

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
ORDER R5-2020-0022

AMENDING
ORDER R5-2017-0085

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT CAG585001

WASTE DISCHARGE REQUIREMENTS
FOR MUNICIPAL WASTEWATER DISCHARGERS THAT MEET
OBJECTIVES/CRITERIA AT THE POINT OF DISCHARGE
TO SURFACE WATER

FINDINGS

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board) finds that:

1. On 11 August 2017, the Central Valley Water Board adopted Waste Discharge Requirements Order R5-2017-0085 (NPDES CAG585001) for Municipal Wastewater Dischargers That Meet Objectives/Criteria at the Point of Discharge to Surface Water (Municipal General Order). This Order amends the Municipal General Order as summarized in Findings 2 through 7. Other editorial changes have also been made to the Municipal General Order.
2. **Discharger-Specific Zinc WER Study.** The Municipal General Order allows for the California Toxics Rule (CTR) criteria and associated water quality-based effluent limitations to be calculated using discharger-specific water effect ratios (WER). On 11 September 2019, the City of Placerville submitted the Hangtown Creek Water Reclamation Facility Zinc Water-Effect Ratio Study that calculated a discharger-specific (hereinafter site-specific) WER, as defined in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP) of 1.7 for total recoverable and dissolved zinc that is applicable to the City of Placerville Hangtown Creek Water Reclamation Facility's discharge to Hangtown Creek in El Dorado County. The Central Valley Water Board agrees with the findings of the Study; therefore, the Municipal General Order is amended to include a site-specific zinc WER of 1.7 for the City of Placerville, Hangtown Creek Water Reclamation Facility to calculate the CTR criteria and water quality-based effluent limitations for zinc.
3. **Implementing New Mercury Water Quality Objectives.** On 2 May 2017, the State Water Resources Control Board (State Water Board) adopted Resolution 2017-0027, Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California—Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions. Resolution 2017-0027 specified new water quality objectives for mercury to protect beneficial uses involving the consumption of fish. The Municipal General Order is amended to include an annual average screening level of 12 nanograms per liter (ng/L) for total mercury based on the new water quality objective for fish consumption when discharging to flowing water bodies, such as rivers, creeks, streams, and waters with tidal mixing.
4. **Discharges to Specific Waterbodies.** The Water Quality Control Plan for the Sacramento and San Joaquin River Basins, Fifth Edition, May 2018 includes site-

specific water quality objectives for copper and zinc that are applicable to the Sacramento River and its tributaries above the state Highway 32 Bridge at Hamilton City. The Municipal General Order is amended to include effluent limitations for copper and zinc in Tables 13A through 13E and 14A through 14E, respectively, for discharges to the Sacramento River and its tributaries above the State Highway 32 Bridge at Hamilton City.

5. **Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS).** On 31 May 2018, as part of the CV-SALTS initiative, the Central Valley Water Board approved Basin Plan Amendments to incorporate new strategies for addressing ongoing salt and nitrate accumulation in the Central Valley. Therefore, to incorporate changes due to the CV-SALTS initiative, the Municipal General Order is amended to:
 - Revise electrical conductivity effluent limitations for the Tulare Lake Basin based on the updated water quality objectives for the Central Valley Region and require electrical conductivity effluent limits for all Dischargers that are enrolled under the Municipal General Order
 - Remove effluent limitations for boron and chloride for Dischargers in the Tulare Lake Basin
 - Remove triggers for a Salinity Evaluation and Minimization Plan
6. **Recycled Water Policy Annual Reports.** On 11 December 2018, the State Water Board adopted Resolution 2018-0057, which amends the Water Quality Control Policy for Recycled Water (Recycled Water Policy), section 3, to require wastewater and recycled water dischargers to annually report monthly volumes of influent, wastewater produced, and effluent, including treatment level and discharge type. Therefore, the Municipal General Order is amended to incorporate the annual reporting requirements from the Recycled Water Policy.
7. **Additional Changes.** The Municipal General Order is also amended to incorporate the following clarifying changes:
 - Add the Provisions and Requirements Implementing State Law Finding.
 - Add a flow prohibition to regulate the facility flow.
 - Update the effluent limitations in the necessary criteria maximum concentration (CMC) columns to reflect the correct effluent limitations in the existing Table 16B Effluent Limitations – Ammonia Nitrogen Total (as Nitrogen) Based on CMC (Salmonids Present).
 - Add dissolved organic carbon as a parameter for effluent and receiving water monitoring and the Effluent and Receiving Water Characterization Study to calculate updated United States Environmental Protection Agency (U.S. EPA) Aquatic Life Ambient Water Quality Criteria for Aluminum in Freshwater adopted on 21 December 2018.

- Incorporate new requirements in the Monitoring and Reporting Program to ensure compliance with the Sufficiently Sensitive Methods Rule specified under 40 Code of Federal Regulations (C.F.R.) 122.21(e)(3) and 122.44(i)(1)(iv).
8. On 16 April 2020, in Rancho Cordova, California, after due notice to affected persons, the Central Valley Water Board conducted a public hearing at which evidence was received to consider this Order under the California Water Code (CWC).
 9. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) (“CEQA”) pursuant to Water Code section 13389, since the adoption or modification of a NPDES permit for an existing source is statutorily exempt and this Order only serves to implement a NPDES permit. (*Pacific Water Conditioning Ass’n, Inc. v. Discharger Council of Discharger of Riverside* (1977) 73 Cal.App.3d 546, 555-556.). Issuance of this Order is also exempt from the provisions of CEQA in accordance with California Code of Regulations (CCR), title 14, section 15321, subdivision (a)(2).

BOARD ACTION
IT IS HEREBY ORDERED THAT:

Effective immediately, Waste Discharge Requirements Order R5-2017-0085 (NPDES CAG585001) is amended as shown in items 1 through 75, below.

1. The Order number is changed from R5-2017-0085 to R5-2017-0085-01 throughout the Municipal General Order.
2. Change the citation for the Sacramento and San Joaquin River Basins Plan from the Fourth Edition (Revised April 2016) to the Fifth Edition, May 2018 and update all section references throughout the Municipal General Order.
3. Change the citation for the Tulare Lake Basin Plan from the Second Edition (Revised January 2018 with approved amendments) to the Third Edition, May 2018 and update all section references throughout the Municipal General Order.

4. **Cover Page.** Modify the last paragraph to the text shown below:

I, PATRICK PULUPA, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on **11 August 2017** and amended by Order R5-2020-0022 on **16 April 2020**.

5. **Limitations and Discharge Requirements, Section II. NOTIFICATION REQUIREMENTS and Attachment F – Fact Sheet, Section III.A.1.** Remove the text of Section II.A.1.a of the Limitations and Discharge Requirements and Section III.A.1 of Attachment F – Fact Sheet and replace it with the following:

The appropriate first annual fee as required by Title 23 of the CCR, Division 3, Chapter 9, Article 1. Information regarding the [current fee schedule](http://www.waterboards.ca.gov/resources/fees) (<http://www.waterboards.ca.gov/resources/fees>) and [how to make a payment](https://www.waterboards.ca.gov/make_a_payment) (https://www.waterboards.ca.gov/make_a_payment) by check or credit card is

available online. (Checks must be made payable to the State Water Resources Control Board.)

