2023-0009

**WASTE DISCHARGE REQUIREMENTS AND MASTER RECYCLING PERMIT
FOR THE
EAST VALLEY WATER DISTRICT
STERLING NATURAL RESOURCE CENTER**

The following Discharger, as described below, is subject to Waste Discharge Requirements (WDRs) and Master Recycling Permit set forth in this Order:

Table 1 Discharger/Facility Information

Discharger	East Valley Water District
Name of Facility	Sterling Natural Resource Center (SNRC)
Facility Address	25376 5 th St., San Bernardino, CA 92410
	San Bernardino County

Table 2 Discharge Locations

Discharge Point	Effluent Description	Latitude	Longitude	Receiving Waters
DP-001	Up to 8 MGD of Disinfected Tertiary Treated recycled water	34°6'34" N	117°9'57" W	Bunker Hill-B Groundwater Management Zone (GMZ)

Effective Date

The Order was adopted by the California Regional Water Quality Control Board, Santa Ana Region (Santa Ana Water Board) and is effective on December 1, 2023.

I, Jayne Joy, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the Santa Ana Water Board on December 1, 2023.

Jayne Joy, P.E., Executive Officer

TABLE OF CONTENTS

I. Facility Information.....	5
II. Findings.....	5
III. Discharge Prohibitions.....	8
IV. Discharge Specifications and Effluent Limitations	8
V. Notification and Response Levels	16
VI. Water Recycling Requirements	17
VII. Standard Provisions.....	18
VIII. Special Provisions	23
IX. Notices.....	27
ATTACHMENT A – DEFINITIONS.....	1
ATTACHMENT B – MAPS AND FIGURES.....	1
ATTACHMENT C – FLOW SCHEMATIC.....	1
ATTACHMENT D – WATER RECYCLING REQUIREMENTS.....	2
I. General Requirements.....	2
II. Wastewater Source Control.....	4
III. Diluent Water And Recycled Municipal Wastewater Contribution Requirements	4
IV. Pathogenic Microorganism Control.....	5
V. Cross-Connection Control Program.....	7
VI. Non-Potable Recycled Water Specifications	9
VII. Compliance Monitoring and Reporting.....	12
VIII. Operation Optimization Plan.....	14
IX. Total Organic Carbon and Soil-Aquifer Treatment Process Requirements.....	15
ATTACHMENT E – MONITORING AND REPORTING PROGRAM.....	1
I. Findings.....	1
II. General Monitoring Provisions.....	1
III. Monitoring Locations.....	3
IV. Monitoring Requirements.....	4
V. Constituents of Emerging Concern Monitoring Requirements	19
VI. Diluent Water Monitoring	26
VII. Self-Monitoring Reports.....	27
VIII. One Time Reporting Due Dates	29

IX. Volumetric Reporting Requirements	30
X. Pretreatment Program Monitoring and Reporting Requirements	31
ATTACHMENT F – FACT SHEET	1
I. Order Information	1
II. Facility Description.....	2
III. Applicable Plans, Policies, and Regulations	4
IV. Rationale For Discharge Prohibitions, Discharge Specifications, and Effluent Limitations	9
V. Rationale For Provisions.....	12
VI. Rationale For Monitoring and Reporting Provisions	13
VII. Public Participation	14

ATTACHMENTS

Attachment A – DEFINITIONS

Attachment B – MAPS AND FIGURES

Attachment C – FLOW SCHEMATIC

Attachment D – WATER RECLAMATION REQUIREMENTS

Attachment E – MONITORING AND REPORTING REQUIREMENTS

Attachment F – FACT SHEET

TABLES

Table 1 Discharger/Facility Information	1
Table 2 Discharge Locations.....	1
Table 3 Effluent Limitations at DP-001	8
Table 4 Effluent Limitations Based on Constituents with Secondary MCLs and other Required Constituents.....	9
Table 5 Effluent Limitations Based on Primary MCLs	11
Table 6 Effluent Limitations Based on Volatile Organic Chemicals (VOCs) with Primary MCLs.....	12
Table 7 Effluent Limitations Based on Synthetic Organic Chemicals (SOCs) with Primary MCLs	13
Table 8 Effluent Limitations Based on Disinfection Byproducts with Primary MCLs.....	15
Table 9 Effluent Limitations Based on Radionuclides with Primary MCLs.....	15
Table 10 Notification Levels (NL) and Response Levels (RL)	16

I. FACILITY INFORMATION

- A. The East Valley Water District (Discharger) owns and operates the Sterling Natural Resource Center (SNRC or Facility). The SNRC is a recycled water project by EVWD, in collaboration with the San Bernardino Valley Municipal Water District (San Bernardino Valley). The SNRC consists of two major components: wastewater recycling facility (WWRF) and the Weaver Basins. Non-potable use of treated water from the WWRF is an additional minor component. The WWRF is located at 25376 5th St., San Bernardino, CA 92410.
- B. The Discharger is responsible for providing potable water treatment and delivery services and wastewater collection and treatment. The Discharger constructed the Facility to produce and discharge disinfected tertiary treated recycled water through spreading basins for groundwater recharge (indirect potable reuse) of the Bunker Hill-B GMZ and for limited non-potable uses. Recycled water from the Facility will supplement the natural recharge into the groundwater basin.
- C. General information about the Facility is summarized in sections I and II of the Fact Sheet (Attachment F) of this Order to provide a detailed description of the Facility. Section I of the Fact Sheet also includes information regarding the permit application for the Facility.

II. FINDINGS

- A. **Legal Authorities.** This Order serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code, commencing with section 13260. Also, this Order serves as a master recycling permit pursuant to section 13523.1 of article 4, chapter 7, division 7 of the Water Code. This Order further incorporates applicable portions of State Water Resources Control Board (State Water Board) *Water Quality Control Policy for Recycled Water* (Recycled Water Policy)¹ and California Code of Regulations, title 22, division 4, chapter 3, article 5.1 - Indirect Potable Reuse: Groundwater Replenishment – Surface Application.
- B. **Background and Rationale for Requirements.** The Santa Ana Water Board developed the requirements in this Order based on information submitted in the *Title 22 Engineering Report: Sterling Natural Resource Center*² (Engineering Report) and the *Report of Waste Discharge Application for the East Valley Water District's Sterling Natural Resource Center* (ROWD)³, water quality control plans, policies, and other available information. The Fact Sheet (Attachment F) contains background information and rationale for the requirements in this Order and is

¹ The Recycled Water Policy can be found at the following webpage:
https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_ameendment_oal.pdf

² Submitted pursuant to Cal. Code Regs., tit. 22, § 60323

³ Submitted pursuant to Wat. Code, § 13260

incorporated into and constitutes findings for this Order. Attachments B through E are also incorporated in this Order.

C. **Pretreatment Program Approval.** The Santa Ana Water Board has received a request from the Discharger for approval of its pretreatment program. The Discharger's pretreatment program submittal was made in accordance with California Code of Regulations, title 23, section 2233 and 40 Code of Federal Regulations (40 CFR) section 403.9. The Santa Ana Water Board has reviewed the Discharger's pretreatment program submission and finds that it complies with the requirements of 40 CFR section 403.8. The Discharger's request did not include a request for a modification of the categorical treatment standards under 40 CFR sections 403.7(b) and (c). The Santa Ana Water Board hereby approves the pretreatment program of the Discharger (also referred to as the "Control Authority"). This approval is made in accordance with the requirements of the California Code of Regulations, title 23, section 2233 and 40 CFR section 403.11. The approved pretreatment program and its components, such as the Sewer Use Ordinance (Sewer Rules and Regulations), Enforcement Response Plan, local limits, and control mechanisms, amongst others, are hereby made an enforceable condition of this Order.

D. **California Environmental Quality Act (CEQA).** This Order includes requirements for the production and distribution of recycled water for non-potable reuse at a new facility. On March 15, 2016, the San Bernardino Valley, as the lead agency under CEQA (Pub. Res. Code, § 21000 et seq.), certified an Environmental Impact Report (EIR) for the SNRC (State Clearinghouse [SCH] No. 2015101058). The EIR identified no significant adverse impact to water quality as a result of the use of recycled water provided that mitigation measures proposed in the EIR are implemented. In 2018, the Discharger became the lead agency for SNRC and subsequently issued Addendum No. 1 and Addendum No. 2 to the 2016 EIR (see section III.B. of Attachment F for more details).

The Santa Ana Water Board is a responsible agency under CEQA for the purposes of issuing this Order. In issuing this Order, the Santa Ana Water Board has considered the EIR certified by San Bernardino Valley, Addendum Nos. 1 and 2 prepared by the Discharger, and subsequent information provided by the Discharger. More specifically, the Santa Ana Water Board considered those sections of the EIR and Addendums pertaining to impacts to water quality. The Santa Ana Water Board finds that compliance with the mitigation measures of the EIR and conditions in this Order will reduce potentially adverse impacts to water quality to a less than significant level and protect beneficial uses of receiving waters.

E. **Antidegradation Policy.** The State Water Board established California's Antidegradation Policy in Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (Resolution No. 68-16). Resolution No. 68-16 requires that the existing quality of waters be maintained unless degradation is justified based on specific findings. The Santa Ana Water

Board's *Water Quality Control Plan for the Santa Ana River Basin* (Basin Plan) implements and incorporates by reference the State's Antidegradation Policy. As discussed in section III.F of the Fact Sheet, the discharge regulated by this Order is consistent with the Basin Plan and Resolution No 68-16.

- F. **Executive Officer Delegation of Authority.** The Santa Ana Water Board, by prior resolution, has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to Water Code section 13223. Therefore, the Executive Officer is authorized to act on the Santa Ana Water Board's behalf on any matter within this Order, unless such delegation is unlawful under the Water Code section 13223 or as otherwise explicitly stated in this Order. The Santa Ana Water Board's delegated authorities to the Executive Officer include approving modifications to Water Recycling Requirements in Attachment D of this Order, as appropriate, after consulting with and receiving the recommendations from the State Water Board, Division of Drinking Water (DDW). The Executive Officer may also approve modifications to the Monitoring and Reporting Program (MRP), Attachment E.
- G. **Notification of Interested Persons.** The Santa Ana Water Board notified the Discharger, local agencies, and interested persons of its intent to prescribe WDRs and Master Recycling Permit for the discharge and provided them with an opportunity to submit written comments and recommendations. The Santa Ana Water Board also provided an opportunity for the Discharger and interested agencies and persons to submit oral comments and recommendations at a public hearing. Notification details are included in section VII.B of the Fact Sheet.
- H. **Consideration of Public Comment.** The Santa Ana Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Public Hearing details are included in section VII.D of the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED that, to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and applicable regulations adopted thereunder, the Discharger must comply with the requirements in this Order. The Discharger is hereby authorized to discharge disinfected tertiary treated recycled water at the discharge locations described in Table 2 within the Bunker Hill-B GMZ subject to the requirements below:

III. DISCHARGE PROHIBITIONS

- A. The use of recycled water shall be limited to treated effluent that meets the conditions and requirements specified in section IV and Attachments D and E of this Order.
- B. The discharge of wastewater and/or of recycled water at a location or in a manner different from described in the Order is prohibited.
- C. The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited.
- D. The discharge of any substances in concentrations toxic to animal or plant life in the affected receiving water is prohibited.
- E. The discharge of any radiological, chemical, or biological warfare agent or high-level radiological waste is prohibited.
- F. The distribution and use of recycled water prior to authorization by the California State Water Resources Control Board's (State Water Board) Division of Drinking Water (DDW), is prohibited.
- G. The treatment or disposal of waste from the Facility that causes a condition of contamination, pollution or nuisance, as defined in Water Code section 13050, is prohibited.

IV. DISCHARGE SPECIFICATIONS AND EFFLUENT LIMITATIONS

- A. The flowrate from the Facility must not exceed 8 million gallons per day (MGD) based on a monthly average flow.
- B. The Discharger must maintain compliance with the effluent limitations in Table 3, with compliance for DP-001 measured at Monitoring Location REC-001 as described in table E-1 of the Monitoring and Reporting Program (MRP) in Attachment E of the Order.

Table 3 Effluent Limitations at DP-001

Parameter	Units	Monthly Average ¹	Weekly Average ²
Biological Oxygen Demand (BOD ₅ @ 20°C) ³	Milligrams per liter (mg/L)	20	30
Total Suspended Solids (TSS) ³	mg/L	20	30

¹ The monthly average effluent limitation must apply to the arithmetic mean of the results of all samples collected during each calendar month.

- ² The weekly average effluent limitation must apply to the arithmetic mean of the results of all samples collected during each calendar week, beginning on Sunday and ending on Saturday.
- ³ Compliance is determined based on the monitoring data generated by the Discharger, at a minimum as required in Attachment E of this Order, which will characterize the discharge during the monitoring period.
- C. The Discharger must maintain compliance with the effluent limitations in Tables 4 through 9 of this Order, with compliance measured at Monitoring Location REC-001, as described in Table E-1 of Attachment E of this Order.

Table 4 Effluent Limitations Based on Constituents with Secondary MCLs and other Required Constituents

Parameter	Units	Average Annual ¹	Daily Maximum	Instantaneous Minimum	Instantaneous Maximum
Aluminum ²	milligrams per liter (mg/L)	0.2	-	-	-
Boron ³	mg/L	0.75	-	-	-
Chloride ^{2,3}	mg/L	55	500	-	-
Color Units ^{2,3}	Apparent Color Unit (ACU)	15	-	-	-
Copper ^{2,3,4}	mg/L	1.0	-	-	-
Fluoride ^{3,4}	"	1.0			
Iron ^{2,3}	"	0.3	-	-	-
Manganese ^{2,3}	"	0.05	-	-	-
Methylene Blue-Activated Substances (MBAS) ^{2,3}	"	0.05	0.5	-	-
Methyl-tert-butyl ether (MTBE) ²	"	0.005	-	-	-
Nitrate (as Nitrogen) ^{4,11}	"		10	-	-
Nitrate + Nitrite (as Nitrogen) ^{4,11}	"	-	10	-	-

Parameter	Units	Average Annual ¹	Daily Maximum	Instantaneous Minimum	Instantaneous Maximum
Nitrite (as Nitrogen) ^{4,11}	"	-	1	-	-
Total Nitrogen ^{6,13}	"	-	10	-	-
Total Inorganic Nitrogen ³	"	7.3	-	-	-
Odor ²	Threshold Odor Number (TON)	3	-	-	-
pH ^{3,12}	pH Units	-	-	6	9
Silver ^{2,3}	mg/L	0.05	0.1	-	-
Sulfate ^{2,3}	"	250	500	-	-
Thiobencarb ²	"	0.001	-	-	-
Total Dissolved Solids (TDS) ³	"	545	-	-	-
Total Organic Carbon (TOC) ^{5,7,13}	"	0.5	-	-	0.5
Turbidity ^{2,8,9,10}	Nephelometric Turbidity Units (NTU)	-	0.2	-	0.5
Zinc ²	mg/L	5.0	-	-	-

- ¹ The average annual effluent limitation must apply to the arithmetic mean of the results of all samples collected during each calendar year.
- ² Parameters with secondary maximum contaminant levels (MCLs) established in title 22, section 64449, Tables 64449-A and 64449-B.
- ³ Parameters with water quality objectives (WQOs) in the Basin Plan and for TDS is based on TDS assimilative capacity for the Bunker Hill-B GMZ. However, if the Discharger does not demonstrate compliance with the TDS mitigation commitments listed in section VIII.G. of this Order, the annual average TDS concentration shall not exceed a TDS effluent limitation of 330 mg/L, which is the TDS WQO for the Bunker Hill-B GMZ in the Basin Plan.

- 4 Parameters with primary MCLs established in title 22, section 64431, Table 64431-A.
- 5 Parameters with effluent limitations recommended by DDW's *Division of Drinking Water's Conditional Acceptance of the Title 22 Engineering Report for the East Valley Water District – Sterling Natural Resource Center Groundwater Replenishment Project (3690026-701), dated August 1, 2023, as revised by DDW's letter issued on October 13, 2023, to correct conditions and responsibilities regarding well-control zones.*
- 6 Parameters with limits established in title 22, section 60320.110.
- 7 As required under title 22, section 60320.118(c), TOC must not exceed 0.5 mg/L divided by the RMA RWC based on a 20-week running average of all TOC results and the average of the last four monitoring results for TOC.
- 8 Parameters with limits established in title 22, section 60301.320(b).
- 9 The effluent turbidity must not exceed an average of 0.2 NTU more than 5% of the time within a 24-hour period or 0.5 NTU at any time.
- 10 The Discharger must monitor turbidity at the MBR's microfiltration filter effluent rather than REC-001.
- 11 Running 4-Week Average per title 22, section 60320.112.
- 12 The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month. No individual excursion from the range of pH values shall exceed 60 minutes.
- 13 Compliance verified at Monitoring Location REC-002, as described in Table E-1 of Attachment E of this Order.

Table 5 Effluent Limitations Based on Primary MCLs

Parameter ^{1,2}	Units	Running 4-Week Average
Aluminum	mg/L	1
Antimony	"	0.006
Arsenic	"	0.010
Asbestos (for fibers exceeding 10 micrometers (µm) in length ³)	Million fibers per liter (MFL)	7
Barium	mg/L	1
Beryllium	"	0.004
Cadmium	"	0.005
Chromium	"	0.05

Parameter ^{1,2}	Units	Running 4-Week Average
Copper ³	"	1.3
Cyanide	"	0.15
Fluoride	"	2.0
Lead ³	"	0.015
Mercury	"	0.002
Nickel	"	0.1
Perchlorate	"	0.006
Selenium	"	0.05
Thallium	"	0.002

- ¹ Parameters with primary MCLs established in title 22, section 64431, Table 64431-A.
- ² Compliance with the running 4-week average will be determined based on the average of all samples collected during the 4-week period. The Discharger will be deemed in compliance with effluent limitation(s) during any 4-week period when samples are neither required nor collected.
- ³ The federal action levels for lead and copper are applied.

Table 6 Effluent Limitations Based on Volatile Organic Chemicals (VOCs) with Primary MCLs

Parameter ^{1,2}	Units	Running 4-Week Average
Benzene	mg/L	0.001
Carbon Tetrachloride	"	0.0005
1,2-Dichlorobenzene	"	0.6
1,4-Dichlorobenzene	"	0.005
1,1-Dichloroethane	"	0.005
1,2-Dichloroethane	"	0.0005
1,1-Dichloroethylene	"	0.006
Cis-1,2-Dichloroethylene	"	0.006
Trans-1,2-Dichloroethylene	"	0.01
Dichloromethane	"	0.005
1,2-Dichloropropane	"	0.005
1,3-Dichloropropene	"	0.0005

Parameter ^{1,2}	Units	Running 4-Week Average
Ethylbenzene	"	0.3
MTBE	"	0.013
Monochlorobenzene	"	0.07
Styrene	"	0.1
1,1,2,2-Tetrachloroethane	"	0.001
Tetrachloroethylene	"	0.005
Toluene	"	0.15
1,2,4-Trichlorobenzene	"	0.005
1,1,1-Trichloroethane	"	0.200
1,1,2-Trichloroethane	"	0.005
Trichloroethylene	"	0.005
Trichlorofluoromethane	"	0.15
1,1,2-Trichloro-1,2,2-Trifluoroethane	"	1.2
Vinyl Chloride	"	0.0005
Xylenes	"	1.750 ³

- ¹ Parameters with primary MCLs established in title 22, section 64444, Table 64444-A.
- ² Compliance with the running 4-week average will be determined based on the average of all samples collected during the 4-week period. The Discharger will be deemed in compliance with effluent limitation(s) during any 4-week period when samples are neither required nor collected.
- ³ The MCL is for either a single isomer or the sum of the isomers.

Table 7 Effluent Limitations Based on Synthetic Organic Chemicals (SOCs) with Primary MCLs

Parameter ^{1,2}	Units	Running 4-Week Average
Alachlor	mg/L	0.002
Atrazine	"	0.001
Bentazon	"	0.018
Benzo(a)pyrene	"	0.0002
Carbofuran	"	0.018
Chlordane	"	0.0001

Parameter^{1,2}	Units	Running 4-Week Average
2,4-Dichlorophenoxyacetic acid	"	0.07
Dalapon	"	0.2
1,2-Dibromo-3-chloropropane	"	0.0002
Di(2-ethylhexyl) adipate	"	0.4
Di(2-ethylhexyl) phthalate	"	0.004
Dinoseb	"	0.007
Diquat	"	0.02
Endothall	"	0.1
Endrin	"	0.002
Ethylene Dibromide	"	0.00005
Glyphosate	"	0.7
Heptachlor	"	0.00001
Heptachlor epoxide	"	0.00001
Hexachlorobenzene	"	0.001
Hexachlorocyclopentadiene	"	0.05
Gamma BHC (Lindane)	"	0.0002
Methoxychlor	"	0.03
Molinate	"	0.02
Oxamyl	"	0.05
Pentachlorophenol	"	0.001
Picloram	"	0.5
Polychlorinated Biphenyls (PCBs)	"	0.0005
Simazine	"	0.004
Thiobencarb	"	0.07
Toxaphene	"	0.003
1,2,3-Trichloropropane	"	0.000005
2,3,7,8-tetrachlorodibenzodioxin (Dioxin)	"	3 x 10 ⁻⁸
2-(2,4,5-trichlorophenoxy)propionic acid (Silvex)	"	0.05

¹ Parameters with primary MCLs established in title 22, section 64444, Table 64444-A.

- ² Compliance with the running 4-week average will be determined based on the average of all samples collected during the 4-week period. The Discharger will be deemed in compliance with effluent limitation(s) during any 4-week period when samples are neither required nor collected.

Table 8 Effluent Limitations Based on Disinfection Byproducts with Primary MCLs

Parameter ^{1,2}	Units	Running 4-Week Average
Total Trihalomethanes (TTHMs) <ul style="list-style-type: none"> • Bromodichloromethane • Bromoform • Chloroform • Dibromochloromethane 	mg/L	0.080
Haloacetic acid (five) <ul style="list-style-type: none"> • Monochloroacetic acid • Dichloroacetic acid • Trichloroacetic acid • Monobromoacetic acid • Dibromoacetic acid 	"	0.060
Bromate	"	0.010
Chlorite	"	1.0

¹ Parameters with primary MCLs established in title 22, section 64533, Table 64533-A.

- ² Compliance with the running 4-week average will be determined based on the average of all samples collected during the 4-week period. The Discharger will be deemed in compliance with effluent limitation(s) during any 4-week period when samples are neither required nor collected.