6. **Limitations and Discharge Requirements, Section III. FINDINGS.** Insert the following text as Section III.D below Section III.C and update the subsequent lettering:
 - D. **Provisions and Requirements Implementing State Law.** The provisions/requirements in subsection VI.B and VII.C.4 are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
7. **Limitations and Discharge Requirements, Section IV. DISCHARGE PROHIBITIONS.** Remove Section IV.D and replace it with the following:
 - D. **Average Dry Weather Flow.** Discharges exceeding the site-specific average dry weather flow specified in the Notice of Applicability are prohibited.
8. **Limitations and Discharge Requirements, Section V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** Remove Section V.A.1.a.i.(c) and Section V.A.1.a.ii.(c) for Total Coliform Organisms and replace them with the following:
 - (c) **Total Coliform Organisms.** Effluent total coliform organisms shall not exceed the following at the Monitoring Location EFF-001 or otherwise specified in the Notice of Applicability:
9. **Limitations and Discharge Requirements, Section V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** Remove Section V.A.1.b.iii and replace it with the following:
 - iii. **Hardness-based Metals.** The priority pollutant effluent limitations, as identified in the Notice of Applicability from the Executive Officer, shall not exceed the respective effluent limitations contained in Tables 7A through 9F, below. Effluent limitations contained in Tables 7A through 9F for copper, lead, and zinc are based on the appropriate ambient hardness concentration selected using the procedures described in section V.C.2.e of the Fact Sheet (Attachment F). See section VII.C.1.d for additional information regarding effluent limitations for metals.
10. **Limitations and Discharge Requirements, Section V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** Insert the following as Section V.A.1.b.v below Section V.A.1.b.iv where CV equals the coefficient of variation, H equals the effluent hardness in milligrams per liter (mg/L), AMEL equals the average monthly effluent limitation in micrograms per liter ($\mu\text{g/L}$), and MDEL equals the maximum daily effluent limitation in $\mu\text{g/L}$, and update the subsequent table numbers as necessary:
 - v. **Applicable to Discharges to the Sacramento River and its tributaries above the State Highway 32 Bridge at Hamilton City.** For discharges to the Sacramento River and its tributaries above the State Highway 32 Bridge at Hamilton City, the priority pollutant effluent limitations, as identified in the Notice of

Applicability from the Executive Officer, shall not exceed the effluent limitations in Tables 13A through 13E and 14A through 14E below:

Table 13A. Effluent Limitations – Copper, Total Recoverable for Discharges to the Sacramento River and Its Tributaries Above the State Highway 32 Bridge at Hamilton City

CV	0 ≤ H < 5 AMEL	0 ≤ H < 5 MDEL	5 ≤ H < 10 AMEL	5 ≤ H < 10 MDEL	10 ≤ H < 15 AMEL	10 ≤ H < 15 MDEL	15 ≤ H < 20 AMEL	15 ≤ H < 20 MDEL	20 ≤ H < 25 AMEL	20 ≤ H < 25 MDEL
0.1	0.39	0.45	0.99	1.1	1.5	1.8	2.0	2.4	2.6	3.0
0.2	0.36	0.48	0.95	1.3	1.5	2.0	2.0	2.6	2.5	3.4
0.3	0.32	0.48	0.86	1.3	1.4	2.0	1.8	2.8	2.3	3.5
0.4	0.28	0.48	0.77	1.3	1.2	2.0	1.7	2.8	2.1	3.5
0.5	0.26	0.48	0.70	1.3	1.1	2.0	1.5	2.8	1.9	3.5
0.6	0.24	0.48	0.64	1.3	1.0	2.0	1.4	2.8	1.7	3.5
0.7	0.22	0.48	0.60	1.3	0.95	2.0	1.3	2.8	1.6	3.5
0.8	0.21	0.48	0.56	1.3	0.89	2.0	1.2	2.8	1.5	3.5
0.9	0.20	0.48	0.53	1.3	0.85	2.0	1.1	2.8	1.4	3.5
1.0	0.19	0.48	0.51	1.3	0.81	2.0	1.1	2.8	1.4	3.5
1.1	0.18	0.48	0.49	1.3	0.78	2.0	1.1	2.8	1.3	3.5
1.2	0.18	0.48	0.48	1.3	0.76	2.0	1.0	2.8	1.3	3.5
1.3	0.17	0.48	0.46	1.3	0.74	2.0	1.0	2.8	1.3	3.5
1.4	0.17	0.48	0.45	1.3	0.72	2.0	0.98	2.8	1.2	3.5
1.5	0.16	0.48	0.45	1.3	0.71	2.0	0.96	2.8	1.2	3.5
1.6	0.16	0.48	0.44	1.3	0.70	2.0	0.94	2.8	1.2	3.5
1.7	0.16	0.48	0.43	1.3	0.69	2.0	0.93	2.8	1.2	3.5
1.8	0.16	0.48	0.43	1.3	0.68	2.0	0.92	2.8	1.2	3.5
1.9	0.16	0.48	0.42	1.3	0.67	2.0	0.91	2.8	1.1	3.5
2.0	0.15	0.48	0.42	1.3	0.66	2.0	0.90	2.8	1.1	3.5
2.1	0.15	0.48	0.42	1.3	0.66	2.0	0.89	2.8	1.1	3.5
2.2	0.15	0.48	0.41	1.3	0.65	2.0	0.89	2.8	1.1	3.5
2.3	0.15	0.48	0.41	1.3	0.65	2.0	0.88	2.8	1.1	3.5
2.4	0.15	0.48	0.41	1.3	0.65	2.0	0.88	2.8	1.1	3.5
2.5	0.15	0.48	0.40	1.3	0.64	2.0	0.87	2.8	1.1	3.5
2.6	0.15	0.48	0.40	1.3	0.64	2.0	0.87	2.8	1.1	3.5
2.7	0.15	0.48	0.40	1.3	0.64	2.0	0.86	2.8	1.1	3.5
2.8	0.15	0.48	0.40	1.3	0.63	2.0	0.86	2.8	1.1	3.5
2.9	0.15	0.48	0.40	1.3	0.63	2.0	0.85	2.8	1.1	3.5
3.0	0.15	0.48	0.39	1.3	0.63	2.0	0.85	2.8	1.1	3.5
3.1	0.15	0.48	0.39	1.3	0.62	2.0	0.85	2.8	1.1	3.5
3.2	0.14	0.48	0.39	1.3	0.62	2.0	0.84	2.8	1.1	3.5
3.3	0.14	0.48	0.39	1.3	0.62	2.0	0.84	2.8	1.1	3.5
3.4	0.14	0.48	0.39	1.3	0.62	2.0	0.84	2.8	1.1	3.5
3.5	0.14	0.48	0.39	1.3	0.62	2.0	0.83	2.8	1.0	3.5
3.6	0.14	0.48	0.39	1.3	0.61	2.0	0.83	2.8	1.0	3.5
3.7	0.14	0.48	0.38	1.3	0.61	2.0	0.83	2.8	1.0	3.5
3.8	0.14	0.48	0.38	1.3	0.61	2.0	0.83	2.8	1.0	3.5
3.9	0.14	0.48	0.38	1.3	0.61	2.0	0.82	2.8	1.0	3.5
4.0	0.14	0.48	0.38	1.3	0.61	2.0	0.82	2.8	1.0	3.5

Table 13B. Effluent Limitations – Copper, Total Recoverable for Discharges to the Sacramento River and Its Tributaries Above the State Highway 32 Bridge at Hamilton City

CV	25 ≤ H < 30 AMEL	25 ≤ H < 30 MDEL	30 ≤ H < 35 AMEL	30 ≤ H < 35 MDEL	35 ≤ H < 40 AMEL	35 ≤ H < 40 MDEL	40 ≤ H < 45 AMEL	40 ≤ H < 45 MDEL	45 ≤ H < 50 AMEL	45 ≤ H < 50 MDEL
0.1	3.0	3.5	3.5	4.0	3.9	4.5	4.3	5.0	4.8	5.5
0.2	2.9	3.8	3.3	4.4	3.8	5.0	4.2	5.6	4.6	6.1
0.3	2.8	4.2	3.2	4.8	3.6	5.5	4.1	6.1	4.5	6.7
0.4	2.5	4.2	2.9	4.9	3.3	5.5	3.7	6.2	4.1	6.8
0.5	2.3	4.2	2.6	4.9	3.0	5.5	3.4	6.2	3.7	6.8
0.6	2.1	4.2	2.4	4.9	2.8	5.5	3.1	6.2	3.4	6.8
0.7	1.9	4.2	2.3	4.9	2.6	5.5	2.9	6.2	3.2	6.8
0.8	1.8	4.2	2.1	4.9	2.4	5.5	2.7	6.2	3.0	6.8
0.9	1.7	4.2	2.0	4.9	2.3	5.5	2.6	6.2	2.8	6.8
1.0	1.7	4.2	1.9	4.9	2.2	5.5	2.5	6.2	2.7	6.8
1.1	1.6	4.2	1.9	4.9	2.1	5.5	2.4	6.2	2.6	6.8
1.2	1.5	4.2	1.8	4.9	2.0	5.5	2.3	6.2	2.5	6.8
1.3	1.5	4.2	1.8	4.9	2.0	5.5	2.2	6.2	2.5	6.8
1.4	1.5	4.2	1.7	4.9	1.9	5.5	2.2	6.2	2.4	6.8
1.5	1.4	4.2	1.7	4.9	1.9	5.5	2.1	6.2	2.4	6.8
1.6	1.4	4.2	1.7	4.9	1.9	5.5	2.1	6.2	2.3	6.8
1.7	1.4	4.2	1.6	4.9	1.9	5.5	2.1	6.2	2.3	6.8
1.8	1.4	4.2	1.6	4.9	1.8	5.5	2.1	6.2	2.3	6.8
1.9	1.4	4.2	1.6	4.9	1.8	5.5	2.0	6.2	2.2	6.8
2.0	1.4	4.2	1.6	4.9	1.8	5.5	2.0	6.2	2.2	6.8
2.1	1.3	4.2	1.6	4.9	1.8	5.5	2.0	6.2	2.2	6.8
2.2	1.3	4.2	1.6	4.9	1.8	5.5	2.0	6.2	2.2	6.8
2.3	1.3	4.2	1.5	4.9	1.8	5.5	2.0	6.2	2.2	6.8
2.4	1.3	4.2	1.5	4.9	1.7	5.5	2.0	6.2	2.2	6.8
2.5	1.3	4.2	1.5	4.9	1.7	5.5	1.9	6.2	2.1	6.8
2.6	1.3	4.2	1.5	4.9	1.7	5.5	1.9	6.2	2.1	6.8
2.7	1.3	4.2	1.5	4.9	1.7	5.5	1.9	6.2	2.1	6.8
2.8	1.3	4.2	1.5	4.9	1.7	5.5	1.9	6.2	2.1	6.8
2.9	1.3	4.2	1.5	4.9	1.7	5.5	1.9	6.2	2.1	6.8
3.0	1.3	4.2	1.5	4.9	1.7	5.5	1.9	6.2	2.1	6.8
3.1	1.3	4.2	1.5	4.9	1.7	5.5	1.9	6.2	2.1	6.8
3.2	1.3	4.2	1.5	4.9	1.7	5.5	1.9	6.2	2.1	6.8
3.3	1.3	4.2	1.5	4.9	1.7	5.5	1.9	6.2	2.1	6.8
3.4	1.3	4.2	1.5	4.9	1.7	5.5	1.9	6.2	2.1	6.8
3.5	1.3	4.2	1.5	4.9	1.7	5.5	1.9	6.2	2.1	6.8
3.6	1.3	4.2	1.5	4.9	1.7	5.5	1.9	6.2	2.1	6.8
3.7	1.2	4.2	1.5	4.9	1.7	5.5	1.9	6.2	2.0	6.8
3.8	1.2	4.2	1.4	4.9	1.6	5.5	1.8	6.2	2.0	6.8
3.9	1.2	4.2	1.4	4.9	1.6	5.5	1.8	6.2	2.0	6.8
4.0	1.2	4.2	1.4	4.9	1.6	5.5	1.8	6.2	2.0	6.8

Table 13C. Effluent Limitations – Copper, Total Recoverable for Discharges to the Sacramento River and Its Tributaries Above the State Highway 32 Bridge at Hamilton City