Table 9 Effluent Limitations Based on Radionuclides with Primary MCLs

Parameter ^{1,2}	Units	Running 4-Week Average
Combined Radium-226 and Radium-228	Picocuries per Liter (pCi/L)	5
Gross Alpha particle activity (excluding Radon and Uranium)	pCi/L	15
Uranium	pCi/L	20
Beta/photon emitters	millirem/yr	4
Strontium-90	pCi/L	8

Parameter ^{1,2}	Units	Running 4-Week Average
Tritium	pCi/L	20,000

- ¹ Parameters with primary MCLs established in title 22, section 64442 and 64443, Tables 64442 and 64443.
- ² Compliance with the running 4-week average will be determined based on the average of all samples collected during the 4-week period. The Discharger will be deemed in compliance with effluent limitation(s) during any 4-week period when samples are neither required nor collected.

V. NOTIFICATION AND RESPONSE LEVELS

- A. Notification Levels (NLs) are health-based advisory levels established by DDW for constituents in drinking water without MCLs. The Discharger must monitor the following constituents with NLs at Monitoring Location REC-001 as described in Table E-1 of the MRP. The Santa Ana Water Board does not use NLs for compliance determination. If DDW elevates an NL to an MCL through a formal regulatory process, the Santa Ana Water Board will use that MCL for compliance determination. Any exceedance of NLs must be reported to DDW within 72 hours.
- B. Table 10 lists the pollutants with NLs and their corresponding Response Levels (RLs) at the time of adoption of this Order. The Discharger must maintain an updated list of pollutants with notification levels and monitor these pollutants as DDW issues NL and RLs for additional pollutants pursuant to Health and Safety Code section 116455.

Table 10 Notification Levels (NL) and Response Levels (RL)

Parameter	Units	NL	RL
Boron	mg/L	1	10
n-Butylbenzene	"	0.26	2.6
sec-Butylbenzene	"	0.26	2.6
tert-Butylbenzene	"	0.26	2.6
Carbon Disulfide	"	0.16	1.6
Chlorate	"	0.8	8
2-Chlorotoluene	"	0.14	1.4
4-Chlorotoluene	"	0.14	1.4
Diazinon	"	0.0012	0.012
Dichlorodifluoromethane (Freon 12)	"	1	10

Parameter	Units	NL	RL
1,4-Dioxane	"	0.001	0.035
Ethylene Glycol	"	14	140
Formaldehyde	"	0.1	1
HMX (Octogen)	"	0.35	3.5
Isopropylbenzene	"	0.77	7.7
Manganese	"	0.5	5
Methyl Isobutyl Ketone	"	0.12	1.2
Naphthalene	"	0.017	0.17
N-Nitrosodimethylamine (NDEA)	"	0.00001	0.0001
N-Nitrosodimethylamine (NDMA)	"	0.00001	0.0003
N-Nitrosodi-n-propylamine (NDPA)	"	0.00001	0.0005
Perfluorobutanesulfonic acid (PFBS)	"	0.0005	0.005
Perfluorohexanesulfonic acid (PFHxS)	"	0.000003	0.00002
Perfluorooctanesulfonic acid (PFOS)	"	0.0000065	0.00004
Perfluorooctanoic acid (PFOA)	"	0.0000051	0.00001
Propachlor	"	0.09	0.9
n-Propylbenzene	"	0.26	2.6
1,3,5-Trinitroperhydro-1,3,5-triazine (RDX)	"	0.0003	0.03
Tertiary Butyl Alcohol (TBA)	"	0.012	1.2
1,2,4-Trimethylbenzene	"	0.33	3.3
1,3,5-Trimethylbenzene	"	0.33	3.3
2,4,6-Trinitrotoluene (TNT)	"	0.001	1
Vanadium	"	0.05	0.5

VI. WATER RECYCLING REQUIREMENTS

- A. The Discharger must comply with the site-specific water recycling requirements (WRRs) contained in Attachment D, which are based on information from the Discharger's Engineering Report and recommendations in DDW's letter entitled *Division of Drinking Water's Conditional Acceptance of the Title 22 Engineering Report for the East Valley Water District – Sterling Natural Resource Center Groundwater Replenishment Project (3690026-701)*, dated August 1, 2023, as

revised by DDW's letter issued on October 13, 2023 to correct conditions and responsibilities regarding well-control zones.

- B. Attachment D is incorporated by reference into this Order.

VII. STANDARD PROVISIONS

- A. The Discharger must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the Water Code and is grounds for (a) enforcement action; (b) termination and reissuance or modification of this Order; or (c) denial of an application for new or revised WDRs and Master Recycling Permit.
- B. The Discharger must allow the Santa Ana Water Board or an authorized representative, upon the presentation of credentials and such other documents as may be required by law, to:
1. Enter upon the Discharger's premises where the regulated Facility or activity is located, conducted, or where the Discharger keeps the required records under the conditions of this Order.
 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order.
 3. Inspect, at reasonable times, the Facility, equipment (including monitoring and control equipment), practices, or operations that are regulated or required under this Order.
 4. Sample or monitor, at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at any location.
- C. The Discharger must report any noncompliance that may endanger human health, safety, or the environment. Pursuant to Health and Safety Code section 5411.5, any sewage overflow or spill must be immediately reported to the California Office of Emergency Services (OES) and the Environmental Health Division of the San Bernardino County Department of Public Health (SBCDPH). In addition, the Discharger shall verbally notify the Santa Ana Water Board within 24 hours from the time the Discharger becomes aware of the incident and submit a written report on the incident within 5 business days following the initial notification to the Santa Ana Water Board. The written report must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; 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 recurrence of the noncompliance. The Santa Ana

Water Board may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

- D. The Discharger must report the following occurrence(s) to the Santa Ana Water Board and DDW within 24 hours:
1. Any intentional or unintentional bypass of any portion of the Facility,
 2. Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge, or any other circumstances,
 3. Any treatment plant upset resulting in an exceedance of the discharge specifications and effluent limitations of this Order,
 4. Failure of the disinfection system, and/or
 5. An exceedance of any primary MCLs.
- E. If the Discharger, without regard to intent or negligence, causes or permits an unauthorized discharge of 50,000 gallons or more of treated recycled water, or 1,000 gallons or more of recycled water that is treated at a level less than disinfected tertiary recycled water, the Discharger must immediately notify the Santa Ana Water Board in accordance with reporting requirements in Standard Provision VII.C. Consistent with Water Code section 13529.2, the Discharger must notify the Santa Ana Water Board as soon as (1) the Discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures.
- F. Upon reduction, loss, or failure of the Facility the Discharger must, to the extent necessary to maintain compliance with this Order, control production and/or control all discharges until the Facility is restored or until an alternative method of treatment is provided. This provision applies, for example, when the primary source of power to the Facility has failed or is reduced and backup power sources are insufficient.
- G. Any person who, without regard to intent or negligence, causes or permits any hazardous substance to be discharged in or on any waters of the State, must immediately notify SBCDPH and OES of the discharge. The Discharger must notify SBCDPH and OES as soon as (a) the Discharger has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, in accordance with Health and Safety Code section 5411.5, and the spill reporting provision of the State toxic disaster contingency plan adopted Government Code, title 2, division 1, chapter 7, article 3.7 (commencing with section 8574.17). This provision does not require reporting of any discharge that is less than a reportable quantity as provided for under the Water Code section 13271, subdivisions (f) and (g) and California Code of Regulations, title 23, sections

2250 to 2251, unless the Discharger is in violation of a prohibition in the Basin Plan.

- H. Except for a discharge which is in compliance with this Order, any person who, without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where the oil or petroleum product is or probably will be discharged in or on any waters of the State must immediately notify OES of the discharge. The Discharger must notify OES as soon as (a) the Discharger has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code, title 2, division 1, chapter, article 3.7 (commencing with section 8574.1). This requirement does not require reporting of any discharge that is less than 42 gallons unless the discharge is also required to be reported pursuant to Clean Water Act (CWA) section 311, or the discharge is in violation of a Basin Plan prohibition.
- I. The Discharger must maintain a copy of this Order at the Facility and must make the copy always available to operating personnel.
- J. This Order may be modified, rescinded and reissued, or terminated at any time for cause, including, but not limited to:
 - 1. The violation of any terms or conditions of this Order,
 - 2. The adoption of new regulations by the State Water Board or Santa Ana Water Board, including revisions to the Basin Plan,
 - 3. The discovery of the Discharger's misrepresentation or failure to disclose fully all relevant facts relating to the Order,
 - 4. A change in the character, location, or volume of discharge, and/or
 - 5. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge (such as the dissolution of the "Coalition" described in section IV.C. of Attachment F of this Order). The Discharger must provide written notification of the change in action to the Santa Ana Water Board, DDW, and SBCDPH.
- K. The filing of a request by the Discharger for the modification or rescission of this Order, or notification by the Discharger of planned changes or anticipated noncompliance, does not stay any condition of this Order.
- L. At least 120 days prior to any proposed changes to the Facility, the Discharger must notify DDW and submit a new or amended ROWD to the Santa Ana Water Board for review and response. The ROWD must be stamped and/or signed as

specified in section VII. Standard Provision O of this Order. The following are examples of changes that require submittal of a new or amended ROWD:

1. Significant change in the treatment or discharge method (e.g., change in the method of treatment which would significantly alter the nature of the waste).
 2. Change in the discharge area from that described in the findings of this Order.
 3. Increase in discharge flowrate beyond that specified in this Order.
 4. Addition or reduction of project monitoring, monitoring wells, and surface spreading basins not described in this Order. The Discharger is required to submit a new or updated boundary representing a zone of controlled drinking water well construction with the new or amended ROWD.
 5. Other circumstances that result in a material change in character, amount, or location of the waste discharge.
 6. Any planned change or activity in the Facility that may result in noncompliance with this Order.
- M. This Order is not transferable to any person except after notice to the Santa Ana Water Board. The notice must be in writing and received by the Santa Ana Water Board at least 120 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the existing and the new discharger. This agreement must include an acknowledgement that the existing Discharger is liable for violations occurring before the transfer date and that the new discharger is liable from the transfer date and thereafter. The Santa Ana Water Board may require modification or revocation and reissuance of this Order to change the name of the discharger and incorporate other requirements as may be necessary.
- N. Where the Discharger becomes aware that it failed to submit any relevant facts in an ROWD or submitted incorrect information in an ROWD or in any report to the Santa Ana Water Board or DDW, the Discharger must promptly submit such facts or information.
- O. The Discharger must sign and certify all applications, reports, or information submitted to the Santa Ana Water Board as follows:
1. An ROWD must be signed as follows:
 - a) For a municipality, State, federal or other public agency, by either a public executive officer or ranking elected official.

- b) Supporting documents must be signed and stamped by a California-licensed professional if the documents involve the practice of engineering, land surveying, geology, or geophysics.
2. All other reports required by this Order and other information required by the Santa Ana Water Board must be signed by a person designated in section VII. Standard Provision O.1 of this Order or a duly authorized representative of that person. An individual is a duly authorized representative only if all the following are true:
 - a) The authorization is made in writing by a person described in section VII. Standard Provision O.1.a of this Order.
 - b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity.
 - c) The written authorization is submitted to the Santa Ana Water Board.
 - d) Any document that involves the practice of engineering, land surveying, geology, or geophysics must be signed and stamped by a professional with an appropriate California license.
 3. Any person signing a document under this section must make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment."

- P. The Discharger must comply with the MRP (Attachment E) and any future revisions specified by the Santa Ana Water Board. Monitoring results must be reported at the frequency specified in MRP.
- Q. The Discharger must provide to the Santa Ana Water Board, within a reasonable time, any information which the Santa Ana Water Board may request to determine whether cause exists for modifying, rescinding and reissuing, or terminating this Order. The Discharger must also furnish to the Santa Ana Water Board, upon request, copies of records required to be kept by this Order.
- R. The Discharger must submit reports required under this Order to the Santa Ana Water Board via the GeoTracker database at <https://geotracker.waterboards.ca.gov/>. The Santa Ana Water Board may also request hard copies and/or electronic copies on a compact disc (CD) or universal serial bus (USB) drive or other appropriate media, including electronic mail (email). Report submittals must include a signed cover/transmittal letter that

includes the Facility name and Facility contact information, unless directed otherwise by the Executive Officer. Sections VI, VII, and VIII of the MRP (Attachment E) contain additional information regarding report submittal requirements.

VIII. SPECIAL PROVISIONS

- A. **Asset Management Program (AMP).** The Discharger shall develop an AMP to cover the Facility. The Discharger shall:
1. Develop and utilize AMP within eighteen months of the effective date of this Order. This program shall include a detailed inventory of critical assets; condition rating and/or likelihood of failure of said assets; rehabilitation and replacement planning, capacity assurance planning, and maintenance strategy to ensure that the Discharger's system meets a desired level of service and plan for future needs and requirements; and funding sources to support the planned asset maintenance, rehabilitation, and replacement activities. Critical assets may include, but are not limited to sewer lines, manholes, outfalls, pump stations, force mains, and wastewater treatment plant assets.
 2. Develop and submit to the Santa Ana Water Board an AMP within eighteen months of the effective date of this Order. The AMP shall be re-evaluated and updated every five years. The AMP shall include the following components: A Rehabilitation and Replacement Plan identifying and prioritizing upcoming rehabilitation and replacement projects for critical assets and outlining a proposed schedule for completion of each project; a Maintenance Plan identifying major maintenance activities, frequency performed for critical assets, and estimates of ongoing and projected cost of maintenance activities; and Sanitary Sewer System Map incorporating assets from the asset management inventory. Finally, the AMP shall include estimated costs for the Rehabilitation and Replacement Plan and the Maintenance Plan. Expenses may include operational, administrative, interest, or capital expenses. The cost estimate shall include a determination of whether the planned expenditures are capital or operational and the source of funds: users or connection fees, grant, bonds, or reserves.
- B. **Pretreatment Program.** The Discharger has developed a pretreatment program that was submitted to the Santa Ana Water Board and is approved as part of this Order. This Order requires implementation of the approved pretreatment program and compliance with the following requirements:
1. Any change to the pretreatment program shall be reported to the Santa Ana Water Board in writing and major changes shall not become effective until

approved by the Executive Officer in accordance with procedures established in 40 CFR section 403.18.

2. The Discharger shall update as necessary the appropriate contractual agreements with all member agencies and sewerage agencies (governmental agencies) discharging wastewater into the Facility. The contractual agreement shall give the Discharger the authority to implement and enforce the approved pretreatment program within the sewer service areas of the wastewater treatment facility. The Discharger shall ensure 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 approved pretreatment program for any portion of the service area of the treatment facility, the Discharger's pretreatment program shall contain provisions ensuring that the governmental agency's pretreatment program is implemented. If any governmental agency discharging to the Facility fails to effectively implement its individual approved pretreatment program, the Discharger shall implement and enforce its approved pretreatment program within that governmental agency's service area. The Discharger shall ensure that the pretreatment programs for all governmental agencies discharging to the Facility are implemented and enforced.
3. The Discharger shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR part 403, including any subsequent regulatory revisions to part 403. Where 40 CFR part 403 or subsequent revisions place mandatory actions upon the Discharger as a Control Authority but does not specify a timetable for completion of the actions, the Discharger shall submit for approval to the Santa Ana 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.
4. The Discharger shall implement its approved pretreatment program and the program shall be an enforceable condition of this Order. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines, and other remedies by the United States Environmental Protection Agency (USEPA), or other appropriate parties, as provided in the CWA. The USEPA or the Santa Ana Water Board may also initiate enforcement action against an industrial user (IU) for noncompliance with applicable standards and requirements as provided in the CWA.
5. The Discharger shall enforce the pretreatment standards promulgated under Clean Water Act sections 307(b), 307(c), 307(d) and 402(b) with timely, appropriate, and effective enforcement actions. The Discharger shall require all nondomestic users subject to federal categorical standards to achieve

compliance no later than the date specified in those requirements or, in the case of a new nondomestic user, upon commencement of the discharge.

6. 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 sections 403.5 and 403.6;
 - b) Implement the necessary legal authorities as provided in 40 CFR section 403.8(f)(1);
 - c) Implement the programmatic functions as provided in 40 CFR section 403.8(f)(2);
 - d) Publish a list of significant noncompliance as required by 40 CFR section 403.8(f)(2)(vii); and
 - e) Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR section 403.8(f)(3).

7. The Discharger shall implement, as more completely set forth in 40 CFR section 403.5, the necessary legal authorities, programs, and controls to ensure that the following incompatible wastes are not introduced to the treatment system, where incompatible wastes are:
 - 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; and
 - d) Solid or viscous wastes in amount that would cause obstruction to the flow in sewers or otherwise interfere with the proper operation of the treatment works.
 - e) Heat in amounts that inhibit or disrupt biological activity in the treatment works, or that raise influent temperatures above 40 degrees Celsius (104 degrees Fahrenheit), unless the Santa Ana Water Board approves alternate temperature limits;
 - f) Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
 - g) Pollutants which result in the presence of toxic gases, vapors, or fumes within the treatment works in a quantity that may cause acute worker health and safety problems;
 - h) Any trucked or hauled pollutant, except at points pre-designated by the Discharger.

8. The Discharger shall ensure compliance with any existing or future pretreatment standard promulgated by USEPA under CWA section 307 or amendments thereto for any discharge to the municipal system.
9. The Discharger shall comply with effluent standards or prohibitions established under CWA section 307(a) for toxic pollutants within the time provided in the regulations that establish these standards or prohibition, even if this Order has not yet been modified to incorporate the requirement.
10. 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. In addition, the user shall submit these periodic notices within 14 days of each interim date in the compliance schedule (40 CFR § 403.12(c)). The Discharger shall forward a copy of such notice to the Santa Ana Water Board and to the USEPA Regional Administrator.
11. The Discharger shall submit annually a report describing its pretreatment activities over the previous year. Report requirements are described in section X of Attachment E (Cal. Code Regs., tit. 23, § 2233).

- C. **Climate Change Action Plan.** The Discharger must develop a Climate Change Action Plan (CCAP) and must include the discharges, all components of the Facility, spreading, and monitoring wells regulated under this Order. The CCAP must indicate how the Discharger plans to protect the Facility against regional impacts of changing climate conditions (e.g., rising sea levels, flooding, higher storm surges, and changing hydrography, including more intense atmospheric rivers). The Discharger must submit the CCAP within three years of the effective date of this Order.
- D. All waste treatment, containment, and disposal facilities must be protected against a 100-year storm event as defined by the San Bernardino County Department of Public Works (SBCPW).
- E. All waste treatment, containment, and disposal facilities must be protected against erosion, overland runoff, and other impacts resulting from a 100-year, 24-hour storm event as defined by the SBCPW.
- F. If the Santa Ana Water Board or DDW directs the Discharger to suspend the discharge (surface application) of tertiary treated and disinfected recycled water due to noncompliance with this Order, the discharge must not resume until the Discharger has obtained approval from the Santa Ana Water Board and DDW.
- G. **Mitigation to Prevent TDS Cumulative Impacts to the Assimilative Capacity of the Bunker Hill-B GMZ.** To prevent cumulative impacts to the TDS assimilative capacity of the Bunker Hill-B GMZ beyond the 20% assimilative capacity allocated, the Discharger, in collaboration with its Coalition partners the

City of San Bernardino Municipal Water Department, San Bernardino Valley, and the City of Redlands (referred to as "Coalition" and further described in section IV.C. of Attachment F of this Order) shall implement the following TDS mitigation commitments:

1. By January 31, 2024, the Discharger shall submit to the Santa Ana Water Board a copy of the scope of work and other available details regarding the Bunker Hill-B Regional Recycled Water Salinity Management Feasibility Study (Feasibility Study) undertaken by the Coalition partners.
2. By June 30, 2025, the Discharger shall submit to the Santa Ana Water Board a report detailing the findings of the Feasibility Study.
3. By December 31, 2025, the Discharger shall submit to the Santa Ana Water Board a Salt Mitigation Implementation Plan (Plan) that provides a detailed plan and schedule for salinity management in the Bunker Hill-B GMZ based on the Feasibility Study. The Plan shall define the selected mitigation strategy(ies), operations, roles and responsibilities, cost share, and schedule.
4. By December 31, 2027, the Discharger shall initiate design of the identified salinity management strategy(ies) as described in the Plan.
5. By December 31, 2031, the Discharger shall initiate construction of the identified salinity management strategy(ies) as described in the Plan.
6. The Discharger shall include progress reports regarding the Coalition efforts to implement the TDS mitigation commitments in the quarterly self-monitoring reports submitted to the Santa Ana Water Board.
7. The Discharge shall notify the Santa Ana Water Board within 24 hours of becoming aware that it will not be able to implement the TDS mitigation commitments listed above.

If the Santa Ana Water Board finds that the Discharger has not satisfied the TDS mitigation commitments listed above, then the Discharger shall implement a TDS mitigation program approved by the Santa Ana Water Board to address the discharges of recycled water into the Bunker Hill-B GMZ in excess of the TDS effluent limitation included in footnote 3 of Table 4 of section IV.C. of this Order. This program must offset for the TDS cumulative impacts that have accrued in excess of the TDS water quality objective in the Basin Plan for the Bunker Hill-B GMZ of 330 mg/L. A proposed TDS mitigation plan and schedule shall be submitted within 60 days of notification by the Santa Ana Water Board's Executive Officer of the need to do so. The Discharger shall implement the plan and schedule upon approval by the Santa Ana Water Board's Executive Officer.

IX. NOTICES

- A. If any person uses, transports, or stores recycled water in a manner which creates, or threatens to create conditions of pollution, contamination, or nuisance, as defined in the Water Code section 13050, the Santa Ana Water Board may initiate enforcement action against the Discharger, which may result in the termination of the recycled water discharge.
- B. This Order does not convey property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, State or local laws, nor create a vested right for the Discharger to continue the waste discharge.
- C. These requirements have not been reviewed by the United States Environmental Protection Agency (USEPA) and are not issued pursuant to CWA section 402.
- D. Any person aggrieved by this action of the Santa Ana Water Board may petition the State Water Board to review the action in accordance with the Water Code section 13320 and California Code of Regulations, title 23, section 2050. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except if this date falls on a Saturday, Sunday, or State holiday, then the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request. 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 must not be affected.