CV	50 ≤ H < 55 AMEL	50 ≤ H < 55 MDEL	55 ≤ H < 60 AMEL	55 ≤ H < 60 MDEL	60 ≤ H < 65 AMEL	60 ≤ H < 65 MDEL	65 ≤ H < 70 AMEL	65 ≤ H < 70 MDEL	70 ≤ H < 75 AMEL	70 ≤ H < 75 MDEL
0.1	5.2	6.0	5.6	6.5	6.0	7.0	6.4	7.5	6.9	7.9
0.2	5.0	6.7	5.4	7.2	5.8	7.7	6.2	8.3	6.6	8.8
0.3	4.9	7.3	5.3	7.9	5.6	8.5	6.0	9.0	6.4	9.6
0.4	4.5	7.5	4.9	8.1	5.2	8.8	5.6	9.4	6.0	10
0.5	4.1	7.5	4.4	8.1	4.8	8.8	5.1	9.4	5.4	10
0.6	3.7	7.5	4.1	8.1	4.4	8.8	4.7	9.4	5.0	10
0.7	3.5	7.5	3.8	8.1	4.1	8.8	4.4	9.4	4.7	10
0.8	3.3	7.5	3.5	8.1	3.8	8.8	4.1	9.4	4.4	10
0.9	3.1	7.5	3.4	8.1	3.6	8.8	3.9	9.4	4.2	10
1.0	3.0	7.5	3.2	8.1	3.5	8.8	3.7	9.4	4.0	10
1.1	2.9	7.5	3.1	8.1	3.4	8.8	3.6	9.4	3.8	10
1.2	2.8	7.5	3.0	8.1	3.3	8.8	3.5	9.4	3.7	10
1.3	2.7	7.5	2.9	8.1	3.2	8.8	3.4	9.4	3.6	10
1.4	2.6	7.5	2.9	8.1	3.1	8.8	3.3	9.4	3.5	10
1.5	2.6	7.5	2.8	8.1	3.0	8.8	3.3	9.4	3.5	10
1.6	2.6	7.5	2.8	8.1	3.0	8.8	3.2	9.4	3.4	10
1.7	2.5	7.5	2.7	8.1	2.9	8.8	3.2	9.4	3.4	10
1.8	2.5	7.5	2.7	8.1	2.9	8.8	3.1	9.4	3.3	10
1.9	2.5	7.5	2.7	8.1	2.9	8.8	3.1	9.4	3.3	10
2.0	2.4	7.5	2.6	8.1	2.9	8.8	3.1	9.4	3.3	10
2.1	2.4	7.5	2.6	8.1	2.8	8.8	3.0	9.4	3.2	10
2.2	2.4	7.5	2.6	8.1	2.8	8.8	3.0	9.4	3.2	10
2.3	2.4	7.5	2.6	8.1	2.8	8.8	3.0	9.4	3.2	10
2.4	2.4	7.5	2.6	8.1	2.8	8.8	3.0	9.4	3.2	10
2.5	2.4	7.5	2.6	8.1	2.8	8.8	3.0	9.4	3.1	10
2.6	2.3	7.5	2.5	8.1	2.7	8.8	2.9	9.4	3.1	10
2.7	2.3	7.5	2.5	8.1	2.7	8.8	2.9	9.4	3.1	10
2.8	2.3	7.5	2.5	8.1	2.7	8.8	2.9	9.4	3.1	10
2.9	2.3	7.5	2.5	8.1	2.7	8.8	2.9	9.4	3.1	10
3.0	2.3	7.5	2.5	8.1	2.7	8.8	2.9	9.4	3.1	10
3.1	2.3	7.5	2.5	8.1	2.7	8.8	2.9	9.4	3.1	10
3.2	2.3	7.5	2.5	8.1	2.7	8.8	2.9	9.4	3.1	10
3.3	2.3	7.5	2.5	8.1	2.7	8.8	2.9	9.4	3.0	10
3.4	2.3	7.5	2.5	8.1	2.6	8.8	2.8	9.4	3.0	10
3.5	2.3	7.5	2.4	8.1	2.6	8.8	2.8	9.4	3.0	10
3.6	2.2	7.5	2.4	8.1	2.6	8.8	2.8	9.4	3.0	10
3.7	2.2	7.5	2.4	8.1	2.6	8.8	2.8	9.4	3.0	10
3.8	2.2	7.5	2.4	8.1	2.6	8.8	2.8	9.4	3.0	10
3.9	2.2	7.5	2.4	8.1	2.6	8.8	2.8	9.4	3.0	10
4.0	2.2	7.5	2.4	8.1	2.6	8.8	2.8	9.4	3.0	10

Table 13D. Effluent Limitations – Copper, Total Recoverable for Discharges to the Sacramento River and Its Tributaries Above the State Highway 32 Bridge at Hamilton City

CV	75 ≤ H < 80 AMEL	75 ≤ H < 80 MDEL	80 ≤ H < 85 AMEL	80 ≤ H < 85 MDEL	85 ≤ H < 90 AMEL	85 ≤ H < 90 MDEL	90 ≤ H < 95 AMEL	90 ≤ H < 95 MDEL	95 ≤ H < 100 AMEL	95 ≤ H < 100 MDEL
0.1	7.3	8.4	7.7	8.9	8.0	9.3	8.4	9.8	8.8	10
0.2	7.0	9.3	7.4	9.8	7.8	10	8.2	11	8.5	11
0.3	6.8	10	7.2	11	7.5	11	7.9	12	8.2	12
0.4	6.4	11	6.7	11	7.1	12	7.5	13	7.8	13
0.5	5.8	11	6.1	11	6.4	12	6.8	13	7.1	13
0.6	5.3	11	5.6	11	5.9	12	6.2	13	6.5	13
0.7	4.9	11	5.2	11	5.5	12	5.8	13	6.1	13
0.8	4.6	11	4.9	11	5.2	12	5.5	13	5.7	13
0.9	4.4	11	4.7	11	4.9	12	5.2	13	5.4	13
1.0	4.2	11	4.5	11	4.7	12	5.0	13	5.2	13
1.1	4.1	11	4.3	11	4.5	12	4.8	13	5.0	13
1.2	3.9	11	4.2	11	4.4	12	4.6	13	4.9	13
1.3	3.8	11	4.1	11	4.3	12	4.5	13	4.7	13
1.4	3.8	11	4.0	11	4.2	12	4.4	13	4.6	13
1.5	3.7	11	3.9	11	4.1	12	4.3	13	4.5	13
1.6	3.6	11	3.8	11	4.1	12	4.3	13	4.5	13
1.7	3.6	11	3.8	11	4.0	12	4.2	13	4.4	13
1.8	3.5	11	3.7	11	3.9	12	4.1	13	4.4	13
1.9	3.5	11	3.7	11	3.9	12	4.1	13	4.3	13
2.0	3.5	11	3.7	11	3.9	12	4.1	13	4.3	13
2.1	3.4	11	3.6	11	3.8	12	4.0	13	4.2	13
2.2	3.4	11	3.6	11	3.8	12	4.0	13	4.2	13
2.3	3.4	11	3.6	11	3.8	12	4.0	13	4.2	13
2.4	3.4	11	3.6	11	3.8	12	3.9	13	4.1	13
2.5	3.3	11	3.5	11	3.7	12	3.9	13	4.1	13
2.6	3.3	11	3.5	11	3.7	12	3.9	13	4.1	13
2.7	3.3	11	3.5	11	3.7	12	3.9	13	4.1	13
2.8	3.3	11	3.5	11	3.7	12	3.9	13	4.1	13
2.9	3.3	11	3.5	11	3.7	12	3.9	13	4.0	13
3.0	3.3	11	3.5	11	3.6	12	3.8	13	4.0	13
3.1	3.3	11	3.4	11	3.6	12	3.8	13	4.0	13
3.2	3.2	11	3.4	11	3.6	12	3.8	13	4.0	13
3.3	3.2	11	3.4	11	3.6	12	3.8	13	4.0	13
3.4	3.2	11	3.4	11	3.6	12	3.8	13	4.0	13
3.5	3.2	11	3.4	11	3.6	12	3.8	13	3.9	13
3.6	3.2	11	3.4	11	3.6	12	3.8	13	3.9	13
3.7	3.2	11	3.4	11	3.6	12	3.7	13	3.9	13
3.8	3.2	11	3.4	11	3.5	12	3.7	13	3.9	13
3.9	3.2	11	3.4	11	3.5	12	3.7	13	3.9	13
4.0	3.2	11	3.3	11	3.5	12	3.7	12	3.8	13