ATTACHMENT A – DEFINITIONS

Part 1 – ABBREVIATIONS and ACRONYMS

Abbreviation	Definition
40 CFR	Title 40, Code of Federal Regulations
ACU	Apparent color units
AGR	Agricultural Supply beneficial use
AhR	Aryl hydrocarbon receptor
AMP	Asset Management Program
AWWA	American Water Works Association
Basin Plan	Water Quality Control Plan for the Santa Ana River Basin
BEQ	Bioanalytical Equivalent Concentrations
BOD ₅	Biochemical Oxygen Demand (5-day @ 20° C)
CCAP	Climate Change Action Plan
Cal. Code Regs.	California Code of Regulations (abbreviation in parentheses and footnotes)
Coalition	Bunker Hill Regional Recycled Water Coalition formed by East Valley Water District, City of Redlands, City of San Bernadino Municipal Water Department and San Bernadino Valley Municipal Water District to manage salt loadings into the Bunker Hill-B GMZ
CEC	Constituents of Emerging Concern
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CT	Contact time
CWA	Clean Water Act
Water Code	California Water Code (abbreviation in sentences)
Wat. Code	California Water Code (abbreviation in parentheses and footnotes)
DDT	Dichlorodiphenyltrichloroethane
DDW	State Water Board, Division of Drinking Water
Dioxin	2,3,7,8-tetracholordibenzodioxin
Discharger	East Valley Water District (EVWD)
EC	Electrical conductivity

Abbreviation	Definition
EED	Electrical energy dose
EIR	Environmental Impact Report for the SNRC and Addendum No. 1 and Addendum No. 2
ELAP	Environmental Laboratory Accreditation Program
ER-α	Estrogen receptor alpha
EVWD	East Valley Water District
Facility	Sterling Natural Resource Center (SNRC) and Recycled Water Spreading Basins and appurtenances
FCD	SBCPW Flood Control
FCRCT	Free chlorine residual contact time
GMZ	Groundwater Management Zone
GRRP	Groundwater Replenishment Reuse Project
HA	Hydrologic Area
HAS	Hydrologic Subarea
IND	Industrial Service Supply beneficial use
Lindane	Gamma BHC
LRV	Log reduction value
MBAS	Methylene blue-activated substances
MTBE	Methyl-tert-butyl ether
MCL	Maximum contaminant level
MEC	Measured environmental concentrations
MF	Membrane filtration (microfiltration or ultrafiltration)
mg/L	Milligrams per liter
MGD	Million gallons per day
MIT	Membrane integrity testing (aka pressure decay test [PDT])
mJ/cm ²	Millijoules per centimeter squared
mmho/cm	Millimho per centimeter
MRP	Monitoring and Reporting Program
MTL	Monitoring trigger levels
MUN	Municipal and Domestic Supply beneficial use
NDEA	N-Nitrosodiethylamine

Abbreviation	Definition
NDMA	N-Nitrosodimethylamine
NDPA	N-Nitrosodi-n-propylamine
NL	Notification level
NMOR	N-Nitrosomorpholine
ng/L	Nanograms per liter
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
OES	California Office of Emergency Services
OOP	Operation Optimization Plan
Order	Order No. R8-2023-0009
PCBs	Polychlorinated biphenyls
pCi/L	Picocuries per liter
PDT	Pressure decay test
PFBS	Perfluorobutanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctanesulfonic acid
POTW	Publicly Owned Treatment Works
PS Codes	Primary station codes
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
Recycled Water Policy	State Water Resources Control Board Water Quality Control Policy for Recycled Water
RL	Response Level
ROWD	Report of Waste Discharge
RMA	Running Monthly Average
Santa Ana Water Board	California Regional Water Quality Control Board, Santa Ana Region
SBCDPH	San Bernardino County Department of Public Health
SBCEHS	San Bernardino County Environmental Health Services

Abbreviation	Definition
SBCPW	San Bernardino County Public Works
SBMWD	City of San Bernardino Municipal Water Department
SIC	Standard Industrial Classification
Silvex	2-(2,4,5-trichlorophenoxy) propionic acid
SMR	Self-Monitoring Report
SIU	Significant Industrial User
SNRC	Sterling Natural Resource Center
SOC	Synthetic organic chemicals
SPCP	Spill preventive and contingency plan
SRT	Solids retention time
State Water Board	State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TDS	Total Dissolved Solids
Title 22	California Code of Regulations Title 22
Title 23	California Code of Regulations Title 23
TOC	Total organic carbon
TON	Threshold odor number
TSS	Total Suspended Solids
TTHMS	Total trihalomethanes
USEPA	United States Environmental Protection Agency
UVI	Ultraviolet intensity
UVT	Ultraviolet transmittance
San Bernardino Valley	San Bernardino Valley Municipal Water District
VOC	Volatile organic compounds
WDRs	Waste Discharge Requirements
WQOs	Water Quality Objectives
WRRs	Water Recycling Requirements
µm	Microns or micrometers
µg/L	Micrograms per liter

Part 2 – Glossary of Common Terms

Advanced Treated Recycled Water

Advanced treated recycled water is the final effluent produced from a GRRP which is discharged to a groundwater basin for replenishment purposes and is regulated pursuant to the California Code of Regulations, title 22.

Agricultural Supply

Agricultural Supply is the beneficial use of water resources as defined by the Basin Plan that includes uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.

Average

An average is the sum of measured values divided by the number of measured values.

Average Annual Effluent Limitation

The average annual effluent limitation is the highest allowable average of daily discharges over a calendar year (January-December), calculated as the sum of all daily discharges measured during a calendar year divided by the number of daily discharges during that year.

Bioassay

Bioassay is a test used to evaluate the relative potency of a chemical or a mixture of chemicals by comparing its effect on a living organism with the effect of a standard preparation on the same type of organism.

Biochemical Oxygen Demand

BOD is a measurement of the amount of oxygen utilized by the decomposition of organic material, over a specified period (usually 5 days, i.e. BOD5) in a wastewater sample; it is used as a measurement of the readily decomposable organic content of a wastewater.

California Code of Regulations

The California Code of Regulations is the official compilation and publication of the regulations adopted, amended, or repealed by state agencies pursuant to the

Administrative Procedure Act. Properly adopted regulations that have been filed with the Secretary of State have the force of law.

Chlordane

Chlordane is the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Clean Water Act

The CWA is legislation passed by the U.S. Congress to control water pollution, formerly referred to as the Federal Water Pollution Control Act of 1972 or Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500), 33 U.S.C. 1251 et. seq., as amended by: Public Law 96-483; Public Law 97-117; Public Laws 95-217, 97-117, 97-440, and 100-04.

Code of Federal Regulations

CFR is the codification (arrangement of) the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government. The CFR is divided into 50 titles that represent broad areas subject to federal regulations. CFR, Title 40: Protection of Environment is the section of the CFR (40 CFR) that deals with USEPA's mission of protecting human health and the environment.

Composite Sample

A 24-hour composite sample means an aggregate sample derived from no fewer than eight discrete samples collected at equal time intervals or collected proportional to the flow rate over the compositing period. The aggregate sample shall reflect the average source water quality covering the composite 24-hour sample period.

Daily Maximum Effluent Limitation

The daily maximum effluent limitation is the highest allowable daily discharge of a pollutant.

Dichlorodiphenyltrichloroethane

DDT is the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

Disadvantaged Community

For the purpose of this Order, a “disadvantaged community” is defined as a “community in which the median household income is less than 80 percent of the statewide annual median household income level.” (Wat. Code section 13149.2(f)(1)).

Grab Sample

A grab sample is any individual sample collected in less than 15 minutes.

Facility

The Facility is the East Valley Water District's Sterling Natural Resource Center, located at 25376 5th St., San Bernardino, CA 92410, and the Weaver Basins.

Indirect Potable Reuse

Indirect potable reuse for groundwater recharge is defined in the California Water Code, section 13561(c), as “*the planned use of recycled water for replenishment of a groundwater basin or an aquifer that has been designated as a source of drinking water supply for a public water system.*”

Industrial Service Supply

Industrial Service Supply is the beneficial use of water resources as defined by the Basin Plan for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.

Injection Well

An injection well is a subsurface conduit that is used to discharge advanced treated recycled water into the groundwater within a GMZ.

Instantaneous Maximum Effluent Limitation

Instantaneous maximum effluent limitation is 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

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

Maximum Contaminant Level

MCLs are standards set by the United States Environmental Protection Agency (USEPA) for drinking water quality. An MCL is the legal threshold limit on the amount of a substance that is allowed in public water systems under the Safe Drinking Water Act. MCL is for either a single isomer or the sum of the isomers. States may establish their own more stringent MCLs. California MCLs are found in the California Code of Regulations, title 22.

Million Gallons Per Day

MGD is a unit of flow commonly used for wastewater discharges. One MGD is equivalent to 1.547 cubic feet per second.

Municipal and Domestic Supply

Municipal and Domestic Supply is the beneficial use of water resources as defined by the Basin Plan that includes uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.

Off-Specification Water

Off-specification water is effluent from the Facility that does not meet effluent limitations specified in this Order or treatment criteria specified in title 22, chapter 3 Water Recycling Criteria.

Polychlorinated biphenyls

PCBs are the sum of polychlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

Percent Reduction

Percent reduction is a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the average values of the raw wastewater influent pollutant concentrations to the Facility and the average values of the effluent pollutant concentrations for a given time period.

Publicly Owned Treatment Works

A POTW is a treatment works, as defined by section 212 of the CWA, which is owned by the State or a municipality. This definition includes any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature. A POTW also includes the sewers, pipes, and other conveyances if they convey wastewater to a POTW treatment plant (40 CFR section 403.3).

Purified Recycled Water

Same as advanced treated recycled water or full advanced treated (FAT) recycled water, which is the final effluent produced by a GRRP and discharged to recharge a GMZ.

Recycled Municipal Wastewater

Recycled municipal wastewater is defined in title 22 section 60301.690 as recycled water that is the effluent from the treatment of wastewater of municipal origin.

Sludge

Sludge is any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect.

Source of Drinking Water

Source of drinking water is any water, surface or groundwater, designated as municipal and domestic supply (MUN) in the Basin Plan.

Total Nitrogen

Total Nitrogen is the sum of concentrations of ammonia, nitrite, nitrate, and organic nitrogen containing compounds expressed as nitrogen.

Total Trihalomethanes

Total trihalomethanes is the sum of bromoform, chloroform, bromodichloromethane, and dibromochloromethane.

Tribal Community

For the purpose of this Order, a “tribal community” is defined as a “community within a federally recognized California Native American tribe or non-federally recognized Native American tribe on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004.” (Wat. Code section 13149.2(f)(2))

Waste

Waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

Water Quality Objectives

WQOs are the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.

Water Recycling

Water recycling is the treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

ATTACHMENT B – MAPS AND FIGURES

FIGURE B-1 – SNRC LOCATION MAP

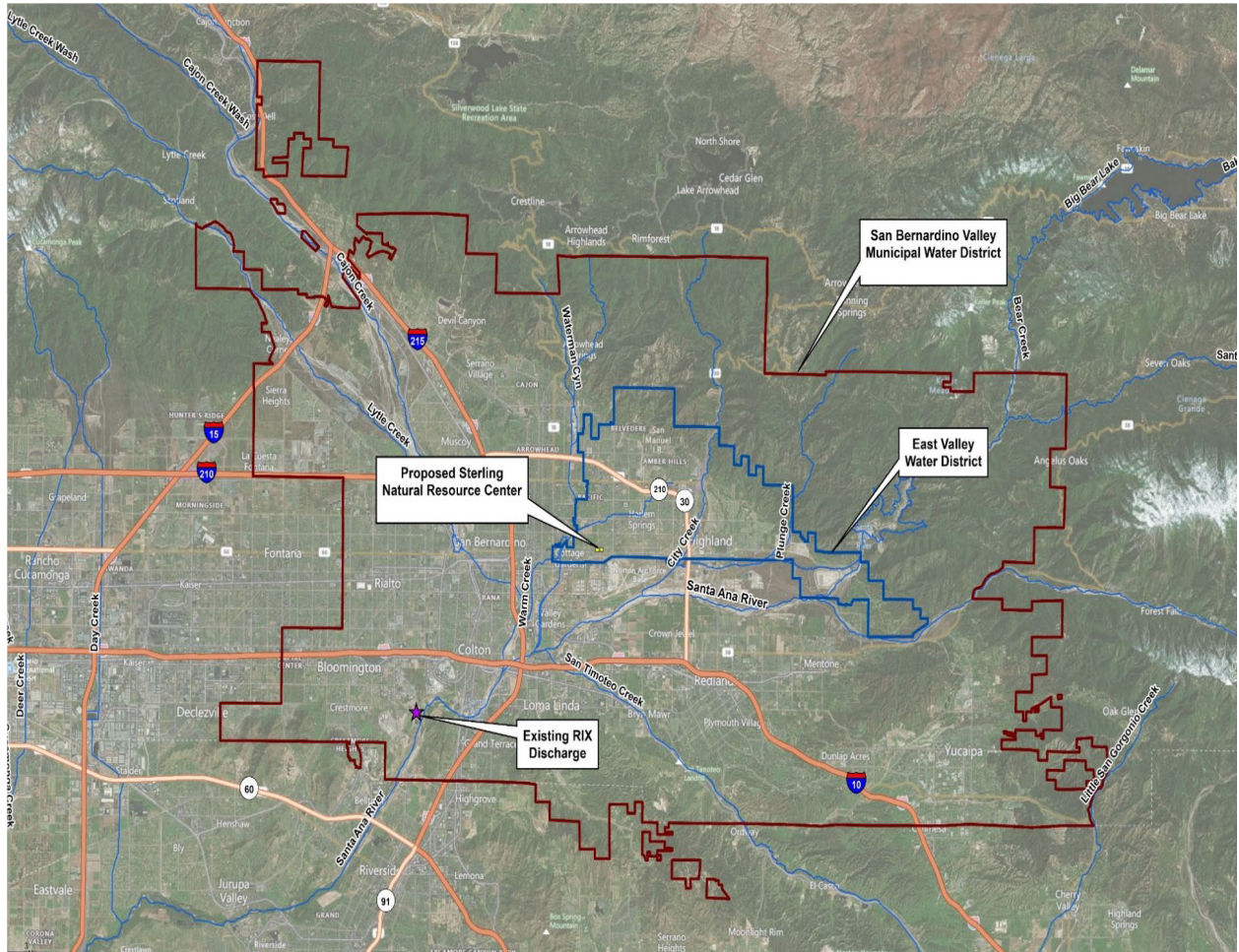
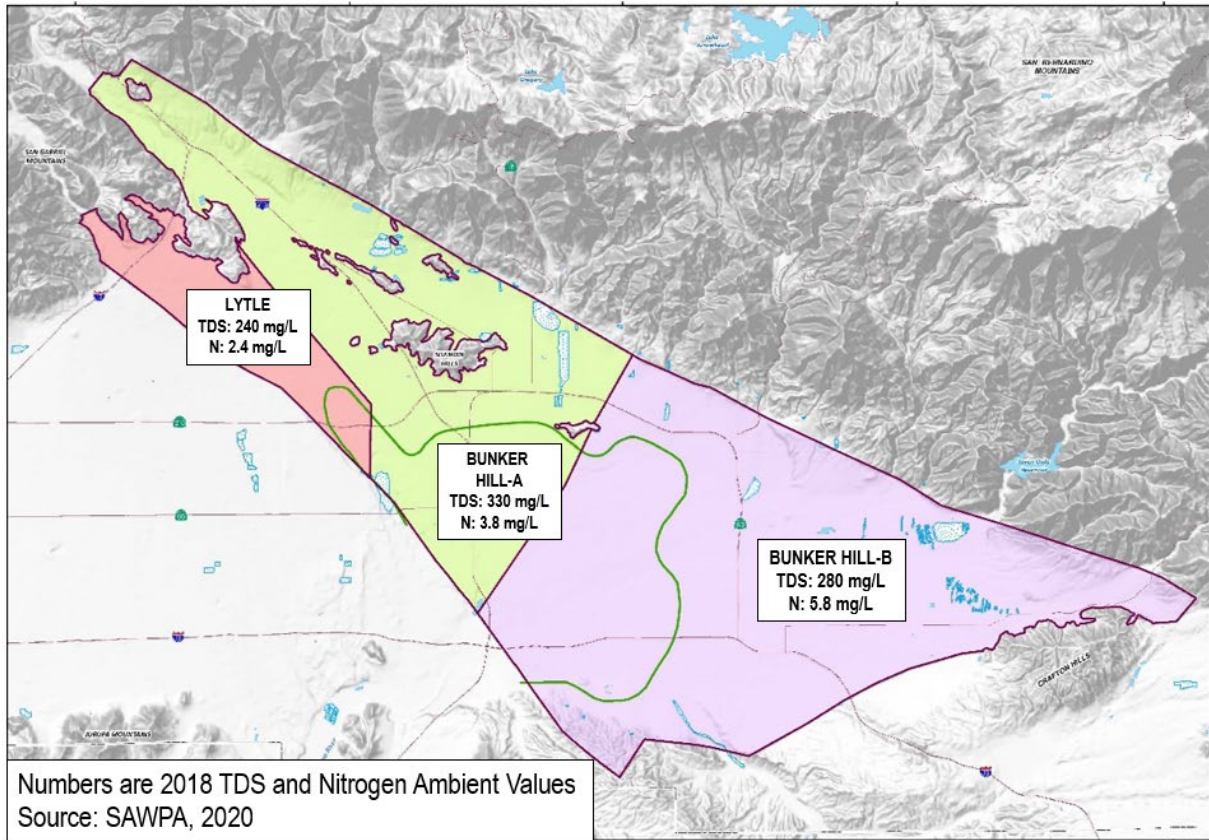
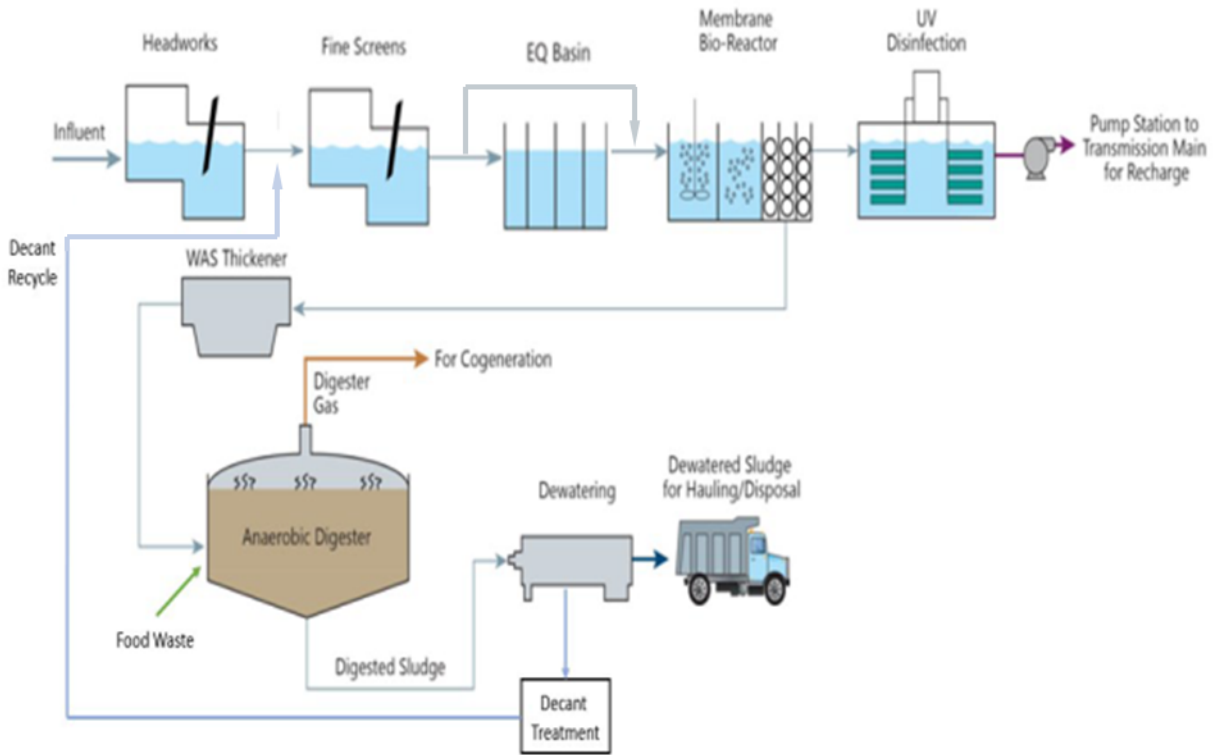


FIGURE B-4 – BUNKER HILL SUBBASINS AND AMBIENT TDS AND NITROGEN VALUES



ATTACHMENT C – FLOW SCHEMATIC

FIGURE C-1 – SNRC FLOW SCHEMATIC



ATTACHMENT D – WATER RECYCLING REQUIREMENTS

In accordance with section VI of Order No. R8-2023-0009, Waste Discharge Requirements and Master Recycling Permit for the East Valley Water District's Sterling Natural Resource Center (Order), East Valley Water District (Discharger) must comply with the following site-specific water recycling requirements (WRRs). The WRRs are based on information from the *Title 22 Engineering Report: Sterling Natural Resource Center, April 2023* (Engineering Report) and recommendations in State Water Resources Control Board (State Water Board) Division of Drinking Water's (DDW's) letter entitled, *Division of Drinking Water's Conditional Acceptance of the Title 22 Engineering Report for the East Valley Water District – Sterling Natural Resource Center Groundwater Replenishment Project (3690026-701)*, dated August 1, 2023 (DDW's Conditional Acceptance Letter) as revised by DDW's letter issued on October 13, 2023, to correct conditions and responsibilities regarding well-control zones.

I. GENERAL REQUIREMENTS

- A. The Discharger must ensure that the operation of the Facility complies with California Code of Regulations, title 22, division 4, chapter 3, article 5.1 – Indirect Potable Reuse: Groundwater Replenishment – Surface Application.
- B. Prior to discharging tertiary treated and disinfected recycled water to the Bunker Hill-B GMZ, or as directed by DDW, the Discharger must:
 1. Demonstrate during an on-site inspection that all treatment processes, alarms, and associated responses were implemented and can achieve their intended function as described in the Engineering Report and the Operations Optimization Plan (OOP). The Discharger must repeat this testing on a regular basis as specified in the OOP or otherwise as requested by DDW. At a minimum, the testing must occur after any expansion or modification of the treatment train (Cal. Code Regs., tit. 22, § 60320.100(g)).
 2. Demonstrate to DDW that the alarms and responses, including automatic shutdown, are functional and in conformance with the Engineering Report, OOP, and DDW's Conditional Acceptance Letter. A full description of the alarms must be included in the OOP, in accordance with title 22, section 60320.122.
 3. Per title 22, section 60320.100(b), the Discharger must obtain the approval of DDW of a plan describing the steps that the Discharger will take to provide an alternate source of drinking water supply to all users of a producing drinking water well, or a DDW-approved treatment mechanism that the Discharger will

provide to all owners of a producing drinking water well, that as a result of the Facility operations, as determined by DDW, violates a California or federal drinking water standard, has been degraded to a degree that is no longer a safe source of drinking water, or receives water that fails to meet title 22, section 60320.108.

4. The Discharger must ensure the implementation of the following regarding zones of controlled drinking water well construction:
 - a) The Discharger must establish a primary zone of controlled drinking water well construction ("primary boundary" or "Well Control Zone"), including private wells, in accordance with title 22, section 60320.100(e)(2).
 - b) The Discharger must establish a secondary boundary representing a zone of potential controlled drinking water well construction ("secondary boundary"), including private wells, in accordance with title 22, section 60320.100(e)(3).
 - c) Regularly as needed, the Discharger must coordinate with local well permitting authorities (e.g., San Bernardino County Environmental Health Services) to administer the primary and secondary boundaries, in accordance with title 22, section 60320.100(e). The Discharger must ensure no well is used to produce drinking water and no new drinking water production wells are constructed within the Well Control Zone.
 - d) The Discharger must ensure that the San Bernardino County Department of Public Health notifies the Discharger of any new well drilling activity (including private wells) in the vicinity of the Facility.
 - e) In accordance with title 22, section 60320.100(e), the Discharger must submit the necessary boundary map(s), location of the Facility's monitoring wells, and location of drinking water wells within a two year underground travel time of the Facility based on groundwater flow direction and velocities expected under the Facility's normal operating conditions (8 MGD or lower) to DDW, the Santa Ana Water Board, and the San Bernardino County Environmental Health Services. The Discharger must provide revised versions of these materials when any conditions change such that the previous map(s) no longer accurately reflect current conditions.
 - f) Conversion or Closure of Existing Wells: The Discharger must ensure that the municipal supply wells EVWD No. 143, 146, 146A, and 147 (all of which are inside the Well Control Zone) will not be used for potable water production, as described in the Engineering Report. For each well, if the Discharger does not plan to convert the well to non-potable use, the well must be destroyed properly per Department of Water Resources (DWR) Bulletins 74-81 and 74-90. When a well is destroyed, the Discharger must submit to DDW a copy of the well destruction permit from the San Bernardino County Department of Public Health and the destruction log from the DWR.

- g) The Discharger must ensure that the irrigation well at the Village Lakes HOA site, located 7998 Village Lakes Road, Highland, CA 92346 (inside the Well Control Zone) will not be used for potable water production.
 - h) Also, the Discharger must ensure that the CEMEX "Well No. 01" that is located at 8731 Orange Street, Highland, CA 92374, and the "Alabama Street" wells, located at 8203 Alabama Street, Redlands, CA 92374, will not be used for potable water production.
 - C. The Discharger must ensure that the Facility is designed and operated as detailed in the Engineering Report and the OOP. Per title 22, section 60320.122(b), the Discharger must ensure that all Facility treatment processes shall be operated in a manner providing optimal reduction of all chemicals and contaminants.
 - D. Prior to implementing any change to the Facility that would require an update to the Engineering Report, the Discharger must consult with DDW and, if directed by DDW, submit an updated Engineering Report to DDW for review and approval.
 - E. If directed by DDW, the Discharger must update the hydrogeological model, zones of controlled drinking water well construction, underground retention time, and response retention times in accordance with title 22, sections 60320.100(e), 60320.108, and 60320.124.
 - F. The Discharger must staff the Facility with individuals possessing certificates of appropriate grade as specified by the State Water Board and Santa Ana Water Board. The Discharger must track the expiration dates for all certified operators to ensure certifications are maintained.
 - G. If the Discharger has been directed by DDW or the Santa Ana Water Board to suspend the discharge of recycled water (surface application) to the Weaver Basins, the discharge of recycled water must not resume until the Discharger has obtained approval from DDW and the Santa Ana Water Board.
 - H. If directed by DDW, the Discharger must optimize stabilization processes to control metal mobilization in groundwater impacted by the Facility; optimization of any Facility operations must be reflected in an updated OOP. If directed by DDW or the Santa Ana Water Board, the Discharger must conduct geochemical analysis for the purpose of controlling metal mobilization in the groundwater.

II. WASTEWATER SOURCE CONTROL

- A. The Discharger must administer their pretreatment program to meet all requirements in title 22, section 60320.106 and in this Order.

III. DILUENT WATER AND RECYCLED MUNICIPAL WASTEWATER CONTRIBUTION REQUIREMENTS

- A. Per title 22, section 60320.116(c), the initial maximum recycled municipal wastewater contribution (RWC) for the Facility is 0.2, as described in the Engineering Report.
- B. The Discharger must describe in the OOP how the Facility will meet the diluent water requirements of title 22, sections 60320.114(a) and (f). The calculation for diluent water must be reviewed and approved by DDW. Also, the Discharger may request credit for diluent water prior to the operations of the Facility per title 22, section 60320.114(e).
- C. The Discharger must propose in the OOP and implement a water quality monitoring program for the diluent water in accordance with title 22, section 60320.114(c), including actions to be taken in the event of noncompliance with a primary Maximum Contaminant Level (MCL), secondary MCL, or exceedance of a Notification Level (NL). The monitoring program must be reviewed and approved by DDW.
- D. To demonstrate ongoing compliance with title 22, sections 60320.114(d) and 60320.116, the Discharger must submit an annual RWC Management Plan to DDW and the Santa Ana Water Board for review. The first submittal of the RWC Management Plan must be submitted to DDW and the Santa Ana Water Board within the first six months of operation of the Facility. In the OOP, the Discharger must describe the purpose and anticipated contents of the RWC Management Plan.

IV. PATHOGENIC MICROORGANISM CONTROL

- A. The Discharger must design and operate the Facility to produce tertiary treated and disinfected recycled water that achieves at least a 12-log enteric virus reduction, 10-log Giardia cyst reduction, and 10-log Cryptosporidium oocyst reduction in accordance with title 22, section 60320.108(a).
- B. The Discharger must validate each of the treatment processes used to meet the required pathogen reduction for enteric virus, Cryptosporidium oocyst, and Giardia cyst, in accordance with title 22, section 60320.108(c) and as proposed in the Engineering Report and OOP. The Discharger must include in its approved OOP, the necessary monitoring and calculations that validate the performance of each treatment process's ability to achieve its pathogen log₁₀ reduction value (LRV) as proposed in the Engineering Report and OOP. Flow-weighted averaging cannot be used for the purpose of calculating the pathogen LRV for any treatment process, including between parallel treatment trains of the same process. Pathogen LRV for each pathogen for each of the treatment processes must be calculated and reported in accordance with the following:
 - 1. The MBR treatment process will be credited pathogen LRVs in accordance with recommendations for a Tier 1 strategy outlined in the Water Research Foundation Project 4997 "*Membrane Bioreactor Validation Protocols for*

Water Reuse." To obtain pathogen LRV credit, the Discharger must conduct monitoring and reporting for the MBR as follows:

- a) The MBR will receive a credit of 1 LRV for enteric virus and 2.5 LRV for Giardia cyst and Cryptosporidium oocyst if MBR filter effluent turbidity does not exceed the turbidity specification listed in section VI.A.1 of this Attachment D of the Order.
 - b) To meet the MBR filtrate turbidity requirements, turbidity must be monitored as follows:
 - i. The primary compliance meters for turbidity will be the turbidity meters on each of the individual MBR filter effluent lines. When all individual MBR filter effluent turbidity meters are online, pathogen LRV credit for each online MBR train will be calculated using the respective MBR filter effluent turbidities. LRV credit for the MBR system must be calculated using the minimum calculated pathogen LRV of any online individual MBR train.
 - ii. The secondary compliance meter for turbidity will be the turbidity meter on the combined MBR filter effluent line. When any of the primary MBR filter effluent turbidity meters are offline, the LRV credit for the MBR system must be determined using the turbidity meter on the combined MBR filter effluent line.
 2. The ultraviolet (UV) disinfection treatment system will be credited 3.5 LRVs for enteric virus, Giardia cyst, and Cryptosporidium oocyst for use of a UV disinfection system that meets all of the conditions in the letter issued by DDW, with respect to the Discharger, entitled, "*Division of Drinking Water Acceptance of the Spot-check Bioassay Report for Trojan UVSigna™ UV Disinfection, East Valley Water District, Sterling Natural Resource Center,*" dated September 16, 2022.
- C. The Discharger must conduct a tracer study to validate underground retention time. The tracer study must be conducted prior to the end of the third month following the start of operations of the Facility in accordance with title 22, sections 60320.108(e) and 60320.124(c) and meet the following requirements:
1. The Discharger must submit a groundwater tracer study protocol for review and approval by DDW. The tracer study protocol must be submitted at least 60 days prior to the start of the tracer study in accordance with title 22, section 60320.124.
 2. The Discharger must submit the completed tracer study report to DDW and the Santa Ana Water Board. The Discharger must update the Engineering Report and the OOP based on the results of the tracer study; the update of

- the Engineering Report may coincide with the five-year update required under title 22, section 60320.128(b).
3. Until the validated underground retention time is determined by the completed tracer study and subsequently approved by DDW, the Discharger must use a minimum underground response retention time (RRT) of 7.5 months as described in the Engineering Report.
 4. Based on the results of the tracer study and in consultation with DDW, the Discharger must revise the primary and secondary boundaries representing zones of controlled drinking water well construction in accordance with title 22, 60320.100(e) and coordinate any necessary actions based on these updates with DDW, the Santa Ana Water Board, and the San Bernardino County Department of Public Health.
 5. The Discharger must update the hydrogeological model based on the results of the tracer study.
- D. The Discharger must comply with the Pathogenic Microorganism Control Reporting specified in section VII.E. of these WRRs.
- E. The Discharger, in accordance with title 22, section 60320.108(i), must investigate the cause and initiate corrective actions, within 24-hours of becoming aware that the required *Cryptosporidium* oocyst, *Giardia* cyst, and enteric virus reductions are not met based on the required on-going monitoring detailed in the approved OOP. If there is a failure to meet the pathogen reduction criteria longer than 4 consecutive hours or more than a total of 8 hours in any 7-day period, the Discharger must notify DDW and the Santa Ana Water Board within 24 hours of its knowledge of such a failure. Failures of shorter duration must be reported to DDW and the Santa Ana Water Board no later than 10 days after the end of the month in which the failure occurred.
- F. Per title 22, section 60320.108(j), if the effectiveness of a treatment train's ability to reduce enteric viruses is less than 10-logs, or *Giardia* cyst or *Cryptosporidium* oocyst reduction is less than 8-logs, the Discharger must immediately notify the Santa Ana Water Board and DDW, and discontinue the application of recycled water, unless directed otherwise by the Santa Ana Water Board or DDW.

V. CROSS-CONNECTION CONTROL PROGRAM

- A. The Discharger must have no undesired or unintended reversal of flow of water or other liquids, gases, or other substances into the Facility's product water lines. The Discharger must report any such undesired or unintended reversal of flow to DDW and the Santa Ana Water Board within 24 hours of becoming aware of the incident.
- B. The Facility must be designed and operated to prevent any inadvertent or improper cross-connections between the potable water, industrial water,

wastewater, recycled water, chemical, or other waste or non-potable systems. Potential points of vulnerability between the potable water, industrial water, wastewater, recycled water, chemical, and other on-site waste or non-potable piping systems must be identified in the OOP. The OOP must include procedures for routine inspection of these potential points of vulnerability, as well as reporting procedures if inadvertent or improperly designed cross-connections are discovered.

- C. The Discharger must submit a comprehensive cross-connection control program report for the Facility to DDW and the Santa Ana Water Board. The cross-connection control program report must be submitted as a standalone document, separate from the OOP. The Discharger must implement its cross-connection control program and update the cross-connection control program report to ensure that program is always representative of the current cross-connection control practices at the Facility. At a minimum, the cross-connection control program report must be updated yearly with the results of the annual cross-connection site inspections. Revisions to the cross-connection control program for any reason, including changes resulting from inspections, must be done in consultation with an individual with a valid and current Cross-Connection Control Program Specialist certification issued by the California-Nevada section of the American Water Works Association (AWWA).
- D. Prior to the operations of the Facility and once every year thereafter, the Discharger must ensure that the potable water, industrial water, wastewater, recycled water, chemical, or other waste or non-potable piping systems are inspected for possible cross-connections. Piping systems must be inspected for possible cross-connection after any modification to the Facility's piping system is made. The Facility must have internal protection from cross-connection. The cross-connection inspection must be performed by an individual with a valid and current Cross-Connection Control Program Specialist certification issued by the California-Nevada section of AWWA. The Discharger must include a written report documenting the results of the initial inspection with the program report

submitted to the DDW. Subsequent inspection results must be submitted with the annual program report to DDW.

VI. NON-POTABLE RECYCLED WATER SPECIFICATIONS

- A. The recycled water used for non-potable reuse shall all times be adequately oxidized disinfected tertiary treated recycled water, which is a filtered and subsequently disinfected wastewater that meets the following limitations:
1. When filtration⁴ is through microfiltration, ultrafiltration, nanofiltration, or reverse osmosis membrane turbidity shall not exceed any of the following:
 - a) 0.2 Nephelometric Turbidity Unit (NTU) more than 5 percent of the time within any 24-hour period; and
 - b) 0.5 NTU at any time.
 2. Disinfected wastewater shall meet the following:
 - a) The 7-day median concentration of total coliform bacteria in the disinfected effluent shall not exceed a Most Probable Number (MPN) of 2.2 per 100 milliliters (ml), utilizing the bacteriological results of the last seven days for which analysis has been completed.
 - b) The number of total coliform organisms 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 sample shall exceed an MPN of 240 total coliform bacteria per 100 ml.
 - d) 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, and the acceptance conditions specified by DDW in the letter issued with respect to the Discharger, entitled, "*Division of Drinking Water Acceptance of the Spot-check Bioassay Report for Trojan UVSigna™ UV Disinfection, East Valley Water District, Sterling Natural Resource Center,*" dated September 16, 2022.
 - e) 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. The facility must be operated and maintained in accordance with the OOP described in Section VIII, of Attachment D. The OOP shall become an enforceable part of this Order.

⁴ For recycled water use, other acceptable filtration technology that complies with tit. 22 of the Cal Code Regs. and approved by DDW may be used. Compliance determination will be based on DDW's guidance.

- B. Prior to the delivery of recycled water to any new user, the Discharger shall submit to the DDW's and the San Bernardino County Department of Public Health for review and approval a report containing the information listed in Section VI.G. of these WRRs, below.
- C. 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 California Code of Regulations, title 22, division 4, chapter 3, sections 60301 through 60355. The Discharger shall conduct periodic inspections of the facilities of the recycled water users to monitor compliance by the users with this Order.
- D. The Discharger shall establish and enforce 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 Water Code section 13521.
 - 1. Use of recycled water by the Discharger shall be consistent with its Rules and Regulations for Recycled Water Use.
 - 2. Any revisions made to the Rules and Regulations shall be subject to the review of the Santa Ana Water Board, DDW, and the San Bernardino County Department of Public Health.
- E. The Discharger shall conduct periodic inspections of recycled water reuse sites to monitor compliance with the Discharger's Rules and Regulations for Recycled

Water Use and the uniform statewide reclamation criteria established pursuant to Water Code section 13521.

- F. The storage, delivery, or use of recycled water shall not individually or collectively, directly or indirectly, result in pollution or nuisance, or adversely affect water quality, as defined in the Water Code.
- G. The Discharger shall maintain and make available upon request by the Santa Ana Water Board, DDW, and/or the San Bernardino County Department of Public Health the following information for any recycled water users:
 - 1. The average number of people estimated to be served at each use area daily.
 - 2. The specific boundaries of the proposed use area, which must be included in a map showing the location of each facility, drinking water fountain, and impoundment to be used.
 - 3. The person or persons responsible for operation of the recycled water system at each use area.
 - 4. Specific use to be made of the recycled water at each use area.
 - 5. The methods to be used to assure that the installation and operation of the recycled water 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.
 - 6. Plans and specifications which include following:
 - a) Proposed piping system to be used.
 - b) Pipe locations of both the recycled and potable water systems.
 - c) Type and location of the outlets and plumbing fixtures that will be accessible to the public.
 - d) The methods and devices to be used to prevent backflow of recycled water into the potable water system.
 - e) Plan notes relating to specific installation and use requirements.
- H. The Discharger shall require each user to designate an on-site supervisor responsible for the operation of the recycled water distribution system within the use area. The supervisor shall be responsible for complying with this Order, prevention of potential hazards, the installation, operation and maintenance of the distribution system as approved by DDW.
- I. For the use of recycled water for landscape pond impoundments at the Facility's administrative center, the Discharger must provide an addendum to the title 22 Engineering Report to DDW and the Santa Ana Water Board that details piping

plans, site drainage plans, supplemental water design and use, use area supervisor assignment and training, a cross-connection shut down test plan, and any other details required by the Recycled Water Criteria. The Discharger must receive approval by DDW before discharging recycled water to the ponds.

VII. COMPLIANCE MONITORING AND REPORTING

- A. The Discharger must complete compliance monitoring and reporting as required by the Monitoring and Reporting Program (MRP), in Attachment E and these WRRs. If there are duplications, the Discharger must comply with the frequency of whichever requirement is more stringent.
- B. The Discharger must electronically submit compliance monitoring results to DDW, using the Primary Station Codes (PS Codes) provided by DDW to electronically submit monitoring results for the Facility. Data produced and reports submitted for analysis, as required by title 22, article 5.1, must be generated by a laboratory accredited by the State Water Board's Environmental Laboratory Accreditation Program (ELAP). Per title 22, section 60320.104, analyses for contaminants having primary or secondary MCLs shall be performed by laboratories approved to perform such analyses by DDW and utilizing DDW-approved drinking water methods or as authorized by DDW in case there are no approved drinking water methods available for a contaminant. Methods for analyses for chemicals other than those having primary and secondary MCLs must be described in the Discharger's OOP. The laboratories performing the analyses must submit the results electronically to DDW's database by the tenth day of the following month in which analysis was completed. Laboratory results that cannot be transmitted electronically via ps-codes to California Laboratory Intake Portal (CLIP), such as bacteriological data, must be submitted to DDW in the appropriate reports (e.g. quarterly reports). Also, the Discharger should contact DDW for any required water quality data that cannot be transmitted electronically.
- C. The Discharger must use analytical methods and sample at locations and frequencies as described in the OOP. Any changes of analytical methods, sample locations, or frequencies must be approved by DDW. The Discharger must not reduce the monitoring frequency for the chemicals having NLs, including all chemicals that overlap with constituents of emerging concern in the Recycled Water Policy (e.g., NDMA, PFOS, PFOA, and 1,4-dioxane), without the approval of DDW.
- D. Groundwater Monitoring and Reporting
 - 1. Per title 22, section 60320.100(c), prior to the operation of the Facility, the Discharger must collect at least four groundwater samples (at least one for each quarter) from each aquifer potentially affected by the Facility. The groundwater samples shall be representative of the water in each aquifer, taking into consideration seasonal variations, and be analyzed for the

- chemicals, contaminants, and characteristics in accordance with title 22, sections 60320.110, 60320.112, 60320.118, and 60320.120. Subsequently, the Discharger must submit a report to DDW documenting the results of the background groundwater quality of the aquifers conducted in accordance with title 22, section 60320.100(c).
2. Per title 22, section 60320.126(b), prior to the operation of the Facility, the Discharger must collect two groundwater samples from the monitoring wells. In addition, the Discharger must submit a report to DDW documenting the results of the background groundwater quality at the monitoring wells conducted in accordance with title 22, section 60320.126.
 3. Per title 22, section 60320.126(b), each quarter after the Facility operations begin, the Discharger must collect at least one groundwater sample from each monitoring well. The Discharger must propose in the OOP the water quality monitoring and reporting program for the groundwater monitoring wells. The groundwater monitoring and reporting program must be reviewed and approved by DDW. Also, the Discharger must notify DDW and the Santa Ana Water Board within 30 days of knowledge of any sample result from a monitoring well exceeding a primary MCL, secondary MCL, or NL.
- E. Pathogenic Microorganism Control Monitoring and Reporting
1. The Discharger must record the daily pathogen LRV for each pathogen achieved by (1) each treatment process and (2) the entire treatment train. The Discharger must also record "Yes" or "No" as to whether the daily total pathogen LRV for the entire treatment train met the total required LRVs for each pathogen. The required pathogen LRVs are 12-logs for enteric virus, 10-logs for Giardia cyst, and 10-logs for Cryptosporidium oocyst, in accordance with title 22, section 60320.108.
 2. Furthermore, the daily total pathogen LRV for the entire treatment train must be calculated as the sum of the minimum pathogen LRVs attributed to each treatment process for each pathogen for each day. The pathogen LRV for the treatment train must be calculated and recorded every day, unless the treatment train is offline for the full day (i.e., midnight to midnight).
- F. The Discharger must submit, electronically, Monthly Reports no later than the 10th day of the month following the month of sampling. These Monthly Reports must be prepared as described in the OOP.
- G. The discharger must submit, electronically, Quarterly Reports no later than the 15th day of the second month following the end of each quarterly monitoring period. These Quarterly Reports must be prepared as described in the OOP.
- H. The Discharger must submit an Annual Report to DDW and the Santa Ana Water Board no later than 6 months after the end of each calendar year. The Annual

Report must include the information required in title 22, section 60320.128(a). These Annual Reports must be prepared as described in the OOP.

- I. The Discharger must submit an updated Engineering Report to DDW and the Santa Ana Water Board at least every 5 years, addressing any changes at the Facility.