Table 13E. Effluent Limitations – Copper, Total Recoverable for Discharges to the Sacramento River and Its Tributaries Above the State Highway 32 Bridge at Hamilton City

CV	100 ≤ H < 120 AMEL	100 ≤ H < 120 MDEL	120 ≤ H < 140 AMEL	120 ≤ H < 140 MDEL	140 ≤ H < 160 AMEL	140 ≤ H < 160 MDEL	160 ≤ H < 180 AMEL	160 ≤ H < 180 MDEL	180 ≤ H AMEL	180 ≤ H MDEL
0.1	9.8	11	11	13	13	15	14	16	16	18
0.2	9.5	13	11	14	12	16	14	18	15	20
0.3	9.1	14	11	16	12	18	13	20	15	22
0.4	8.7	15	10	17	12	19	13	21	14	23
0.5	7.9	15	9.2	17	10	19	12	22	12	23
0.6	7.3	15	8.5	17	9.7	19	11	22	11	23
0.7	6.8	15	7.9	17	9.0	19	10	22	11	23
0.8	6.4	15	7.4	17	8.5	19	9.5	22	10	23
0.9	6.1	15	7.1	17	8.0	19	9.0	22	9.5	23
1.0	5.8	15	6.7	17	7.7	19	8.6	22	9.1	23
1.1	5.6	15	6.5	17	7.4	19	8.3	22	8.7	23
1.2	5.4	15	6.3	17	7.2	19	8.0	22	8.5	23
1.3	5.3	15	6.1	17	7.0	19	7.8	22	8.2	23
1.4	5.2	15	6.0	17	6.8	19	7.7	22	8.1	23
1.5	5.1	15	5.9	17	6.7	19	7.5	22	7.9	23
1.6	5.0	15	5.8	17	6.6	19	7.4	22	7.8	23
1.7	4.9	15	5.7	17	6.5	19	7.3	22	7.7	23
1.8	4.9	15	5.6	17	6.4	19	7.2	22	7.6	23
1.9	4.8	15	5.6	17	6.4	19	7.1	22	7.5	23
2.0	4.8	15	5.5	17	6.3	19	7.1	22	7.4	23
2.1	4.7	15	5.5	17	6.2	19	7.0	22	7.4	23
2.2	4.7	15	5.4	17	6.2	19	6.9	22	7.3	23
2.3	4.6	15	5.4	17	6.2	19	6.9	22	7.3	23
2.4	4.6	15	5.4	17	6.1	19	6.9	22	7.2	23
2.5	4.6	15	5.3	17	6.1	19	6.8	22	7.2	23
2.6	4.6	15	5.3	17	6.0	19	6.8	22	7.1	23
2.7	4.5	15	5.3	17	6.0	19	6.7	22	7.1	23
2.8	4.5	15	5.3	17	6.0	19	6.7	22	7.1	23
2.9	4.5	15	5.2	17	6.0	19	6.7	22	7.0	23
3.0	4.5	15	5.2	17	5.9	19	6.7	22	7.0	23
3.1	4.5	15	5.2	17	5.9	19	6.6	22	7.0	23
3.2	4.5	15	5.2	17	5.9	19	6.6	22	7.0	23
3.3	4.4	15	5.2	17	5.9	19	6.6	22	6.9	23
3.4	4.4	15	5.1	17	5.9	19	6.6	22	6.9	23
3.5	4.4	15	5.1	17	5.8	19	6.5	22	6.9	23
3.6	4.4	15	5.1	17	5.8	19	6.5	22	6.9	23
3.7	4.4	15	5.1	17	5.8	19	6.4	21	6.8	23
3.8	4.4	15	5.0	17	5.7	19	6.3	21	6.8	23
3.9	4.3	15	5.0	17	5.6	19	6.3	21	6.8	23
4.0	4.3	14	4.9	17	5.6	19	6.2	21	6.8	23

Table 14A. Effluent Limitations – Zinc, Total Recoverable for Discharges to the Sacramento River and Its Tributaries Above the State Highway 32 Bridge at Hamilton City