VIII. OPERATION OPTIMIZATION PLAN

A. Draft and Final Operation Optimization Plan (OOP).

1. The Discharger must operate the Facility in accordance with the OOP and ensure that the OOP thoroughly identifies and describes the operation, maintenance, analytical methods, monitoring, and reporting necessary to meet the requirements of the Order and title 22, section 60320.122. The Discharger shall submit a draft OOP to Santa Ana Water Board and DDW 90 days prior to DDW's site inspection (Cal. Code Regs., tit. 22, § 60320.100(g)) and meet the following requirements:
 - a) The Discharger must submit an amended OOP to the Santa Ana Water Board and DDW for review and approval after the completion of DDW's site inspection and incorporate and clearly identify any changes in operational procedures from startup and commissioning and any other changes as directed by DDW. The Discharger must operate the Facility in accordance with the final OOP and subsequent updates.
 - b) The OOP shall include a preventive maintenance program, which addresses UV lamp fouling; equipment repair and replacement (e.g., membranes); and instrumentation maintenance and calibration.
 - c) The OOP shall include a water quality monitoring program, which includes analytical methods, associated instrumentation, monitoring location PS Codes, and procedures for reporting analytical results. Also, the OOP shall incorporate any future revisions to the chemical monitoring list (e.g., MCLs, NLs). The OOP must incorporate the requirements of the MRP and this WRRs.
 - d) The OOP shall include contingency plans (including responses to the Facility's process upsets, communication failure, power interruptions, off specification water, water quality exceedances, and contact information for key personnel and agencies) and emergency response plan. Also, records (including records related to preventive maintenance program, contingency plan, sample templates for maintenance logs and monthly report) and reporting procedures.
 - e) In the OOP and in the main treatment control center, the Discharger must provide reliability features and a process control quick reference guide for operators that includes, at a minimum, the following elements:
 - i. The alarms that trigger responses other than diversion, retreatment, or shutdown.

- ii. The alarms that trigger reliability features: diversion, retreatment, or shutdown.
 - iii. For each alarm, include the associated response and key associated instrumentation information. At a minimum this must include the following: (1) instrument tag and description, (2) alarm type (e.g., low, low-low, high, high-high etc.), (3) alarm numerical set point and permission level for changing the set point (e.g., operator, supervisor, hardcoded), (4) alarm effect (e.g., SCADA alarm, call to operator phone, automatic diversion, shutdown), and (5) Alarm time delay.
 - iv. The required frequency of inspection, calibration, and verification for instrumentation associated with process monitoring and control.
- f) A staffing plan, for manned and unmanned operations (if any), which includes information on operator staffing hours, shifts, responsibilities, and certification classes. Include a log for tracking expiration dates for operator certification. The Discharger must provide for an on-going training program to ensure that each operator has been trained in the following during manned and unmanned (if any) shifts:
- i. The proper operation of all treatment processes utilized to achieve pathogen and chemical reduction.
 - ii. Maintenance, calibration, and verification of instrumentation and analyzers.
 - iii. Control systems, data trending, and the control strategy of plant systems.
 - iv. Incident response and investigation.
 - v. Critical Control Point systems approach.
 - vi. The California Safe Drinking Water Act, its implementing regulations, and all other relevant regulations.
 - vii. The potential adverse health effects associated with the consumption of drinking water that does not meet California drinking water standards.
- B. Operation Optimization Plan Updates. Within six months of optimizing treatment processes, pursuant to title 22, section 60320.122(b), and anytime thereafter when operations are optimized resulting in operational changes, the Discharger must update the OOP and clearly identify any such changes in operational procedures and submit the OOP to DDW for review and approval.

IX. TOTAL ORGANIC CARBON AND SOIL-AQUIFER TREATMENT PROCESS REQUIREMENTS

- A. Per title 22, section 60320.118, the Discharger must collect samples of the recycled water for analysis of total organic carbon (TOC). The Discharger must report the following in the quarterly reports:
1. Results of the TOC monitoring per title 22, section 60320.118(a),
 2. 20-week running average of all TOC results, and
 3. The average of the last four TOC results.
- B. Per title 22, section 60320.118(f), prior to the operation of the Facility and at five-year intervals thereafter, the Discharger must conduct a study to determine the occurrence of indicator compounds in the recycled municipal wastewater to be applied at the Facility. Based on this study, the Discharger must propose at least three indicator compounds for use in meeting title 22, section 60320.118(g). The protocol for the occurrence study, the study's results, and the indicator compounds to be used must be reviewed and approved by DDW.
- C. Per title 22, section 60320.118(g), on a quarterly basis, the Discharger must monitor the Facility's recycled municipal wastewater or recharge water prior to the soil-aquifer treatment process and the water after the soil-aquifer treatment process, but at a point no farther than 30 days downgradient of the spreading area. The monitoring must include at least three indicator compounds approved by DDW based on the results of the occurrence study conducted per title 22, section 60320.118(f). If the monitoring results do not indicate a reduction of at least 90 percent in the concentration of indicator compounds by the soil-aquifer treatment, excluding the effects of dilution by diluent water that may be present, the Discharger shall investigate the reason for the low reduction and report the indicator compound and investigative results within 90 days of receipt of the analytical results.
- D. Per title 22, section 60320.118(h), if the results of the investigation conducted pursuant to title 22, section 60320.118(g) concludes that the 90 percent reduction could not be demonstrated because the concentration of indicator compounds prior to the soil-aquifer treatment process was not sufficient, the Discharger must consult with DDW and comply with an alternative monitoring plan approved by DDW. If the Discharger demonstrates that there are not three indicator compounds available and suitable for indicating a 90 percent reduction pursuant title 22, section 60320.118(g), the Discharger may utilize an indicator compound that achieves a reduction of less than 90 percent, with DDW approval of the alternative indicator compound and reduction criteria.

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

I. FINDINGS

- A. This Monitoring and Reporting Program (MRP) is issued to East Valley Water District (Discharger) pursuant to the Water Code section 13267, which authorizes the Santa Ana Water Board to require technical and monitoring reports. California Code of Regulations, title 22, division 4 also requires monitoring and reporting to confirm compliance with title 22 regulations.
- B. The requirements of this MRP provide information to determine compliance with Order No. R8-2023-0009, *Waste Discharge Requirements and Master Recycling Permit for the East Valley Water District's Sterling Natural Resource Center* (Order). The MRP requirements also provide information to the Santa Ana Water Board to assess the quality of groundwater and to protect beneficial uses. The Santa Ana Water Board's Executive Officer can modify this MRP as appropriate.
- C. This MRP establishes conditions for the Discharger to conduct routine or episodic self-monitoring of the discharges regulated under this Order at specified influent, internal operations, effluent, and receiving water monitoring locations. This MRP requires the Discharger to report the results to the Santa Ana Water Board and DDW with information necessary to evaluate discharge characteristics and compliance status.

II. GENERAL MONITORING PROVISIONS

- A. The Discharger must ensure samples and measurements collected as required by the Order and this MRP are representative of the volume and nature of the monitored discharge. All samples must be collected at the monitoring points specified in this MRP and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. The Discharger must not change monitoring locations prior to notifying and receiving approval from the Santa Ana Water Board and DDW for the proposed change.
- B. The Discharger must select and use appropriate flowrate measurement devices and methods, consistent with accepted scientific practices to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The Discharger must install, calibrate, and maintain the devices according to manufacturer recommendations to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices must be capable of measuring flowrates with a maximum deviation of 5 percent from true discharge rates throughout the range of expected discharge volumes.
- C. In accordance with title 22, section 60320.104, the Discharger must ensure that all laboratories conduct analyses for contaminants having a primary or secondary MCL using a drinking water method for the contaminant approved by DDW. The Discharger must ensure that the laboratory is accredited by the DDW's

Environmental Laboratory Accreditation Program (ELAP) for the analytical method used or as authorized by DDW in case there are no approved drinking water methods available for a contaminant and the method must be described in the Discharger's OOP.

- D. The Discharger must ensure that monitoring for all constituents that do not have a primary or secondary MCL be conducted according to USEPA test procedures approved by ELAP for the analytical method used, or according to methods approved by in 40 CFR part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants, as amended, unless other test procedures have been specified in the Discharger's OOP. Analyses for constituents must be described in the Discharger's OOP.
- E. If the Discharger monitors any pollutants more frequently than required by this MRP, using approved test procedures, or as specified in this MRP, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharger's monitoring report. The Discharger must also report the increased frequency of monitoring.
- F. The Discharger must retain records of all monitoring information, including all calibration and maintenance records including all original strip chart and/or electronic recordings for continuous monitoring instrumentation and copies of all reports required by this MRP, and records of all data used to complete the implementation for this MRP. The Discharger must maintain records for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during any unresolved litigation regarding this discharge or as required by the Santa Ana Water Board. Records of monitoring information must include the following:
 - 1. The date, exact place, and time of sampling or measurements,
 - 2. The individual(s) who performed the sampling or measurements,
 - 3. The date(s) analyses were performed,
 - 4. The individual(s) who performed the analyses,
 - 5. The analytical techniques or methods used, and
 - 6. The results of such analyses.
- G. The Discharger, per manufacturer guidelines, must properly and routinely maintain and calibrate all monitoring instruments and devices used to comply with this MRP.
- H. The Discharger must sign and certify all applications, reports, or information submitted to the Santa Ana Water Board as detailed in section VII.O of the Order.

- I. The Discharger must identify all missing or non-valid monitoring or sampling results in submitted monitoring reports. All instances of missing or non-valid results must include an explanation of their root cause and the steps the Discharger has or will take to prevent future instances. Missing or non-valid results may be considered violations of the MRP that could result in enforcement action depending on the frequency of such instances and efforts by the Discharger to prevent such failures.
- J. Except as otherwise specified in this MRP, the Discharger may reduce sampling and reporting frequency for parameters in accordance with title 22 and the Water Recycling Requirements (WRRs), in Attachment D of the Order after receiving written approval from the Santa Ana Water Board for the reduction. The Santa Ana Water Board will consult with DDW on all title 22 related monitoring requirement changes.

III. MONITORING LOCATIONS

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

Table E- 1 Summary of Monitoring Locations

Monitoring Location Name	Latitude / Longitude	PS Code	Monitoring Location Description
M-INF	34° 6' 33.70" N 117° 15' 3.92" W	CA3690026_001_001	A location in the influent before the headworks
REC-001	34° 6' 35.64" N 117° 14' 58.63" W	CA3690026_002_002	A location at the discharge to the Regional Recycled Water Pipeline
REC-002	34° 6' 30.48" N 117° 9' 57.60" W	To Be Assigned	At a lysimeter located at a spreading basin underground and at a depth prior to reaching the mound at the water table (for TOC, TN, and Indicator Compounds).
MW-A	34° 6' 22.36" N 117° 10' 11.60" W	CA3690026_101_101 CA3690026_102_102 CA3690026_103_103	Nested monitoring well site located downgradient of Weaver Basins. Monitoring well site includes three casings screened from: Shallow 220 to 280 ft bgs, Middle 490 to 550 ft bgs, Deep 720 to 780 ft bgs.

Monitoring Location Name	Latitude / Longitude	PS Code	Monitoring Location Description
MW-B	34° 5' 56.18" N 117° 10' 49.94" W	CA3690026_104_104 CA3690026_105_105 CA3690026_106_106	Nested monitoring well site located upgradient of Redlands wells. Monitoring well site includes three casings screened from: Shallow 330 to 390 ft bgs, Middle 540 to 600 ft bgs, Deep 740 to 800 ft bgs.
MW-C	To be Determined	To Be Determined	Nested monitoring well site location to be determined by the end of 2025 and will be located upstream of EVWD's production wells. Monitoring well site will include three casings and the screened interval will be determined by the end of 2025.
EVWD Plant No. 120	34° 6' 37.64" N 117° 9' 37.46" W	CA3690026_107_107	Single monitoring well site located upgradient of Weaver Basins. Monitoring well site includes one casing screened from 114 to 379 ft bgs.

IV. MONITORING REQUIREMENTS

- A. The Discharger must monitor the influent flow to the Facility for the parameters listed in Table E-2 below. Sampling stations shall be established and located upstream of any in-plant return flows and where a representative sample of the influent flow to the treatment facility can be obtained. The date and time of sampling (as appropriate) shall be reported with the analytical values determined.

Table E- 2 Influent Monitoring at M-INF

Parameter	Units	Sample Type	Minimum Sample Frequency
Flowrate	MGD	Flow meter / totalizer	Continuous
pH	pH units	Recorder	Continuous
Specific Conductance	µmhos/cm	Recorder	Continuous

Parameter	Units	Sample Type	Minimum Sample Frequency
COD	mg/L	Composite	Daily
Biochemical Oxygen Demand (5-day)	mg/L	Composite	Daily
Total Suspended Solids	mg/L	Composite	Daily
Nitrate-Nitrogen	mg/L	Composite	Monthly
Total Inorganic Nitrogen	mg/L	Composite	Monthly
Total Dissolved Solids	mg/L	Composite	Monthly
Volatile Organic Portion of USEPA Priority Pollutants	µg/L	Grab	Annually
Remaining USEPA Priority Pollutants	µg/L	Composite	Annually

B. The Discharger must monitor the effluent leaving the Facility for the parameters listed in Table E-3 below. Sampling station(s) shall be established where representative samples of recycled water can be obtained. Representative samples shall be collected and analyzed for the following parameters at frequencies specified herein.

Table E- 3 Effluent Monitoring for Recycled Water (Title 22) at REC-001

Parameter	Units	Sample Type	Minimum Sample Frequency
Flowrate	MGD	Flow Meter / Totalizer	Continuous
Ultraviolet Transmittance (UVT) at 254 nm ⁵	Percent (%)	Recorder	"
Turbidity ^{1,5,6}	Nephelometric turbidity units (NTU)	Recorder	"
pH ⁸	pH units	Recorder	"
Total Coliform	Most Probable Number (MPN / 100 mL)	Grab	Daily

Parameter	Units	Sample Type	Minimum Sample Frequency
Electrical Conductivity ^{1,8}	µm/cm	Recorder	Continuous
Total Dissolved Solids (TDS)	mg/L	24-hr Composite	Monthly
Biochemical Oxygen Demand, 5-day (BOD ₅)	"	"	Daily
Total Suspended Solids (TSS)	"	"	Daily
Chloride ¹	"	"	Quarterly
Sulfate ¹	"	"	Quarterly
Total Nitrogen ^{2,7}	"	"	Twice Per Week
Nitrate + Nitrite (as Nitrogen) ³	"	Calculate	Quarterly
Nitrate (as Nitrogen) ^{3,4}	"	24-hr Composite	Monthly
Nitrite (as Nitrogen) ^{3,4}	"	"	Monthly
Ammonia (as Nitrogen) ⁴	"	"	Monthly
Total Inorganic Nitrogen	"	Calculate	Monthly
Iron ¹	"	24-hr Composite	Quarterly
Manganese ¹	"	"	"
Methylene Blue-Activated Substances (MBAS) ¹	"	"	"
Odor ¹	Threshold Odor Number (TON)	"	"
Color Units ¹	Apparent Color Unit (ACU)	"	"
Lead ³	µg/L	"	"
Copper ^{1,3}	"	"	"

Parameter	Units	Sample Type	Minimum Sample Frequency
Total Organic Carbon ⁷ (TOC)	mg/L	Recorder (online) or 24-hr composite or Grab	Weekly
Silver ¹	µg/L	24-hr Composite	Quarterly
Thiobencarb	"	"	"
Zinc ¹	"	"	"
Indicator Compounds ⁷	"	"	"

- ¹ Parameters with secondary maximum containment levels (MCLs) established in title 22, section 64449, Table 64449-A.
- ² See section IV.C through IV.E of this MRP for details on monitoring.
- ³ Parameters with primary MCLs established in title 22, section 64431 Table 64431 or with Notification Levels.
- ⁴ These constituents are used to compute Total Inorganic Nitrogen (TIN) and verify compliance with the TIN effluent limitation.
- ⁵ UVT to be measured at the UV disinfection system or UVT and turbidity are measured at the UV disinfection system influent (after MBR) at the WWRF site.
- ⁶ Turbidity to be measured at the membrane filtration effluent.
- ⁷ To be sampled at REC-002 as 24-hour composite unless DDW approves a grab sample.
- ⁸ The effluent pH and EC will be monitored at the membrane filter feed location or other locations as authorized by Santa Ana Water Board.

C. The Discharger must perform additional monitoring, as described below, for parameters with secondary MCLs in Table E-3 in the event of an exceedance of a corresponding effluent limitation listed in the Order (Cal Code Regs., tit. 22, § 60320.112(e)).

1. If the annual average of the results of the monitoring performed exceeds a parameter's secondary MCL, the Discharger shall initiate quarterly monitoring for the parameter and if the running annual average of quarterly-averaged results exceeds a parameter's secondary MCL, describe the reason(s) for the exceedance and any corrective action taken in a report that must be submitted to the Santa Ana Water Board and DDW no later than 45 days following the quarter in which the exceedance occurred. The annual

monitoring frequency may resume if the running annual average of quarterly results does not exceed a parameter's secondary MCL.

- D. The Discharger must demonstrate control of nitrogen compounds. The Discharger must in each calendar week, at least three days apart, as specified in the Facility's OOP, collect at least two effluent water quality sample at Monitoring Location REC-001 or REC-002 and have the sample analyzed for total nitrogen.⁵ The Discharger must ensure that the laboratory or person conducting the analysis provides the monitoring results within 72 hours, if the result of any single sample exceeds 10 mg/L. If the average of the results of two consecutive samples exceeds 10 mg/L total nitrogen, the Discharger must also take the following measures:
1. Take a confirmation sample and notify the Santa Ana Water Board and DDW within 48 hours of the laboratory notifying the Discharger of the results.
 2. Investigate the cause for the exceedances and take actions to reduce the total nitrogen concentrations to ensure continued or future exceedances do not occur.
 3. Initiate additional monitoring for nitrogen compounds as described in the Facility's OOP, including locations in the groundwater basin, to identify elevated concentrations and determine whether such elevated concentrations exceed or may lead to an exceedance of a nitrogen based MCL.
- E. If the average of the results of four consecutive samples exceeds a concentration of 10 mg/L of total nitrogen, suspend the discharge (surface application) of tertiary treated recycled water. The Discharger must not resume the discharge (surface application) until the Discharger takes corrective actions and at least two consecutive sampling results have a concentration of total nitrogen less than 10 mg/L.
- F. The Discharger must perform additional monitoring, as described below, for parameters with MCLs in Table E-3, and all parameters in Tables E-4 through E-8, in the event of an exceedance of a corresponding effluent limitation listed in the Order (Cal Code Regs., tit. 22, § 60320.112(d)).
1. For a parameter whose compliance with its MCL or Action Level (for lead and copper) that is not based on a running annual average (i.e., currently these are nitrate, nitrite, nitrate plus nitrite, perchlorate, chlorite, asbestos, lead, and copper):
 - a) Within 72 hours of being notified of a result exceeding an MCL or Action Level (AL) the Discharger must collect another sample, and have it analyzed for the parameter as confirmation.

⁵ Per tit. 22, § 60301.860, "Total Nitrogen" means the sum of concentrations of ammonia, nitrite, nitrate, and organic nitrogen-containing compounds, expressed as nitrogen.

- b) If the average of the initial and confirmation sample exceeds the parameter's MCL or AL, or a confirmation sample is not collected and analyzed, the Discharger must initiate weekly monitoring for the parameter until four consecutive weekly results are below the parameter's MCL or AL. The Discharger must notify the Santa Ana Water Board and DDW within 24 hours if any sample exceeds an MCL or AL.
 - c) If the running four-week average exceeds the parameter's MCL or AL, the Discharger must notify the Santa Ana Water Board and DDW within 24 hours of knowledge of the exceedance and, if directed by the Santa Ana Water Board or DDW, conduct corrective actions up to and potentially including suspending the discharge of the recycled municipal wastewater.
2. For a parameter whose compliance with its MCL is based on a running annual average (Cal Code Regs., tit. 22, § 60320.112(d)):
- a) Within 72 hours of being notified of a result exceeding an MCL, the Discharger must collect another sample, and have it analyzed for the parameter as confirmation.
 - b) If the average of the initial and confirmation sample exceeds the parameter's MCL, or a confirmation sample is not collected and analyzed, the Discharger must initiate weekly monitoring for the parameter until the running four-week average no longer exceeds the MCL. The Discharger must notify the Santa Ana Water Board and DDW within 24 hours if any sample exceeds an MCL.
 - c) If the running four-week average exceeds the parameter's MCL, the Discharger must describe the reason(s) for the exceedance and provide a workplan with a schedule for completion of corrective actions in a report submitted to the Santa Ana Water Board and DDW no later than 45 days following the quarter in which the exceedance occurred.
 - d) If the running four-week average exceeds the parameter's MCL for sixteen (16) consecutive weeks, the Discharger must notify the Santa Ana Water Board and DDW within 48 hours of knowledge of the exceedance and, if directed by the Santa Ana Water Board or DDW, conduct corrective actions up to and potentially including suspending the discharge of the recycled municipal wastewater.

G. The Discharger must monitor the effluent at REC-001, as described in Table E-1, for the parameters listed in Tables E-4 through E-10 below:

**Table E- 4 Effluent Monitoring for Recycled Water (Title 22) at REC-001:
 Inorganics with Primary MCLs**

Parameter ¹	Units	Sample Type	Minimum Sample Frequency
Aluminum	mg/L	Grab	Quarterly
Antimony	"	"	"

Arsenic	“	“	“
Asbestos (for fibers exceeding 10 µm in length)	Million fibers per liter (MFL)	“	“
Barium	mg/L	“	“
Beryllium	“	“	“
Cadmium	“	“	“
Total Chromium	“	“	“
Cyanide	“	“	“
Fluoride	“	“	“
Mercury	“	“	“
Nickel	“	“	“
Perchlorate	“	“	“
Selenium	“	“	“
Thallium	“	“	“

¹ Parameters with primary MCLs established in title 22, section 64431, Table 64431.

Table E- 5 Effluent Monitoring for Recycled Water (Title 22) at REC-001: Volatile Organic Chemicals (VOCs) with Primary MCLs

Parameter ¹	Units	Sample Type	Minimum Sample Frequency
Benzene	mg/L	Grab	Quarterly
Carbon Tetrachloride	“	“	“
1,2-Dichlorobenzene	“	“	“
1,4-Dichlorobenzene	“	“	“
1,1-Dichloroethane	“	“	“
1,2-Dichloroethane	“	“	“
1,1-Dichloroethylene	“	“	“
cis-1,2-Dichloroethylene	“	“	“
trans-1,2-Dichloroethylene	“	“	“
Dichloromethane	“	“	“
1,2-Dichloropropane	“	“	“
1,3-Dichloropropene	“	“	“

Parameter ¹	Units	Sample Type	Minimum Sample Frequency
Ethylbenzene	"	"	"
Methyl-tert-butyl-ether (MTBE)	"	"	"
Monochlorobenzene	"	"	"
Styrene	"	"	"
1,1,2,2-Tetrachloroethane	"	"	"
Tetrachloroethylene	"	"	"
Toluene	"	"	"
1,2,4-Trichlorobenzene	"	"	"
1,1,1-Trichloroethane	"	"	"
1,1,2-Trichloroethane	"	"	"
Trichloroethylene	"	"	"
Trichlorofluoromethane	"	"	"
1,1,2-Trichloro-1,2,2- Trifluoroethane	"	"	"
Vinyl Chloride	"	"	"
Xylenes	"	"	"

¹ Parameters with primary MCLs established in title 22, section 64444, Table 64444-A.