CV	0 ≤ H < 5 AMEL	0 ≤ H < 5 MDEL	5 ≤ H < 10 AMEL	5 ≤ H < 10 MDEL	10 ≤ H < 15 AMEL	10 ≤ H < 15 MDEL	15 ≤ H < 20 AMEL	15 ≤ H < 20 MDEL	20 ≤ H < 25 AMEL	20 ≤ H < 25 MDEL
0.1	1.4	1.6	3.5	4.0	5.3	6.2	7.1	8.2	8.7	10
0.2	1.2	1.6	3.1	4.0	4.7	6.2	6.2	8.2	7.6	10
0.3	1.1	1.6	2.7	4.0	4.1	6.2	5.4	8.2	6.7	10
0.4	0.97	1.6	2.4	4.0	3.7	6.2	4.9	8.2	6.0	10
0.5	0.88	1.6	2.2	4.0	3.4	6.2	4.4	8.2	5.5	10
0.6	0.81	1.6	2.0	4.0	3.1	6.2	4.1	8.2	5.0	10
0.7	0.75	1.6	1.9	4.0	2.9	6.2	3.8	8.2	4.7	10
0.8	0.71	1.6	1.8	4.0	2.7	6.2	3.6	8.2	4.4	10
0.9	0.67	1.6	1.7	4.0	2.6	6.2	3.4	8.2	4.2	10
1.0	0.64	1.6	1.6	4.0	2.5	6.2	3.2	8.2	4.0	10
1.1	0.62	1.6	1.5	4.0	2.4	6.2	3.1	8.2	3.8	10
1.2	0.60	1.6	1.5	4.0	2.3	6.2	3.0	8.2	3.7	10
1.3	0.59	1.6	1.5	4.0	2.2	6.2	3.0	8.2	3.6	10
1.4	0.57	1.6	1.4	4.0	2.2	6.2	2.9	8.2	3.6	10
1.5	0.56	1.6	1.4	4.0	2.1	6.2	2.8	8.2	3.5	10
1.6	0.55	1.6	1.4	4.0	2.1	6.2	2.8	8.2	3.4	10
1.7	0.55	1.6	1.4	4.0	2.1	6.2	2.7	8.2	3.4	10
1.8	0.54	1.6	1.3	4.0	2.1	6.2	2.7	8.2	3.3	10
1.9	0.53	1.6	1.3	4.0	2.0	6.2	2.7	8.2	3.3	10
2.0	0.53	1.6	1.3	4.0	2.0	6.2	2.7	8.2	3.3	10
2.1	0.52	1.6	1.3	4.0	2.0	6.2	2.6	8.2	3.2	10
2.2	0.52	1.6	1.3	4.0	2.0	6.2	2.6	8.2	3.2	10
2.3	0.52	1.6	1.3	4.0	2.0	6.2	2.6	8.2	3.2	10
2.4	0.51	1.6	1.3	4.0	2.0	6.2	2.6	8.2	3.2	10
2.5	0.51	1.6	1.3	4.0	1.9	6.2	2.6	8.2	3.2	10
2.6	0.51	1.6	1.3	4.0	1.9	6.2	2.6	8.2	3.1	10
2.7	0.51	1.6	1.3	4.0	1.9	6.2	2.5	8.2	3.1	10
2.8	0.50	1.6	1.3	4.0	1.9	6.2	2.5	8.2	3.1	10
2.9	0.50	1.6	1.2	4.0	1.9	6.2	2.5	8.2	3.1	10
3.0	0.50	1.6	1.2	4.0	1.9	6.2	2.5	8.2	3.1	10
3.1	0.50	1.6	1.2	4.0	1.9	6.2	2.5	8.2	3.1	10
3.2	0.49	1.6	1.2	4.0	1.9	6.2	2.5	8.2	3.1	10
3.3	0.49	1.6	1.2	4.0	1.9	6.2	2.5	8.2	3.1	10
3.4	0.49	1.6	1.2	4.0	1.9	6.2	2.5	8.2	3.0	10
3.5	0.49	1.6	1.2	4.0	1.9	6.2	2.5	8.2	3.0	10
3.6	0.49	1.6	1.2	4.0	1.9	6.2	2.5	8.2	3.0	10
3.7	0.49	1.6	1.2	4.0	1.8	6.2	2.4	8.2	3.0	10
3.8	0.48	1.6	1.2	4.0	1.8	6.2	2.4	8.2	3.0	10
3.9	0.48	1.6	1.2	4.0	1.8	6.2	2.4	8.2	3.0	10
4.0	0.48	1.6	1.2	4.0	1.8	6.2	2.4	8.2	3.0	10

Table 14B. Effluent Limitations – Zinc, Total Recoverable for Discharges to the Sacramento River and Its Tributaries Above the State Highway 32 Bridge at Hamilton City

CV	25 ≤ H < 30 AMEL	25 ≤ H < 30 MDEL	30 ≤ H < 35 AMEL	30 ≤ H < 35 MDEL	35 ≤ H < 40 AMEL	35 ≤ H < 40 MDEL	40 ≤ H < 45 AMEL	40 ≤ H < 45 MDEL	45 ≤ H < 50 AMEL	45 ≤ H < 50 MDEL
0.1	10	12	12	14	13	15	15	17	16	19
0.2	9.0	12	10	14	12	15	13	17	14	19
0.3	7.9	12	9.1	14	10	15	11	17	12	19
0.4	7.1	12	8.2	14	9.2	15	10	17	11	19
0.5	6.4	12	7.4	14	8.3	15	9.3	17	10	19
0.6	5.9	12	6.8	14	7.7	15	8.5	17	9.3	19
0.7	5.5	12	6.3	14	7.1	15	7.9	17	8.7	19
0.8	5.2	12	6.0	14	6.7	15	7.4	17	8.2	19
0.9	4.9	12	5.7	14	6.4	15	7.1	17	7.8	19
1.0	4.7	12	5.4	14	6.1	15	6.8	17	7.4	19
1.1	4.5	12	5.2	14	5.9	15	6.5	17	7.2	19
1.2	4.4	12	5.1	14	5.7	15	6.3	17	6.9	19
1.3	4.3	12	4.9	14	5.6	15	6.2	17	6.8	19
1.4	4.2	12	4.8	14	5.4	15	6.0	17	6.6	19
1.5	4.1	12	4.7	14	5.3	15	5.9	17	6.5	19
1.6	4.1	12	4.7	14	5.2	15	5.8	17	6.4	19
1.7	4.0	12	4.6	14	5.2	15	5.7	17	6.3	19
1.8	3.9	12	4.5	14	5.1	15	5.7	17	6.2	19
1.9	3.9	12	4.5	14	5.1	15	5.6	17	6.1	19
2.0	3.9	12	4.4	14	5.0	15	5.6	17	6.1	19
2.1	3.8	12	4.4	14	5.0	15	5.5	17	6.0	19
2.2	3.8	12	4.4	14	4.9	15	5.5	17	6.0	19
2.3	3.8	12	4.3	14	4.9	15	5.4	17	6.0	19
2.4	3.8	12	4.3	14	4.9	15	5.4	17	5.9	19
2.5	3.7	12	4.3	14	4.8	15	5.4	17	5.9	19
2.6	3.7	12	4.3	14	4.8	15	5.3	17	5.8	19
2.7	3.7	12	4.2	14	4.8	15	5.3	17	5.8	19
2.8	3.7	12	4.2	14	4.8	15	5.3	17	5.8	19
2.9	3.7	12	4.2	14	4.7	15	5.3	17	5.8	19
3.0	3.6	12	4.2	14	4.7	15	5.2	17	5.7	19
3.1	3.6	12	4.2	14	4.7	15	5.2	17	5.7	19
3.2	3.6	12	4.2	14	4.7	15	5.2	17	5.7	19
3.3	3.6	12	4.1	14	4.7	15	5.2	17	5.7	19
3.4	3.6	12	4.1	14	4.6	15	5.2	17	5.7	19
3.5	3.6	12	4.1	14	4.6	15	5.1	17	5.6	19
3.6	3.6	12	4.1	14	4.6	15	5.1	17	5.6	19
3.7	3.6	12	4.1	14	4.6	15	5.1	17	5.6	19
3.8	3.5	12	4.1	14	4.6	15	5.1	17	5.6	19
3.9	3.5	12	4.1	14	4.6	15	5.1	17	5.6	19
4.0	3.5	12	4.0	14	4.6	15	5.1	17	5.5	19

Table 14C. Effluent Limitations – Zinc, Total Recoverable for Discharges to the Sacramento River and Its Tributaries Above the State Highway 32 Bridge at Hamilton City