Table E- 6 Effluent Monitoring for Recycled Water (Title 22) at REC-001: Synthetic Organic Chemicals (SOCs) with Primary MCLs

Parameter ¹	Units	Sample Type	Minimum Sample Frequency
Alachlor	mg/L	Grab	Quarterly
Atrazine	"	"	"
Bentazon	"	"	"
Benzo(a)pyrene	"	"	"
Carbofuran	"	"	"
Chlordane	"	"	"
2,4-Dichlorophenoxyacetic acid	"	"	"
Dalapon	"	"	"
1,2-Dibromo-3-chloropropane	"	"	"

Parameter¹	Units	Sample Type	Minimum Sample Frequency
Di(2-ethylhexyl) adipate	"	"	"
Di(2-ethylhexyl) phthalate	"	"	"
Dinoseb	"	"	"
Diquat	"	"	"
Endothall	"	"	"
Endrin	"	"	"
Ethylene Dibromide	"	"	"
Glyphosate	"	"	"
Heptachlor	"	"	"
Heptachlor epoxide	"	"	"
Hexachlorobenzene	"	"	"
Hexachlorocyclopentadiene	"	"	"
Gamma BHC (Lindane)	"	"	"
Methoxychlor	"	"	"
Molinate	"	"	"
Oxamyl	"	"	"
Pentachlorophenol	"	"	"
Picloram	"	"	"
Polychlorinated Biphenyls (PCBs)	"	"	"
Simazine	"	"	"
Thiobencarb	"	"	"
Toxaphene	"	"	"
1,2,3-Trichloropropane	"	"	"
2,3,7,8-tetrachlorodibenzodioxin (Dioxin)	"	"	"
2-(2,4,5-trichlorophenoxy) propionic acid (Silvex)	"	"	"

¹ Parameters with primary MCLs established in title 22, section 64444, Table 64444-A.

**Table E- 7 Effluent Monitoring for Recycled Water (Title 22) at REC-001:
 Disinfection Byproducts with Primary MCLs**

Parameter ¹	Units	Sample Type	Minimum Sample Frequency
Bromodichloromethane	mg/L	Grab	Quarterly
Bromoform	"	"	"
Chloroform	"	"	"
Dibromochloromethane	"	"	"
Monochloroacetic acid	"	"	"
Dichloroacetic acid	"	"	"
Trichloroacetic acid	"	"	"
Monobromoacetic acid	"	"	"
Dibromoacetic acid	"	"	"
Bromate	"	"	"
Chlorite	"	"	"

¹ Parameters with primary MCLs established in title 22, section 64533, Table 64533-A.

**Table E- 8 Effluent Monitoring for Recycled Water (Title 22) at REC-001:
 Radionuclides with Primary MCLs**

Parameter ¹	Units	Sample Type	Minimum Sample Frequency
Combined Radium-226 and Radium-228	Picocuries per liter (pCi/L)	Grab	Quarterly
Gross Alpha particle activity (excluding radon and uranium)	"	"	"
Uranium	"	"	"
Beta/Photon emitters	Millirem per year	"	"
Strontium-90	pCi/L	"	"
Tritium	"	"	"

¹ Parameters with primary MCLs established in title 22, sections 64442 and 64443, Tables 64442 and 64443.

Table E- 9 Monitoring for Recycled Water (Title 22) at REC-001: Notification and Response Levels

Parameter	Units	Sample Type	Minimum Sample Frequency
Boron	mg/L	Grab	Quarterly
n-Butylbenzene	"	"	"
sec-Butylbenzene	"	"	"
tert-Butylbenzene	"	"	"
Carbon disulfide	"	"	"
Chlorate	"	"	"
2-Chlorotoluene	"	"	"
4-Chlorotoluene	"	"	"
Diazinon	"	"	"
Dichlorodifluoromethane	"	"	"
1,4-Dioxane	"	"	"
Ethylene Glycol	"	"	"
Formaldehyde	"	"	"
HMX (Octogen)	"	"	"
Isopropylbenzene	"	"	"
Manganese	"	"	"
Methyl isobutyl ketone	"	"	"
Naphthalene	"	"	"
N-Nitrosodiethylamine (NDEA)	"	"	"
N-Nitrosodimethylamine (NDMA)	"	"	"
N-Nitrosodi-n-propylamine (NDPA)	"	"	"
Perfluorobutanesulfonic acid (PFBS)	"	"	"
Perfluorooctanesulfonic acid (PFOS)	"	"	"
Perfluorohexanesulfonic acid (PFHxS)	"	"	"
Perfluorooctanoic acid (PFOA)	"	"	"
Propachlor	"	"	"
n-Propylbenzene	"	"	"
1,3,5-Trinitroperhydro-1,3,5-triazine	"	"	"

Parameter	Units	Sample Type	Minimum Sample Frequency
Tertiary butyl alcohol	"	"	"
1,2,4-Trimethylbenzene	"	"	"
1,3,5-Trimethylbenzene	"	"	"
2,4,6-Trinitrotoluene	"	"	"
Vanadium	"	"	"

Table E- 10 Monitoring for Recycled Water (Title 22) at REC-001: Remaining Priority Pollutants

Parameter ¹	Units	Sample Type	Minimum Sample Frequency
Aldrin	µg/L	Grab	Quarterly
Dieldrin	"	"	"
4,4'-DDT	"	"	"
4,4'-DDE	"	"	"
4,4'-DDD	"	"	"
Alpha-endosulfan	"	"	"
Beta-endosulfan	"	"	"
Endosulfan sulfate	"	"	"
Endrin aldehyde	"	"	"
Alpha-BHC	"	"	"
Beta-BHC	"	"	"
Delta-BHC	"	"	"
Acrolein	"	"	"
Acrylonitrile	"	"	"
Chlorobenzene	"	"	"
Chloroethane	"	"	"
1,1-dichloroethylene	"	"	"
Methyl chloride	"	"	"
Methyl bromide	"	"	"
2-chloroethyl vinyl ether	"	"	"

Parameter¹	Units	Sample Type	Minimum Sample Frequency
2,4,6-trichlorophenol	"	"	"
3-methyl-4-chlorophenol(P-chloro-m-cresol)	"	"	"
2-chlorophenol	"	"	"
2,4-dichlorophenol	"	"	"
2,4-dimethylphenol	"	"	"
2-nitrophenol	"	"	"
4-nitrophenol	"	"	"
2,4-dinitrophenol	"	"	"
2-methyl-4,6-dinitrophenol	"	"	"
Phenol	"	"	"
Chromium (III) trivalent	"	"	"
Acenaphthene	"	"	"
Benzidine	"	"	"
Hexachloroethane	"	"	"
Bis (2-chloroethyl) ether	"	"	"
2-chloronaphthalene	"	"	"
1,3-dichlorobenzene	"	"	"
3,3'-dichlorobenzidine	"	"	"
2,4-dinitrotoluene	"	"	"
2,6-dinitrotoluene	"	"	"
1,2-diphenylhydrazine	"	"	"
Fluoranthene	"	"	"
4-chlorophenyl phenyl ether	"	"	"
4-bromophenyl phenyl ether	"	"	"
Bis(2-chloroisopropyl) ether	"	"	"
Bis(2-chloroethoxyl) methane	"	"	"
Hexachlorobutadiene	"	"	"
Isophorone	"	"	"
Nitrobenzene	"	"	"

Parameter ¹	Units	Sample Type	Minimum Sample Frequency
N-nitrosodiphenylamine	"	"	"
Bis(2-ethylhexyl) phthalate	"	"	"
Butyl benzyl phthalate	"	"	"
Di-n-butyl phthalate	"	"	"
Di-n-octyl phthalate	"	"	"
Diethyl phthalate	"	"	"
Dimethyl phthalate	"	"	"
Benzo(a)anthracene	"	"	"
Benzo(b)fluoranthene	"	"	"
Benzo(k)fluoranthene	"	"	"
Chrysene	"	"	"
Acenaphthylene	"	"	"
Anthracene	"	"	"
1,12-benzoperylene	"	"	"
Fluorene	"	"	"
Phenanthrene	"	"	"
1,2,5,6-dibenzanthracene	"	"	"
Indeno(1,2,3-cd) pyrene	"	"	"
Pyrene	"	"	"

¹ Remaining priority toxic pollutants that do not have primary or secondary MCLs or NLs.

H. The Discharger must perform additional monitoring, as described below, for all parameters listed in Table E-9 of the MRP, above, in the event of an exceedance.

1. If a monitoring result exceeds a Notification Level (NL), within 72 hours of notification of the result the Discharger must collect another sample, and have it analyzed for the parameter as confirmation. If the average of the initial and confirmation sample exceeds the parameter's NL, or a confirmation sample is not collected and analyzed pursuant to this section, the Discharger must initiate weekly monitoring for the parameter until the running four-week

average no longer exceeds the NL. The Discharger must notify the Santa Ana Water Board and DDW within 24 hours if any sample exceeds a NL.

2. If the running four-week average of monitoring results exceeds the parameter's NL, the Discharger must describe the reason(s) for the exceedance and provide a workplan and schedule for completion of corrective actions in a report submitted to the Santa Ana Water Board and DDW no later than 45 days following the quarter in which the exceedance occurred.
 3. If the running four-week average of monitoring results exceeds the parameter's NL for sixteen consecutive weeks, the Discharger must notify the Santa Ana Water Board and DDW within 48 hours of knowledge of the exceedance.
 4. The Discharger must not reduce the monitoring frequency for the parameters having NLs, including any parameters that overlap with constituents of emerging concern in the Recycled Water Policy, without the approval of the Santa Ana Water Board and DDW. The Discharger must use the analytical methods described in the approved OOP, and any changes must be approved by the Santa Ana Water Board and DDW.
- I. The Discharger must monitor the groundwater monitoring wells at monitoring locations MW-A, MW-B, and MW-C as described in Table E-1 for the parameters listed in Table E-11 below:

Table E- 11 Groundwater Monitoring at MW-A, MW-B, and MW-C

Parameter	Units	Minimum Sample Frequency
Groundwater Elevation	0.01 Feet (ft)	Quarterly
Depth to Groundwater	0.01 ft	"
Gradient	ft/ft	"
Gradient Direction	Degrees	"
Specific Conductance	µS/cm	"
Total Dissolved Solids (TDS)	mg/L	"
Chloride	"	"
Sulfate	"	"
Total Organic Carbon	"	"
Total Nitrogen	"	"
Nitrate (as nitrogen)	"	"
Nitrite (as nitrogen)	"	"

Parameter	Units	Minimum Sample Frequency
Iron	"	"
Manganese	"	"
Methylene Blue-Activated Substances (MBAS)	"	"
Odor	Threshold Odor Number (TON)	"
Color	Apparent Color Unit (ACU)	"
Turbidity	NTU	"
Copper	mg/L	"
Aluminum	"	"
Methyl- <i>tert</i> -butyl Ether (MTBE)	"	"
Silver	"	"
Thiobencarb	"	"
Zinc	"	"
Priority Toxic Pollutants per title 22, sections 60320.120 and 60320.126	"	"

J. If a groundwater monitoring result exceeds 80 percent of an MCL for nitrate, nitrite, or nitrate plus nitrite, within 48 hours of notification of the result the Discharger must collect another groundwater sample, and have the sample analyzed for the parameter as confirmation. If the average of the initial sample and the confirmation sample exceeds the parameter's MCL, the Discharger must notify the Santa Ana Water Board and DDW within 24 hours of being notified by the laboratory of the confirmation sample result and discontinue the discharge of the tertiary treated recycled water into the Weaver Basins. The Discharger must take steps to address the exceedance or submit evidence to the Santa Ana Water Board and DDW that the exceedance was not the result of the discharge from the Facility. The Discharger must not restart discharge until authorized by the Santa Ana Water Board and DDW.

V. CONSTITUENTS OF EMERGING CONCERN MONITORING REQUIREMENTS

A. The Discharger shall develop and must maintain a Quality Assurance Project Plan (QAPP) for monitoring Constituents of Emerging Concern (CEC) to ensure the Facility's monitoring data are of known, consistent, and documented quality

and that the monitoring is consistent with the State Water Board's *Water Quality Control Policy for Recycled Water* (Recycled Water Policy). The Discharger shall develop the QAPP using the *Guidance for Quality Assurance Project Plans, EPA QA/G-5* (EPA/240/R-2/009, 2002). The Discharger shall submit a QAPP to the Santa Ana Water Board and State Water Board for their review and approval. The QAPP must be updated and re-submitted to the Santa Ana Water Board and State Water Board for approval when significant changes are made that would affect the overall data quality and use (e.g., using a new analytical chemistry laboratory) or at least annually if any changes are made. Details on QAPP requirements are in Attachment A of the Recycled Water Policy.

- B. The Discharger must monitor constituents of emerging concern (CECs) using the following phased approach.
1. Health-based and performance CECs and surrogates for CECs.
 - a) The Discharger shall conduct an initial assessment monitoring phase for one year with quarterly sampling, except for surrogates, for which the monitoring frequency is monthly for the first 3 months and quarterly thereafter;
 - b) The Discharger shall conduct a baseline monitoring phase for three years, with semi-annual sampling, except where more frequent monitoring is necessary to respond to a concern as stated in Attachment A, section 4.2 of the Recycled Water Policy; and
 - c) The Discharger shall conduct a standard operation monitoring phase, with semi-annual or annual sampling, as determined by the Santa Ana Water Board based on the results from the previous phase (consistent CECs removal efficiency), treatment operational performance, and appropriate recycled water quality, except where more frequent monitoring is necessary to respond to a concern as stated in Attachment A, section 4.3 of the Recycled Water Policy.
 - d) After each sampling event for health-based CECs, the Discharger shall conduct the evaluations in Table E-15 and implement appropriate response actions.
 - i. For surrogates, the Discharger shall evaluate the data collected during the initial assessment phase and the surrogates CECs that exhibited reduction by unit processes and/or provided an indication of operational performance shall be selected for monitoring in the baseline monitoring phase. Likewise, the data collected during the baseline monitoring phase shall be evaluated and the surrogate CECs that exhibited reduction by unit processes and/or provided an indication of operational performance shall be selected for monitoring in the standard operation monitoring phase.
 - ii. If a health-based CEC also has a notification level or maximum contaminant level pursuant to title 22, sections 60320.112 or

60320.120, the more frequent monitoring requirements shall govern the sampling, regardless of the phase.

2. Bioanalytical Screening Tools.

- a) The Discharger shall conduct an initial assessment phase for three years with quarterly sampling for Estrogen receptor- α (ER- α) and Aryl hydrocarbon receptor (AhR) bioanalytical screening tools and determine the range of responses for the bioassays;
- b) The Discharger shall conduct a baseline monitoring phase for one year and sample quarterly. After each sampling event, the Discharger shall conduct the evaluations in Table E-17 and implement appropriate response actions; and
- c) The Discharger shall conduct a standard operation monitoring phase, with semi-annual or annual sampling, as determined by the Santa Ana Water Board based on the results from the previous phase (consistent CECs removal efficiency), treatment operational performance, and appropriate recycled water quality, except where more frequent monitoring is necessary to respond to a concern as stated in Attachment A section 4.3 of the Recycled Water Policy. After each sampling event, the Discharger shall conduct the evaluations in Table E-17 and implement appropriate response actions.

Table E- 12 CEC Monitoring: Health, Performance, and Surrogates at REC-001 and MW-A

Parameter	Units	Relevance	Sample Type	Reporting Limit ¹
1,4-Dioxane	µg/L	Health	Grab	0.1
NDMA	"	Health/Performance	"	0.002
N-Nitrosomorpholine (NMOR)	"	Health	"	0.002
PFOS	"	"	"	0.0065
PFOA	"	"	"	0.007
Gemfibrozil	"	Performance	"	0.01
Iohexol	"	"	"	0.05
Sucralose	"	"	"	0.1
Sulfamethoxazole	"	"	"	0.01
Ammonia-N	mg/L	Surrogate	"	--
Dissolved Organic Carbon	"	"	"	--
Nitrate-N	"	"	"	--

Total Fluorescence	RFU ²	“	Grab or online	--
Ultraviolet (UV) Light absorbance at 254 nm	Percent (%)	“	“	--

- 1 The Santa Ana Water Board may approve higher reporting limits if it determines these reporting limits cannot be practicably met in recycled water sample matrices using existing methods, as long as the ratio between the reporting limit and the monitoring trigger limit is no less than 2.0 micrograms per liter (µg/L) (see Tables 1 and 7 of Attachment A of the Recycled Water Policy).
- 2 RFU = Relative Fluorescence Units.

Table E- 13 CEC Monitoring: Bioanalytical Screening Tools at REC-001 and MW-A

End Point Activity	Units	Example Relevant CECs	Sample Type	Reporting Limit
Estrogen receptor-α (ER-α)	ng/L	Estradiol, Bisphenol A, Nonylphenol	Grab	0.5
Aryl hydrocarbon receptor (AhR)	“	Dioxin-like chemicals, polycyclic aromatic hydrocarbons, pesticides	“	0.5

- C. The Discharger must use the monitoring results for CECs, surrogates, and bioanalytical screenings to evaluate the overall operational performance of the treatment process and the effectiveness of the treatment process in removing CECs. Monitoring reports submitted to the Santa Ana Water Board must include an evaluation of monitoring results.
 1. The Discharger must evaluate health-based CEC monitoring results from monitoring location REC-001. To determine the appropriate response actions, the Discharger must compare measured environmental concentrations (MECs) to their respective monitoring trigger levels (MTLs) listed in Table E-14 to determine MEC/MTL ratios. The Discharger must compare the calculated MEC/MTL ratios to the thresholds specified in Table E-15 and implement the response actions corresponding to the threshold.

Table E- 14 Monitoring Trigger Levels: Health, Performance, and Surrogates

Parameter	Relevance	Monitoring Trigger Level (µg/L)
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1-4, Dioxane	Health	1
NDMA	Health/Performance	0.010
NMOR	Health	0.012
PFOS	"	0.013
PFOA	"	0.014
Gemfibrozil	Performance	N/A
Iohexol	"	"
Sucralose	"	"
Sulfamethoxazole	"	"
Ammonia-N	Surrogate	"
Dissolved Organic Carbon	"	"
Nitrate-N	"	"
Total Fluorescence	"	"
Ultraviolet (UV) Light Absorbance at 254 nm	"	"

Table E- 15 MEC/MTL Thresholds and Response Actions

MEC/MTL Threshold	Response Action
If greater than 75 percent of the MEC/MTL ratio results for a CEC are less than or equal to 0.1 during the baseline monitoring phase and/or subsequent monitoring	After completion of the baseline monitoring phase, consider requesting removal of the CEC from the monitoring program.
If MEC/MTL ratio is greater than 0.1 and less than or equal to 1	Continue to monitor.
If MEC/MTL ratio is greater than 1 and less than or equal to 10	Check the data for accuracy. Continue to monitor.
If MEC/MTL ratio is greater than 10 and less than or equal to 100	Check the data for accuracy, resample within 72 hours of notification of the result and analyze to confirm CEC result. Continue to monitor.
If MEC/MTL ratio is greater than 100	Check the data for accuracy, resample within 72 hours of notification of the result and analyze to confirm CEC result. Continue to monitor. Contact the Santa Ana Water Board and the State Water

	Board to discuss additional actions. (Additional actions may include, but are not limited to, additional monitoring, toxicological studies, engineering removal studies, modification of facility operation, implementation of a source identification program, and monitoring at additional locations.)
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D. The Discharger must evaluate the bioanalytical assay monitoring results during the baseline monitoring phase and standard operation monitoring phase and the Discharger must determine the appropriate response actions. The Discharger must compare Bioanalytical Equivalent Concentrations (BEQs) to their respective MTLs listed in Table E-16 to determine BEQ/MTL ratios. The Discharger must compare the calculated BEQ/MTL ratios to the thresholds presented in Table E-17 and implement the response actions corresponding to the threshold.

Table E- 16 Required Equivalency Agonists and Monitoring Trigger Levels for Bioanalytical Screening Tools

Parameter	Equivalency Agonist	Monitoring Trigger Level (ng/L)
ER- α	17-beta-estradiol	3.5
AhR	2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)	0.5

Table E- 17 BEQ/MTL Thresholds and Response Actions for Bioanalytical Screening

BEQ/MTL Threshold	Response Action
If BEQ/MTL ratio is consistently less than or equal to 0.15 for ER- α or 1.0 for AhR	After completion of the baseline monitoring phase, consider decreasing monitoring frequency or requesting removal of the endpoint from the monitoring program.
If BEQ/MTL ratio is greater than 0.15 and less than or equal to 10 for ER- α or greater than 1.0 and less than or equal to 10 for AhR	Continue to monitor
If BEQ/MTL ratio is greater than 10 and less than or equal to 1000	Check the data for accuracy, resample within 72 hours of notification of the result and analyze to confirm bioassay result. Continue to monitor. Contact the Santa Ana Water Board and State Water Board to discuss additional actions, which

	<p>may include, but are not limited to, targeted analytical chemistry monitoring, increased frequency of bioassay monitoring, and implementation of a source identification program.</p>
<p>If BEQ/MTL ratio is greater than 1000</p>	<p>Check the data for accuracy, resample within 72 hours of notification of the result and analyze to confirm bioassay result. Continue to monitor. Contact the Santa Ana Water Board and the State Water Board to discuss additional actions, which may include, but are not limited to, targeted and/or nontargeted analytical chemistry monitoring, increased frequency of bioassay monitoring, toxicological studies, engineering removal studies, modification of facility operation, implementation of a source identification program, and monitoring at additional locations.</p>

E. The Discharger must evaluate the effectiveness of the treatment process to remove CECs by determining the removal percentages for performance indicator CECs and surrogates. The removal percentage is the difference in the concentration of a compound in recycled water prior to (at REC-001) and after soil aquifer treatment (at MW-A), divided by the concentration prior to the treatment process and multiplied by 100. The Discharger must report the removal percentages with the CEC monitoring results.

$$\text{Removal Percentage} = \left(\frac{X_{in} - X_{out}}{X_{in}} \right) (100)$$

X_{in} - Concentration in recycled water prior to the treatment process

X_{out} - Concentration in recycled water after the treatment process

F. During the initial assessment, the Discharger must monitor performance of the treatment process to determine removal percentages for performance indicator CECs and surrogates. The Discharger must confirm removal percentages during the baseline monitoring phase. The established removal percentages for each project must be used to evaluate treatment effectiveness and operational performance.