CV	50 ≤ H < 55 AMEL	50 ≤ H < 55 MDEL	55 ≤ H < 60 AMEL	55 ≤ H < 60 MDEL	60 ≤ H < 65 AMEL	60 ≤ H < 65 MDEL	65 ≤ H < 70 AMEL	65 ≤ H < 70 MDEL	70 ≤ H < 75 AMEL	70 ≤ H < 75 MDEL
0.1	18	20	19	22	20	24	22	25	23	27
0.2	15	20	17	22	18	24	19	25	20	27
0.3	14	20	15	22	16	24	17	25	18	27
0.4	12	20	13	22	14	24	15	25	16	27
0.5	11	20	12	22	13	24	14	25	14	27
0.6	10	20	11	22	12	24	12	25	13	27
0.7	9.4	20	10	22	11	24	12	25	12	27
0.8	8.9	20	9.6	22	10	24	11	25	12	27
0.9	8.4	20	9.1	22	9.7	24	10	25	11	27
1.0	8.1	20	8.7	22	9.3	24	9.9	25	11	27
1.1	7.8	20	8.4	22	9.0	24	9.6	25	10	27
1.2	7.5	20	8.1	22	8.7	24	9.3	25	9.9	27
1.3	7.3	20	7.9	22	8.5	24	9.0	25	9.6	27
1.4	7.2	20	7.7	22	8.3	24	8.8	25	9.4	27
1.5	7.0	20	7.6	22	8.1	24	8.7	25	9.2	27
1.6	6.9	20	7.5	22	8.0	24	8.5	25	9.1	27
1.7	6.8	20	7.4	22	7.9	24	8.4	25	8.9	27
1.8	6.8	20	7.3	22	7.8	24	8.3	25	8.8	27
1.9	6.7	20	7.2	22	7.7	24	8.2	25	8.7	27
2.0	6.6	20	7.1	22	7.6	24	8.1	25	8.6	27
2.1	6.6	20	7.1	22	7.6	24	8.1	25	8.6	27
2.2	6.5	20	7.0	22	7.5	24	8.0	25	8.5	27
2.3	6.5	20	7.0	22	7.5	24	8.0	25	8.5	27
2.4	6.4	20	6.9	22	7.4	24	7.9	25	8.4	27
2.5	6.4	20	6.9	22	7.4	24	7.9	25	8.4	27
2.6	6.4	20	6.9	22	7.3	24	7.8	25	8.3	27
2.7	6.3	20	6.8	22	7.3	24	7.8	25	8.3	27
2.8	6.3	20	6.8	22	7.3	24	7.8	25	8.2	27
2.9	6.3	20	6.8	22	7.2	24	7.7	25	8.2	27
3.0	6.2	20	6.7	22	7.2	24	7.7	25	8.2	27
3.1	6.2	20	6.7	22	7.2	24	7.7	25	8.1	27
3.2	6.2	20	6.7	22	7.2	24	7.6	25	8.1	27
3.3	6.2	20	6.7	22	7.1	24	7.6	25	8.1	27
3.4	6.1	20	6.6	22	7.1	24	7.6	25	8.0	27
3.5	6.1	20	6.6	22	7.1	24	7.5	25	8.0	27
3.6	6.1	20	6.6	22	7.1	24	7.5	25	8.0	27
3.7	6.1	20	6.6	22	7.0	24	7.5	25	8.0	27
3.8	6.1	20	6.5	22	7.0	24	7.5	25	7.9	27
3.9	6.0	20	6.5	22	7.0	24	7.4	25	7.9	27
4.0	6.0	20	6.5	22	7.0	24	7.4	25	7.9	27

Table 14D. Effluent Limitations – Zinc, Total Recoverable for Discharges to the Sacramento River and Its Tributaries Above the State Highway 32 Bridge at Hamilton City

CV	75 ≤ H < 80 AMEL	75 ≤ H < 80 MDEL	80 ≤ H < 85 AMEL	80 ≤ H < 85 MDEL	85 ≤ H < 90 AMEL	85 ≤ H < 90 MDEL	90 ≤ H < 95 AMEL	90 ≤ H < 95 MDEL	95 ≤ H < 100 AMEL	95 ≤ H < 100 MDEL
0.1	24	28	26	30	27	31	28	33	29	34
0.2	21	28	22	30	23	31	25	33	26	34
0.3	19	28	20	30	21	31	22	33	23	34
0.4	17	28	18	30	19	31	19	33	20	34
0.5	15	28	16	30	17	31	18	33	18	34
0.6	14	28	15	30	15	31	16	33	17	34
0.7	13	28	14	30	14	31	15	33	16	34
0.8	12	28	13	30	14	31	14	33	15	34
0.9	12	28	12	30	13	31	13	33	14	34
1.0	11	28	12	30	12	31	13	33	13	34
1.1	11	28	11	30	12	31	12	33	13	34
1.2	10	28	11	30	12	31	12	33	13	34
1.3	10	28	11	30	11	31	12	33	12	34
1.4	9.9	28	10	30	11	31	11	33	12	34
1.5	9.7	28	10	30	11	31	11	33	12	34
1.6	9.6	28	10	30	11	31	11	33	12	34
1.7	9.4	28	9.9	30	10	31	11	33	11	34
1.8	9.3	28	9.8	30	10	31	11	33	11	34
1.9	9.2	28	9.7	30	10	31	11	33	11	34
2.0	9.1	28	9.6	30	10	31	11	33	11	34
2.1	9.1	28	9.5	30	10	31	10	33	11	34
2.2	9.0	28	9.5	30	9.9	31	10	33	11	34
2.3	8.9	28	9.4	30	9.9	31	10	33	11	34
2.4	8.9	28	9.4	30	9.8	31	10	33	11	34
2.5	8.8	28	9.3	30	9.8	31	10	33	11	34
2.6	8.8	28	9.2	30	9.7	31	10	33	11	34
2.7	8.7	28	9.2	30	9.7	31	10	33	11	34
2.8	8.7	28	9.2	30	9.6	31	10	33	11	34
2.9	8.7	28	9.1	30	9.6	31	10	33	10	34
3.0	8.6	28	9.1	30	9.5	31	10	33	10	34
3.1	8.6	28	9.0	30	9.5	31	9.9	33	10	34
3.2	8.6	28	9.0	30	9.5	31	9.9	33	10	34
3.3	8.5	28	9.0	30	9.4	31	9.9	33	10	34
3.4	8.5	28	8.9	30	9.4	31	9.8	33	10	34
3.5	8.5	28	8.9	30	9.4	31	9.8	33	10	34
3.6	8.4	28	8.9	30	9.3	31	9.8	33	10	34
3.7	8.4	28	8.9	30	9.3	31	9.7	33	10	34
3.8	8.4	28	8.8	30	9.3	31	9.7	33	10	34
3.9	8.4	28	8.8	30	9.2	31	9.7	33	10	34
4.0	8.3	28	8.8	30	9.2	31	9.6	33	10	34

Table 14E. Effluent Limitations – Zinc, Total Recoverable for Discharges to the Sacramento River and Its Tributaries Above the State Highway 32 Bridge at Hamilton City