G. The list of parameters and monitoring frequencies may be adjusted by the Executive Officer, of the Santa Ana Water Board, if the Discharger makes a

request and the Executive Officer determines that the modification is adequately supported by monitoring data submitted.

VI. DILUENT WATER MONITORING

A. Sampling station(s) shall be established where representative samples of diluent water can be obtained. Representative samples shall be collected and analyzed for the following parameters at frequencies specified herein:

Table E- 18 Monitoring Program for Diluent Water at Monitoring Well EVWD Plant No. 120

Constituent	Sample Station	Units	Type of Sample	Minimum Frequency of Analysis
Diluent water Volume	Before Blending	Acre-feet	Calculated	Annually
Nitrate and Nitrite	"	mg/L	Grab	See VI.B below
Constituent with Secondary MCLs per title 22, sections 64449 and 64449, Tables 64449-A and 64449-B	Monitoring Well EVWD Plant No. 120	mg/L	"	Quarterly
Inorganics with Primary MCLs per title 22, section 64431, Table 64431	"	"	"	"
VOCs with Primary MCLs per title 22, section 64444, Table 64444-A	"	"	"	"
SOCs with Primary MCLs per title 22, section 64444, Table 64444-A	"	"	"	"
Disinfection Byproducts with Primary MCLs per title 22, section	"	"	"	"

64533, Table 64533-A				
Radionuclides with Primary MCLs per title 22, sections 64442 and 64443, Tables 64442 and 64443	“	“	“	“
Constituents with NLs	“	“	“	“

B. A non-DDW approved drinking water source diluent water, as defined in title 22, section 60301.190, shall be monitored quarterly for nitrate and nitrite. Within 72 hours of being informed by the laboratory of a nitrate and/or nitrite or nitrate plus nitrite result greater than an MCL, a confirmation sample shall be collected. If the average of the initial and confirmation samples exceeds an MCL, the provisions of title 22, section 60320.114, Diluent Water Requirements shall apply.

VII. SELF-MONITORING REPORTS

- A. The Discharger must submit to DDW a monthly report as required by the WRRs and this MRP. These monthly reports must be submitted to DDW by the 10th day of the following month.
- B. The Discharger must submit the results of all other monitoring required by this MRP in Self-Monitoring Reports (SMRs) to the Santa Ana Water Board via the State Water Board's GeoTracker system at <http://geotracker.waterboards.ca.gov/> (GeoTracker). The Discharger must upload SMRs on or prior to the SMR due dates set forth in Table E-23.
 - 1. The Discharger must divide documents larger than 400 megabytes (MB) into separate files at logical places in the report to keep the file sizes under 400 MB.
 - 2. The Discharger must submit Laboratory Analytical Data for all samples in Electronic Deliverable Format (EDF).
 - 3. The Discharger must report the latitude and longitude of all sampling locations for which data are reported.
- C. If requested by the Santa Ana Water Board, the Discharger must also provide any or all of the following to the Santa Ana Water Board: a hard copy of the complete SMR, a hard copy of the cover/transmittal letter, a hard copy of

oversized drawings or maps, and an electronic copy (see section VII.R of the Order – Standard Provisions) of the complete SMR.

- D. If requested by the Santa Ana Water Board, the Discharger must also provide a complete copy (in a text-searchable PDF file) of all documents including signed transmittal letters, professional certifications, and all data presented in the SMR. Upon receipt of the documents, the Santa Ana Water Board must use the email date and time to determine compliance with the regulatory due dates specified in this Order.
- E. The Discharger must summarize all reported data in a tabular format. The reports must present data to clearly illustrate whether the Facility is operating in compliance with discharge specifications and effluent limitations.
- F. The Discharger must attach a cover letter to the SMR. The information contained in the cover letter must clearly identify violations of the Order; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. For identified violations, the letter must include a description of the requirement in the Order that was violated and a description of the violation.
- G. The monitoring results in each SMR must be based on the sampling frequency, monitoring period, and due dates specified in Table E-19:

Table E- 19 Monitoring Periods and Reporting Schedule

Sampling Frequency	Start of Monitoring Periods	Monitoring Period	SMR Due Date
Continuous	January 1, 2024 or at commissioning of the WWRF	All	Submit with Quarterly SMR
Daily	“	Midnight through 11:59 p.m. or any 24-hour period that reasonably represents a calendar day for the purpose of sampling	“
Weekly	“	Sunday through Saturday	“
Monthly (Pathogen Credit)	“	First day of calendar month through last day of calendar month	On the 10 th of the month following the monitoring period
Monthly (All other monthly data)	“	“	Submit with quarterly SMR.
Quarterly	“	January 1 through March 31 April 1 through June 30 July 1 through September 30	May 15 August 15 November 15

		October 1 through December 31	February 15 (following year)
Once per 6 months	“	January 1 through June 30 July 1 through December 31	August 15 February 15 (following year)
Annually	“	January 1 through December 31	June 30

VIII. ONE TIME REPORTING DUE DATES

This section, and Table E-20 below, summarizes all one time reports due to the Santa Ana Water Board and DDW after adoption of the Order and accompanying attachments.

Table E- 20 One Time Reporting Schedule

Report Type	Reference Section	Reviewing/ Approving Agency	Report Due Date
Noncompliance Report	Order section VII.C	Santa Ana Water Board	5 days after noncompliance
Report of Waste Discharge	Order section VII.L	Santa Ana Water Board	120 days prior to proposed major change
Transfer of Ownership	Order section VII.M	Santa Ana Water Board	120 days prior to proposed change
Asset Management Program Plan	Order section VIII.A	Santa Ana Water Board	18 months from the effective date of the Order, reevaluate and update every 5 years
Climate Change Action Plan (CCAP)	Order section VIII.C	Santa Ana Water Board	3 years from the effective date of the Order
Groundwater Tracer Study Protocol	Attachment D, section IV.C.1	DDW	60 days prior to the start of the tracer study
Groundwater Tracer Study Report	Attachment D, section IV.C.2	DDW	Upon completion of the tracer study
Comprehensive Cross-Connection Control Program Report	Attachment D, section V.C	DDW	Prior to the operations of the Facility

Cross-Connection Inspection Report	Attachment D, section V.C	DDW	Prior to the operations of the Facility
Indicator Compound Study	Attachment D, section IX.B	DDW	Prior to the operations of the Facility
Alternate Source of Drinking Water Supply Plan	Attachment D, section I.4	DDW	Prior to the operations of the Facility
RWC Management Plan	Attachment D, section III.D.	DDW	Within the first 6 months of operation of the Facility and on an annual basis thereafter.
Background Groundwater Quality Report	Attachment D, section VII.D.1	DDW	Within the first 6 months of operation of the Facility.
Operation Optimization Plan (OOP)	Attachment D, section VIII	DDW	Draft due prior to the Facility commissioning. Final due within 90 days following completion of the Facility startup and commissioning, within six months of optimizing treatment processes and anytime thereafter operations are optimized that result in a change in operation

IX. VOLUMETRIC REPORTING REQUIREMENTS

- A. The Discharger must submit an annual volumetric report to the State Water Board by April 30 of each year. The Discharger must submit this annual volumetric report containing monthly data in electronic format via GeoTracker.

The Discharger must report in accordance with each of the items in section 3 of the Recycled Water Policy as described below:

1. Influent. Monthly total volume of wastewater collected and treated by the Facility.
2. Production. Monthly volume of wastewater treated, specifying level of treatment.
3. Discharge. Monthly volume of treated wastewater discharged to emergency storage and specifying level of treatment.
4. Reuse. Monthly volume of recycled water distributed.
5. Reuse Categories. Annual volume of treated wastewater distributed for beneficial use in compliance with title 22 in each of the reuse categories listed below:
 - a) Agricultural irrigation: pasture or crop irrigation.
 - b) Landscape irrigation: irrigation of parks, greenbelts, and playgrounds; school yards; athletic fields; cemeteries; residential landscaping, common areas; commercial landscaping; industrial landscaping; and freeway, highway, and street landscaping.
 - c) Golf course irrigation: irrigation of golf courses, including water used to maintain aesthetic impoundments within golf courses.
 - d) Commercial application: commercial facilities, business use (such as laundries and office buildings), car washes, retail nurseries, and appurtenant landscaping that is not separately metered.
 - e) Industrial application: manufacturing facilities, cooling towers, process water, and appurtenant landscaping that is not separately metered.
 - f) Other non-potable uses: including but not limited to dust control, flushing sewers, fire protection, fill stations, snow making, and recreational impoundments.
 - g) Groundwater recharge: the planned use of recycled water for replenishment of a groundwater basin or an aquifer that has been designated as a source of drinking water supply for a public water system. This includes surface or subsurface applications, except use of recycled water for seawater intrusion barrier.

X. PRETREATMENT PROGRAM MONITORING AND REPORTING REQUIREMENTS

- A. The Discharger shall submit to the Santa Ana Water Board and USEPA, Region 9, a quarterly compliance status report. The quarterly compliance status report shall cover the periods of 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 the issuance of this Order. The reports shall identify:

1. All significant industrial users (SIUs) which violated any standard or reporting requirements during that quarter;
 2. The violations committed (distinguish between categorical and local limits);
 3. The enforcement actions undertaken; and
 4. The status of active enforcement actions from previous periods, including closeouts (facilities under previous enforcement actions which attained compliance during the quarter).
- B. Annually, the Discharger shall submit a report to the Santa Ana Water Board, State Water Board, and USEPA Region 9 describing the pretreatment activities within the service area during the previous year. If 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 industrial users discharges, interjurisdictional agency agreement implementation issues, or other causes,) then the Discharger shall also include the reasons for noncompliance 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 to June 30 of each fiscal year and is due on September 1 of each year. The report shall contain A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the, but not limited to, the following information:
1. 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 results of annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants 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 part 136 and amendments thereto.
 2. 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:
 - a) The reasons why the incidents occurred, the corrective action taken, and, if known, the name and address of the IU(s) responsible.
 - b) A review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be

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

3. A complete and updated list of the Discharger's SIUs, including names, Standard Industrial Classification (SIC) code(s) and addresses, and a list of any SIUs 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.
4. A list or table characterizing the industrial compliance status of each SIU, including:
 - a) SIU name;
 - b) Industrial category;
 - c) The type (processes) of wastewater treatment in place;
 - d) Number of samples taken by the POTW during the year;
 - e) Number of samples taken by the SIU during the year;
 - f) Whether all needed certifications (if allowed) were provided by SIUs which have limits for total toxic organics;
 - g) Federal and Regional Standards violated during the year, reported separately;
 - h) Whether the SIU at any time in the year was in Significant Noncompliance (SNC), as defined by 40 CFR section 403.12(f)(2)(vii). SNC is determined at the beginning of each quarter based on data of the previous six months;
 - i) 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; and
 - j) Number of inspections conducted at each SIU during the year.
5. A compliance summary table which includes:
 - a) SIUs which were in SNC at any time during the year;
 - b) The total number of SIUs which are in SNC with pretreatment compliance schedules during the year;
 - c) The total number of notices of violation and administrative orders issued against SIUs during the year;
 - d) The total number of civil and criminal judicial actions filed against SIUs during the year;
 - e) The number of SIUs which were published as being in SNC during the year; and
 - f) The number of IUs from which penalties were collected during the year.

6. 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:
 - a) The program's administrative structure;
 - b) Local industrial discharge limitations;
 - c) Monitoring program or monitoring frequencies;
 - d) Legal authority or enforcement policy;
 - e) Funding mechanisms; and
 - f) Resource requirements and/or staffing levels.
 7. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.
 8. A summary of public participation activities to involve and inform the public.
 9. A description of any changes in sludge disposal methods and discussion of any concerns not described elsewhere in the report.
- C. The cumulative number of IUs that the Discharger has notified regarding Baseline Monitoring Reports and the cumulative number of IU responses.

ATTACHMENT F – FACT SHEET

ORDER NO. R8-2023-0009

This Fact Sheet includes background information, legal requirements, technical rationale; and serves as the basis for the requirements of Order No. R8-2023-0009, *Waste Discharge Requirements and Master Recycling Permit for East Valley Water District's Sterling Natural Resource Center* (Order), the directives in Monitoring and Reporting Program (MRP) in Attachment E and the Water Recycling Requirements in Attachment D. This Fact Sheet is incorporated into and constitutes findings for the Order, Attachment D, and MRP.

I. ORDER INFORMATION

- A. Table F-1 below, summarizes the administrative information related to the East Valley Water District's Sterling Natural Resource Center (Facility).

Table F- 1 Facility Information

WDID	8 300112001
Discharger	East Valley Water District
Name of Facility	Sterling Natural Resource Center
Facility Address	25376 5th St., San Bernardino, CA 92410
Facility Contact, Title and Phone	Jeff Noelte, Director of Engineering & Operations, (909) 806-4096
Authorized Person to Sign and Submit Reports	Jeff Noelte, Director of Engineering & Operations
Mailing Address	31111 Greenspot Rd, Highland, CA 92346
Billing Address	31111 Greenspot Rd, Highland, CA 92346
Type of Facility	Publicly Owned Treatment Works
Threat to Water Quality	2
Complexity	A
Pretreatment Program	Yes
Permitted Discharge Flowrate	8 Million Gallons per Day (MGD)
Design Flowrate	8 MGD
Watershed	Bunker Hill-B Groundwater Management Zone (GMZ)
Receiving Water Type	Groundwater

- B. East Valley Water District (EVWD or Discharger) owns and operates the Sterling Natural Resource Center (SNRC or Facility) located at 25376 5th St., San Bernardino, CA 92410.
- C. The SNRC will discharge disinfected and tertiary treated recycled water into the Bunker Hill-B GMZ. Attachment B, Figure B-2 shows the location of the spreading basins for the discharge of disinfected and tertiary treated recycled

water into the Bunker Hill-B GMZ. The Facility will begin operation approximately by January 2024.

- D. The Discharger submitted a Report of Waste Discharge, dated February 5, 2022, applying for waste discharge requirements and/or water recycling requirements for the use of the 8 MGD of disinfected and tertiary treated recycled water for groundwater replenishment and reuse by surface application at the spreading basins. The Discharger also submitted to DDW the *Title 22 Engineering Report: Sterling Natural Resource Center* (Engineering Report) dated November 2021 to demonstrate compliance with California Code of Regulations, title 22, division 4, chapter 3, article 5.1, *Indirect Potable Reuse: Groundwater Replenishment – Surface Application*. Upon DDW's review of the Engineering Report, DDW issued a letter entitled, *Division of Drinking Water's Conditional Acceptance of the Title 22 Engineering Report for the East Valley Water District – Sterling Natural Resource Center Groundwater Replenishment Project (3690026-701)*, dated August 1, 2023, as revised by DDW's letter issued on October 13, 2023, to correct conditions and responsibilities regarding well-control zones. The Santa Ana Water Board has reviewed DDW's recommendations included in their August 1, 2023, Conditional Acceptance Letter, and DDW's revisions, and has incorporated the recommendations as requirements in this Order and its pertinent attachments.

II. FACILITY DESCRIPTION

The Discharger is responsible for providing potable water treatment and delivery services and wastewater collection for the Discharger's domestic, commercial and irrigation customers. EVWD has a service population of approximately 104,000 and its service area is about 18,000 acres. The Discharger has constructed the SNRC that will discharge disinfected and tertiary treated recycled water to replenish the Bunker Hill-B GMZ. The SNRC is in southwestern San Bernardino County. The SNRC is a project by the Discharger with the collaboration of the San Bernardino Valley Municipal Water District (San Bernardino Valley). The SNRC is a water supply project that supplements existing water supplies by providing a reliable, high-quality source of water to recharge the Bunker Hill-B GMZ. The SNRC consists of two major components: Wastewater Recycling Facility (WWRF) and the Weaver Basins. Non-potable use of treated water from the WWRF is an additional minor component. The SNRC includes both treatment processes and pumping stations. Produces disinfected and tertiary treated recycled water for mostly indirect potable reuse and for non-potable reuse, at a lower volumetric scale.

A. Wastewater Treatment

1. Wastewater Recycling Facility (WWRF)

The WWRF of the SNRC is designed to produce up to 8 MGD of disinfected and tertiary treated recycled water, and, in the future, its treatment capacity

may be expanded to 10 MGD by adding additional treatment trains. Wastewater generated in the EVWD's service area, which includes a small portion of the SBMWD's service area, is primarily from residential and commercial sources with negligible industrial contribution. The wastewater is conveyed by gravity to the WWRF. The WWRF's raw wastewater treatment processes include coarse screens, vortex-type grit removal units, and cylindrical fine screens (preliminary treatment), flow equalization, followed by a membrane bioreactor (MBR) system that includes activated sludge aeration basins with nitrification and denitrification capabilities (secondary treatment) and microfiltration membranes (tertiary treatment), and Ultra-Violet (UV) irradiation for disinfection of the tertiary treated effluent. Also, the WWRF includes solids handling facilities, which include sludge thickening, anaerobic co-digestion of waste activated sludge and food waste, biosolids dewatering, and digester gas cogeneration. Biosolids generated will be hauled offsite for disposal.

2. Conveyance Piping

Following wastewater tertiary treatment and disinfection, the Facility will pump the recycled water to the Weaver Basins, for surface application, through a 30-inch conveyance pipeline, the Regional Recycled Water Pipeline (RRWP), that is approximately 5 miles long and is owned by San Bernardino Valley. The Facility is equipped with a treated wastewater pumping station that includes a storage tank divided into two separate compartments: one storing the treated wastewater intended for recycling and the other storing plant service water. The treated wastewater pumping station is equipped with six (6) 2800-gallons per minute pumps equipped with a variable frequency drive to cover a full range of discharge flows, as needed, and send recycled water to the spreading basins. In the future, through coordination with San Bernardino Valley, turnouts from the conveyance pipeline may be installed to convey recycled water to other spreading locations and/or non-potable customers. In addition, the San Bernardino Valley is working collaboratively with SBMWD on the development of the extension of the RRWP that will connect the SNRC and the San Bernardino Water Reclamation Plant (SBWRP).

B. Discharge Locations

1. Weaver Basins

The Discharger will utilize the Weaver Basins, which are owned by San Bernardino Valley, to spread and percolate, initially, up to 8 MGD of the disinfected and tertiary treated recycled water to recharge the Bunker Hill-B GMZ. The Weaver Basins include five (5) rectangular spreading basins with 9 feet of depth and the volume of each basin varies from 5.5 to 19 million gallons. The effective recharge area is 15 acres, the estimated infiltration rate is 7.6 feet per day, the overall recharge capacity is estimated at 37.1 MGD,

depth to groundwater is 113 feet below ground surface, and the vadose zone travel time is estimated to be 15 days.

The diluent water source for the Facility will consist primarily of groundwater underflow that will include Santa Ana River water and imported water that is percolated into the subsurface at the Santa Ana River Spreading Grounds, which are located upstream and about 2 miles east of the Weaver Basins.

2. Non-Potable Recycled Water Reuse

The Discharger produces recycled water for non-potable reuse at present and future use sites such as the ornamental landscape ponds located by the Administration Center building.

C. Monitoring wells

The Discharger will monitor the groundwater quality downgradient from the groundwater recharge locations using 2 existing monitoring well sites and one future monitoring well site (MW-C). Monitoring wells MW-A and MW-B will be used to assess compliance with discharge of recycled water at the Weaver Basins and will be multi-nested to be able to monitor water-bearing layers 1, 3, and 5 of the Bunker Hill-B GMZ. Also, monitoring well MW-C is proposed to be located 11,800 ft downgradient from the Weaver Basins and will be constructed by 2025. Monitoring well MW-C will be located 180 days of travel time upgradient of the nearest EVWD's production well. Monitoring well EVWD Plant No. 120 will be used to assess water quality upgradient from the Weaver Basins (diluent water quality). The monitoring wells will allow groundwater elevations to be measured and water quality samples to be collected from the aquifer initially receiving recycled water as a source of drinking water supply. Section IV.H of the MRP requires groundwater monitoring to assess any potential impacts to receiving waters from the discharge. In accordance with the Water Code section 13750.5; construction, alteration, and destruction of monitoring wells shall be performed by contractors licensed in accordance with the California Contractors' License Law (division 3, chapter 9, Business and Professions Code), except where exempted by law.

D. Production Wells

The Bunker Hill-A and B GMZs meet approximately 90 percent of the water supply demand in the EVWD's service area. The Discharger operates eighteen production wells to pump from the Bunker Hill-A and B GMZs. This Order does not regulate the extraction or discharge of groundwater from the production wells. The Discharger has established primary and secondary boundaries representing zones of controlled drinking water well construction in accordance with title 22, section 60320.100(e).

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

- A. **Legal Authorities.** The Order is issued pursuant to the Water Code, sections 13263, 13267, and 13523.1. The Order serves as Waste Discharge Requirements (WDRs) issued pursuant to the Water Code, article 4, chapter 4, division 7.
- B. **California Environmental Quality Act (CEQA).** San Bernardino Valley, as lead agency under CEQA, prepared an Environmental Impact Report (EIR) for the SNRC (State Clearinghouse [SCH] No. 2015101058). The San Bernardino Valley certified the EIR on March 15, 2016 and filed a Notice of Determination on March 16, 2016. Since the certification of the 2016 EIR, EVWD became the lead agency for SNRC in or about 2018. Prior to 2018, EVWD provided sewer collection services in its sphere of influence. EVWD received approval from the Local Agency Formation Commission (LAFCO) for San Bernardino County to include wastewater treatment, reclamation, and disposal to its services under Resolution No. 3276 issued in August 2018. This gave EVWD the authority to collect, treat, reclaim, and dispose of wastewater and, therefore, authorization to construct and operate the SNRC. LAFCO's approval was contingent upon EVWD's assumption of San Bernardino Valley's obligations under the Final EIR and the associated Mitigation Monitoring and Reporting Plan (MMRP). In October 2018, through an Assignment and Assumption Agreement, EVWD accepted, assumed, and agreed to perform, fulfill and comply with all the obligations and responsibilities of San Bernardino Valley, express and implied, arising from and/or related to the SNRC Final EIR and associated MMRP. Since then, two addenda to the EIR have been completed. In July 2019, EVWD as the lead agency adopted Addendum No. 1 to the 2016 EIR, which evaluated specified operational changes to the SNRC facility that included emergency operations and recycled water detentions ponds, use of an adjacent parcel, and food waste facilities. In January 2021, EVWD as lead agency adopted Addendum No. 2 to the 2016 EIR to allow the recharge of recycled water produced at SNRC at two additional recharge basin locations (including the Weaver Basins) in the City of Highland and an extension of the 2016-EIR certified treated water conveyance pipeline system to the new recharge basin locations. EVWD filed a Notice of Determination for Addendum No. 2 on July 23, 2021. Neither of these changes created new or increased environmental impacts beyond those analyzed and mitigated in the 2016 EIR. The Santa Ana Water Board is a responsible agency under CEQA for the purposes of issuing this Order and is relying upon the analysis in the EIR and subsequent addenda.
- C. **Water Reclamation Statute.** The California Legislature declared in the Water Code section 13511, that a substantial portion of the future water requirements of the State may be economically met by the beneficial use of recycled water. The Legislature also expressed in the Water Code section 13512, the State's intent to undertake all possible steps to encourage development of water recycling facilities so that recycled water may be made available to help meet the growing water requirements of the State. The adoption of the Order is consistent with the

legislature's declaration because it facilitates the use of recycled water to supplement potable water supplies.

- D. **Water Quality Control Plan.** The Santa Ana Water Board's *Water Quality Control Plan for the Santa Ana River Basin* (Basin Plan) designates beneficial uses, establishes water quality objectives (WQOs), and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.

On January 22, 2004, the Santa Ana 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 total dissolved solids (TDS) objectives for the new management zones, and new nitrogen (N) and TDS management strategies applicable to both surface and groundwaters. The State Water Board and the office of Administrative Law approved the N/TDS Amendment on September 30, 2004 and December 23, 2004, respectively. The water quality objectives for TDS and N as well as management strategies contained in the Basin Plan have since been amended several times. Effluent limitations for TDS and total inorganic nitrogen (TIN) in this Order are based on N and TDS wasteload allocations included in the Basin Plan and TDS assimilative capacity considerations for the Bunker Hill-B GMZ (see section IV.C of this Attachment F).

The Order implements the Basin Plan by prescribing requirements for the production, reuse, and disposal of recycled water that will not adversely impact water quality, beneficial uses, human health, or the environment. The beneficial uses of groundwaters listed in the Basin Plan for the Bunker Hill-B Groundwater Management Zone are municipal and domestic supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PROC).

- E. **Recycled Water Policy.** The purpose of the State Water Board's *Water Quality Control Policy for Recycled Water* (Recycled Water Policy) is to increase the production and use of recycled water from wastewater sources in a manner that implements State and federal water quality laws and protects public health and the environment. The Recycled Water Policy provides requirements for the Regional Water Quality Control Boards (Regional Water Boards), proponents of recycled water projects, and the public regarding the methodology and appropriate criteria for the State Water Board and the Regional Water Boards to use when issuing permits for recycled water projects. The State Water Board first adopted the Recycled Water Policy on February 3, 2009; and amended the policy on January 22, 2013 and December 11, 2018. The 2018 Amendment, effective April 8, 2019, includes permitting guidance for groundwater recharge projects and updated monitoring requirements for CECs. This Order includes

monitoring and reporting requirements for CECs and volumetric data which are consistent with the Recycled Water Policy.

- F. **Antidegradation Policy.** The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (Resolution No. 68-16). Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Santa Ana Water Board's Basin Plan implements and incorporates by reference the State antidegradation policy. Requirements specified in this Order should prevent any degradation of the receiving waters. A constituent of concern for potential degradation of receiving waters is TDS. The effluent limit for TDS is set at 545 mg/L, which is higher than the TDS water quality objective (WQO) of 330 mg/L for the Bunker Hill-B GMZ in the Basin Plan. However, this effluent limitation is based on available TDS assimilative capacity for the Bunker Hill-B GMZ and subject to TDS mitigation commitments and potential offsets. See the explanation in section IV.C of this Attachment F below. Therefore, the permitted discharge is consistent with the antidegradation provisions of the State Water Board Resolution No. 68-16.
- G. **Indirect Potable Reuse Regulations.** Groundwater Replenishment – Surface Application. Title 22, chapter 3 establishes specific requirements for indirect potable reuse groundwater recharge projects. This Order incorporates discharge specifications, effluent limitations, and monitoring and reporting requirements from title 22, sections 60320.100 through 60320.130.
- H. **Water Rights and Wastewater Change Petition.** Water Code section 1211 requires the owner of a wastewater treatment plant to obtain approval from the State Water Board prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater where changes in the discharge or use of treated wastewater result in decreasing the flow in any portion of a watercourse. On September 16, 2016, the San Bernardino Valley filed Wastewater Change Petition WW0095 with the State Water Board's Division of Water Rights pursuant to Water Code section 1211. The purpose of the petition is for the San Bernardino Valley to obtain the State Water Board's authorization for the construction and operation of the SNRC, however, the SNRC was, initially, to be jointly owned by the San Bernardino Valley and EVWD prior to EVWD receiving approval from LAFCO to include wastewater treatment, reclamation, and disposal to its authorized services in 2018 (EVWD owns and operates the WWRF and the San Bernardino Valley owns and operates the RRWP and Weaver Basins). The petition seeks to change the point of discharge, place of use, purpose of use, and quantity of discharge of treated wastewater currently discharged to the Santa Ana River. The State Water Board determined that the petition for change will not cause injury to any other user of water. On April 28, 2017, the State Water Board's Division of Water Rights issued an order approving Wastewater Change Petition WW0095. As part of the authorization order, the State Water Board prepared a Mitigation Monitoring and Reporting

Plan (MMRP) that is based on the information and mitigations measures contained in the EIR for SNRC. The MMRP list mitigation measures recommended in the EIR for SNRC and specifies implementation and monitoring responsibilities. One of the mitigation measures, BIO-3, included in the MMRP specifies that the diversion of wastewater flow to SNRC shall not occur either until the Upper Santa Ana River Habitat Conservation Plan (HCP) has been fully executed by the US Fish and Wildlife Service (Service) and the California Department of Fish and Wildlife (Department) or a Habitat Mitigation and Monitoring Plan (HMMP) has been approved by the Service and the Department (see section III.I below).

- I. **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 & Game Code, §§ 2050-2097) or the Federal Endangered Species Act (16 USC §§ 1531-1544). The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act. On March 13, 2017, the US Fish and Wildlife Service (Service) issued a Biological Opinion (BO; FWS-SB-16B0182-17F0387) addressed to the United States Environmental Protection Agency (USEPA) with regards to proposed federal funding for the construction and operation of SNRC through the Clean Water State Revolving Fund that is administered by the State Water Board's Division of Financial Assistance. The BO addresses the effect of SNRC on the federally endangered San Bernardino Kangaroo Rat (SBKR) and its designated critical habitat and the federally threatened Santa Ana Sucker (SAS) and its designated critical habitat in accordance with section 7 of the Federal Endangered Species Act. The BO concludes that providing that USEPA and the San Bernardino Valley comply with the measures included in the Incidental Take Statement of the BO, the proposed construction and operation of SNRC is not likely to jeopardize the continued existence of SBKR or SAS, or adversely modify SBKR or SAS critical habitat. An amendment to the BO was issued on August 11, 2017 (FWS-SB-16B0182-17F0387-R001) that addressed the roles and responsibilities of both the EPA and State Water Board associated with implementation of the SNRC conservation measures. On January 3, 2022, the Service issued a second amendment to the BO (FWS-SB-16B0182-17F0387-R002) to revise the conservation measures for SBKR and Santa Ana River woolly-star based on changes to the SNRC project. These changes did not change project effects on SAS and the analysis in the 2017 BO remains valid. General and Species-Specific Conservation Measure No. 17 (CM-17), included in the BO for SAS, restricts the diversion of wastewater by the EVWD from the Rapid Infiltration and Extraction (RIX) Facility, which discharges into the Santa Ana River, until the Santa Ana Sucker HMMP has been approved by the Service and the actions proposed in CM-17 have been completed or show evidence of significant progress toward successful implementation.
- J. **Pretreatment Program.** This Order contains requirements for the implementation of an effective pretreatment program pursuant to the California

Code of Regulations, title 23, section 2233, Clean Water Act section 307, and 40 CFR parts 35 and 403. The Discharger has established and approved regional pretreatment program that also meets the requirements of title 22, section 60320.106. The approved pretreatment program and its components, such as implementing ordinances, local limits, enforcement response plan, and control mechanisms, among others, are an enforceable condition of this Order.

- K. **Assembly Bill 2108.** Water Code section 13149.2(b) requires that the Santa Ana Water Board, “[w]hen issuing...individual [WDRs]...that regulate activity or a facility that may impact a disadvantaged or tribal community, and that includes a time schedule in accordance with subd. (c) of Section 13263 for achieving an applicable [WQO], an alternative compliance path that allows time to come into compliance with [WQO], or water quality variance...” must include finding(s) regarding “potential environmental justice, tribal impact, and racial equity considerations” that are relevant to the permitting action (see definitions for disadvantaged and tribal communities in the Glossary of Common Terms of Attachment A of this Order). This Order does not incorporate a time schedule for compliance with applicable WQOs or any other provisions described in Water Code section 13149.2(d). Accordingly, no additional findings are necessary under Water Code section 13149.2.
- L. **Other Plans, Policies, and Regulations.** Pursuant to CWA section 402(p) and 40 CFR part 122, 123, and 124, the State Board adopted a general NPDES permit to regulate stormwater discharges associated with industrial activities (State Water Board Industrial General Permit Order No. 2014-0057-DWQ, NPDES No. CAS000001) on April 1, 2014, which became effective on July 1, 2015. Stormwater discharges from the Facility are regulated under the State Water Board Industrial General Permit Order No. 2014-0057-DWQ (as amended by Order 2015-0122-DWQ and subsequent 2018 amendment).

IV. **RATIONALE FOR DISCHARGE PROHIBITIONS, DISCHARGE SPECIFICATIONS, AND EFFLUENT LIMITATIONS**

This Order establishes requirements based on the Basin Plan, Recycled Water Policy, and title 22 for the indirect potable reuse of tertiary treated and disinfected recycled water discharged to groundwater from the Facility and for non-potable reuse.

- A. **Discharge Prohibitions.** This Order establishes discharge prohibitions for the Facility as listed in Section III of this Order. The discharge prohibitions are based on the Basin Plan and State Water Board's plans and policies. These prohibitions are consistent with the requirements set for other discharges regulated by waste discharge requirements adopted by the Santa Ana Water Board.
- B. **Tertiary Treatment and Disinfection Effluent Limitations.** Title 22, section 60320.108(b) requires that, at a minimum, the recycled municipal wastewater applied at a groundwater replenishment and reuse project (GRRP) shall be

filtered wastewater as defined under title 22, section 60301.320 and disinfected tertiary recycled water as defined under title 22, section 60301.230. The tertiary treatment and disinfection effluent limitations in section IV.B of this Order and section V.A of Attachment D of this Order ensure proper oxidation, filtration, and disinfection of the treated wastewater effluent prior to surface application at a GRRP.

- C. **Discharge Specifications and Effluent Limitations.** The discharge specifications and effluent limitations are derived from the basin-specific WQOs, except for TDS, for the Bunker Hill-B GMZ as listed in Table 4-1 of the Basin Plan, and from non-basin specific WQOs included in the Basin Plan for the protection of groundwater quality in general. Constituents with both WQOs and maximum contaminant levels (MCLs) have effluent limitations set at the lower concentration of the two objectives. In the case of TDS, the effluent limit is 545 mg/L, which is higher than the TDS WQO of 330 mg/L for the Bunker Hill-B GMZ and is based on available TDS assimilative capacity for the Bunker Hill-B GMZ.

The State Water Board's Recycled Water Policy allows the allocation of up 20% of the TDS assimilative capacity of a groundwater basin to a group of dischargers. The Santa Ana Water Board has allocated 20% (10 mg/L) of the available TDS assimilative capacity concentration of 50 mg/L (TDS WQO for Bunker Hill-B GMZ of 330 mg/l – ambient groundwater TDS concentration of 280 mg/l), based on the 2018 ambient water quality computation results (SAWPA's 2020 *Ambient Water Quality in the Santa Ana Watershed for the Period of 1999 to 2018*) to a group of three wastewater dischargers that includes the Discharger, the City of Redlands, and the San Bernardino Municipal Water Department (SBMWD). The Discharger has demonstrated through an antidegradation groundwater modeling for TDS and nitrate that the effluent limit of 545 mg/L, in conjunction with two other wastewater discharge sources, will not result in the increase of the ambient groundwater TDS concentration in the Bunker Hill-B GMZ above its TDS WQO of 330 mg/L for the next 20 years.

However, the Discharger groundwater model results indicate that the three wastewater discharge sources, in conjunction, will increase the TDS concentration in the ambient groundwater to 289.1 mg/L within 10 years of operation, which will almost use the entire 20% of available assimilative capacity that was allocated to the group of dischargers, which is equivalent to an ambient groundwater TDS concentration of 290 mg/l. To avoid exceeding the 20% of available TDS assimilative capacity allocated by the Santa Ana Water Board to the group of dischargers, the Discharger, the City of Redlands, SBMWD, and the San Bernardino Valley have formed the Bunker Hill Regional Recycled Water Coalition (Coalition) and have entered into an agreement entitled, *Memorandum of Understanding for the Mitigation of Salt Loading in the Bunker Hill-B Groundwater Management Zone* (MOU). According to the MOU, the Coalition partners are working together to develop and implement a regional approach to

salinity management for the Bunker Hill-B GMZ, prior to completion and implementation of the Upper Santa Ana River Salt and Nutrient Management Plan, which may result in revised findings regarding the available TDS and nitrate assimilative capacity for the Bunker Hill-B GMZ. Based on the Coalition modeling to date, the 20% allocation of the available TDS assimilative capacity of the Bunker Hill-B GMZ, which is currently equivalent to 10 mg/L, is estimated to be allocated amongst three Coalition partners, as an internal agreement, as follows, based on the current anticipated discharges from the parties: 3.7 mg/L for EVWD, 2.9 mg/L for City of Redlands, and 3.4 mg/L for SBMWD.

The Coalition partners' salinity management approach includes the development of solutions to prevent exceeding the 20% TDS assimilative capacity allocation. The solutions that are being considered by the Coalition include a regional recycled water desalter and associated brine line, enhanced upstream recharge of low TDS water, and/or other regional project constructed via partnership between all Coalition partners that contribute TDS loadings to the Bunker Hill-B GMZ. According to the Discharger, in September 2023, the Coalition partners contracted an engineering firm to develop a regional feasibility study for a regional recycled water desalter and/or other preferred salinity management strategy(ies).

This Order includes a timeline for the implementation by the Discharger, in collaboration with its Coalition partners, of TDS mitigations commitments (section VIII.G. of this Order) that are required to be completed as a condition for the allocation of the 20% available TDS assimilative capacity for the group of wastewater dischargers. If the Discharger and its Coalition partners do not implement the entire TDS mitigation commitments, the Santa Ana Water Board may determine (as detailed in section VIII.G. of the Order) that the Discharger and other wastewater dischargers have failed to fulfill the conditions by which the 20% TDS assimilative capacity was granted by the Santa Ana Water Board and require that an approved TDS mitigation plan be implemented by the Discharger to offset TDS loadings in excess of the TDS effluent limitation of 330 mg/L that would be applied to the Discharger instead of the TDS effluent limitation of 545 mg/L (footnote 3 of Table 4 of section IV.C. of the Order).

- D. **Primary and Secondary Maximum Contaminant Levels (MCLs).** Title 22 section, 60320.100(j) requires the Discharger to not exceed effluent limits pertaining to groundwater replenishment pursuant to article 5.1 and primary and secondary MCLs are applied in this Order as effluent limits to protect the MUN beneficial use of the Bunker Hill-B GMZ. Title 22, section 60320.112 also requires the Discharger to notify the Santa Ana Water Board and DDW if the MCLs are exceeded. Tables 5 through 9 of this Order lists the effluent limitations for the constituents with primary MCLs. For constituents with both a secondary MCL and WQO established in the Basin Plan the effluent limitation was set at the

more protective of the two values. The MCLs and corresponding effluent limitations are based on the following:

1. Inorganic parameters are established in title 22, section 64431, Table 64431-A.
 2. Volatile organic compounds parameters are established in title 22, section 64444, Table 64444-A.
 3. Synthetic organic compounds parameters are established in title 22, section 64444, Table 64444-A.
 4. Disinfection byproducts parameters are established in title 22, section 64533, Table 64533-A.
 5. Radionuclides are established in title 22, sections 64442 and 64443, Tables 64442 and 64443.
 6. Constituents with secondary MCLs are established in title 22, section 64449, Tables 64449-A and 64449-B.
 7. Actions Levels for copper and lead per title 22, section 64678.
- E. **Notification Levels.** Title 22, section 60320.120 requires the Discharger to monitor all constituents with notification levels. The notification levels and response levels are listed in Table 10 of this Order.
- F. **Water Reclamation Requirements.** Water Code section 13520 requires DDW to make recommendations to the Santa Ana Water Board based on the Engineering Report for the Facility. The Santa Ana Water Board has reviewed those recommendations made in DDW's *Division of Drinking Water's Conditional Acceptance of the Title 22 Engineering Report for the East Valley Water District – Sterling Natural Resource Center Groundwater Replenishment Project (3690026-701)*, issued on August 1, 2023, as revised by DDW's letter issued on October 13, 2023 to correct conditions and responsibilities regarding well-control zones, and has incorporated the recommendations as requirements in Attachment D and the MRP (Attachment E) of this Order.

V. RATIONALE FOR PROVISIONS

- A. **Standard Provisions.** The standard provisions contain requirements that allow the Santa Ana Water Board to enforce this Order. Provisions include need for inspection, spill and emergency reporting, records maintenance, and reporting of

changes. Standard provisions apply to all WDRs and are consistent with Santa Ana Water Board findings.

- B. **Special Provisions.** These requirements ensure the Facility operates properly, within design parameters, and is protected from storm events to not cause or contribute to a condition of pollution or nuisance and to protect beneficial uses.
- C. **Notices.** Notices are included in this Order to inform the Discharger of administrative issues regarding this Order.

VI. RATIONALE FOR MONITORING AND REPORTING PROVISIONS

- A. The purpose of the MRP is to determine and ensure compliance with discharge specifications, effluent limitations, and other requirements established in this Order. The MRP also helps the Santa Ana Water Board and the Discharger to assess treatment efficiency, characterize effluents, ensure water quality objectives and beneficial uses of the groundwater basin are protected, and minimize the effects of the discharge on the receiving water quality. The MRP also specifies requirements concerning the proper use, maintenance, methods, and the monitoring type intervals and frequency necessary to provide data that are representative of the activities and discharges regulated under this Order.
- B. The MRP is issued pursuant to the Water Code section 13267, which authorizes the Santa Ana Water Board to require dischargers to submit technical and monitoring reports. The Santa Ana Water Board and DDW need the technical and monitoring reports submitted by the Discharger to determine compliance with the Order and to protect water quality and beneficial uses. The Santa Ana Water Board has assessed this MRP to reduce and eliminate unnecessary or overlapping monitoring and reporting requirements where appropriate. Based on the nature and possible consequences of the discharge, the burden of providing the required reports, including the costs, bears a reasonable relationship for the need for the reports and the benefits to be obtained from the reports.
- C. Title 22 requires monitoring and reporting for groundwater replenishment projects through subsurface discharge, including for indirect potable reuse through groundwater recharge. Title 22, division 4, chapter 3 establishes specific requirements for indirect potable reuse groundwater replenishment – surface discharge projects. The MRP and WDRs incorporate the monitoring and reporting requirements from title 22, sections 60320.100 through 60320.130.
- D. The Recycled Water Policy requires monitoring and reporting of volumetric data and CECs, as detailed in the MRP. The State Water Board uses volumetric data to track and report the percentage of wastewater recycled throughout the State of California. The CEC monitoring tracks the Facility's ability to remove CECs and

requires the Discharger to conduct additional sampling and commence response actions as needed.

- E. Pretreatment program monitoring and reporting requirements are established pursuant to California Code of Regulations, title 23, section 2233 and 40 CFR part 403 regulations.

VII. PUBLIC PARTICIPATION

The Santa Ana Water Board has considered the issuance of waste discharge requirements (WDRs) and a Master Recycling Permit for East Valley Water District's SNRC, San Bernardino County. As a step in the WDRs adoption process, the Santa Ana Water Board staff developed tentative WDRs and encouraged public participation in the WDR adoption process.

- A. **Title 22 Hearing.** The Discharger held a public hearing (mixed in-person and virtual) regarding the Facility on August 30, 2022, which satisfied the requirements of title 22, section 60320.102. One member of the public submitted written comments; however, no comments warranted a revision to the title 22 Engineering Report. One member of the public made oral comments.
- B. **Notification of Interested Parties.** The Santa Ana Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs and a Master Recycling Permit for the discharge and has provided an opportunity to submit written comments and recommendations. A Notice of Public Hearing was disseminated to interested persons and posted on the Santa Ana Water Board's website. The public had access to the agenda and any changes in dates and locations through the Santa Ana Water Board's website at: <http://www.waterboards.ca.gov/santaana>.
- C. **Written Comments.** Interested persons were invited to submit written comments concerning tentative WDRs. Comments were due either in person or by mail to the Executive Officer at the Santa Ana Water Board at the address on the cover page of this Order, by fax to (951) 320-6362, or by email to Julio Lara at Julio.Lara@waterboards.ca.gov. The deadline to submit written comments was by 5:00 pm on November 27, 2023.
- D. **Public Hearing.** The Santa Ana Water Board held a public hearing on the tentative Order during its regular meeting on the following date and time and at the following location:

Date:	December 1, 2023
Time:	9:00 a.m.
Location:	City of Loma Linda 25541 Barton Road. Loma Linda, California 92534

Interested persons were invited to attend. At the public hearing, which was a video, teleconference and physical meeting, the Santa Ana Water Board heard testimony pertinent to the discharge and WDRs.