CV	100 ≤ H < 120 AMEL	100 ≤ H < 120 MDEL	120 ≤ H < 140 AMEL	120 ≤ H < 140 MDEL	140 ≤ H < 160 AMEL	140 ≤ H < 160 MDEL	160 ≤ H < 180 AMEL	160 ≤ H < 180 MDEL	180 ≤ H AMEL	180 ≤ H MDEL
0.1	32	38	37	43	42	49	47	54	49	57
0.2	28	38	33	43	37	49	41	54	43	57
0.3	25	38	29	43	32	49	36	54	38	57
0.4	22	38	26	43	29	49	32	54	34	57
0.5	20	38	23	43	26	49	29	54	31	57
0.6	19	38	22	43	24	49	27	54	28	57
0.7	17	38	20	43	23	49	25	54	26	57
0.8	16	38	19	43	21	49	24	54	25	57
0.9	16	38	18	43	20	49	22	54	23	57
1.0	15	38	17	43	19	49	21	54	22	57
1.1	14	38	17	43	19	49	21	54	22	57
1.2	14	38	16	43	18	49	20	54	21	57
1.3	14	38	16	43	18	49	19	54	20	57
1.4	13	38	15	43	17	49	19	54	20	57
1.5	13	38	15	43	17	49	19	54	20	57
1.6	13	38	15	43	17	49	18	54	19	57
1.7	13	38	15	43	16	49	18	54	19	57
1.8	12	38	14	43	16	49	18	54	19	57
1.9	12	38	14	43	16	49	18	54	19	57
2.0	12	38	14	43	16	49	18	54	18	57
2.1	12	38	14	43	16	49	17	54	18	57
2.2	12	38	14	43	16	49	17	54	18	57
2.3	12	38	14	43	15	49	17	54	18	57
2.4	12	38	14	43	15	49	17	54	18	57
2.5	12	38	14	43	15	49	17	54	18	57
2.6	12	38	13	43	15	49	17	54	18	57
2.7	12	38	13	43	15	49	17	54	18	57
2.8	12	38	13	43	15	49	17	54	18	57
2.9	12	38	13	43	15	49	17	54	17	57
3.0	12	38	13	43	15	49	17	54	17	57
3.1	11	38	13	43	15	49	16	54	17	57
3.2	11	38	13	43	15	49	16	54	17	57
3.3	11	38	13	43	15	49	16	54	17	57
3.4	11	38	13	43	15	49	16	54	17	57
3.5	11	38	13	43	15	49	16	54	17	57
3.6	11	38	13	43	15	49	16	54	17	57
3.7	11	38	13	43	15	49	16	54	17	57
3.8	11	38	13	43	14	49	16	54	17	57
3.9	11	38	13	43	14	49	16	54	17	57
4.0	11	38	13	43	14	49	16	54	17	57

11. **Limitations and Discharge Requirements, Section V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** Remove the last paragraph of Section V.A.1.c.v.(a) and replace it with the following:

Mass-based average monthly and average weekly effluent limitations for total ammonia nitrogen (as N), if specified in the Notice of Applicability, shall be calculated based on the design average dry weather flow.

12. **Limitations and Discharge Requirements, Section V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** Only columns with changes are shown. Modify Table 16B Effluent Limitations – Ammonia Nitrogen, Total (as Nitrogen) Based on CMC (Salmonids Present) in Section V.A.1.c.v to the following, where CV equals the coefficient of variation, CMC equals criteria maximum concentration, AMEL equals average monthly effluent limitation in mg/L, and AWEL equals average weekly effluent limitation in mg/L:

Table 18B. Effluent Limitations – Ammonia Nitrogen, Total (as N) Based on CMC (Salmonids Present)

CV	CMC 2.59 mg/L AMEL	CMC 2.59 mg/L AWEL	CMC 2.14 mg/L AMEL	CMC 2.14 mg/L AWEL	CMC 1.77 mg/L AMEL	CMC 1.77 mg/L AWEL	CMC 1.47 mg/L AMEL	CMC 1.47 mg/L AWEL	CMC 1.23 mg/L AMEL	CMC 1.23 mg/L AWEL	CMC 1.04 mg/L AMEL	CMC 1.04 mg/L AWEL
0.1	2.2	2.5	1.8	2.1	1.5	1.7	1.3	1.4	1.1	1.2	0.90	1.0
0.2	2.0	2.5	1.6	2.0	1.3	1.7	1.1	1.4	0.93	1.2	0.78	0.99
0.3	1.7	2.4	1.4	2.0	1.2	1.6	0.98	1.4	0.82	1.1	0.69	0.96
0.4	1.5	2.3	1.3	1.9	1.1	1.6	0.88	1.3	0.73	1.1	0.62	0.94
0.5	1.4	2.3	1.2	1.9	0.96	1.6	0.80	1.3	0.67	1.1	0.56	0.91
0.6	1.3	2.2	1.1	1.8	0.88	1.5	0.73	1.3	0.61	1.1	0.52	0.89
0.7	1.2	2.2	0.99	1.8	0.82	1.5	0.68	1.2	0.57	1.0	0.48	0.88
0.8	1.1	2.1	0.93	1.8	0.77	1.5	0.64	1.2	0.54	1.0	0.45	0.86
0.9	1.1	2.1	0.89	1.7	0.73	1.4	0.61	1.2	0.51	1.0	0.43	0.84
1.0	1.0	2.1	0.85	1.7	0.70	1.4	0.58	1.2	0.49	0.98	0.41	0.83
1.1	0.99	2.0	0.82	1.7	0.68	1.4	0.56	1.2	0.47	0.97	0.40	0.82
1.2	0.96	2.0	0.79	1.7	0.66	1.4	0.54	1.1	0.46	0.95	0.39	0.80
1.3	0.94	2.0	0.77	1.6	0.64	1.4	0.53	1.1	0.44	0.94	0.38	0.79
1.4	0.91	2.0	0.76	1.6	0.62	1.3	0.52	1.1	0.43	0.93	0.37	0.78
1.5	0.90	1.9	0.74	1.6	0.61	1.3	0.51	1.1	0.43	0.92	0.36	0.77
1.6	0.88	1.9	0.73	1.6	0.60	1.3	0.50	1.1	0.42	0.91	0.35	0.77
1.7	0.87	1.9	0.72	1.6	0.59	1.3	0.49	1.1	0.41	0.90	0.35	0.76
1.8	0.86	1.9	0.71	1.5	0.59	1.3	0.49	1.1	0.41	0.89	0.35	0.75
1.9	0.85	1.9	0.70	1.5	0.58	1.3	0.48	1.1	0.40	0.88	0.34	0.74
2.0	0.84	1.8	0.70	1.5	0.58	1.3	0.48	1.0	0.40	0.87	0.34	0.74
2.1	0.84	1.8	0.69	1.5	0.57	1.2	0.47	1.0	0.40	0.86	0.34	0.73
2.2	0.83	1.8	0.68	1.5	0.57	1.2	0.47	1.0	0.39	0.86	0.33	0.72
2.3	0.82	1.8	0.68	1.5	0.56	1.2	0.47	1.0	0.39	0.85	0.33	0.72
2.4	0.82	1.8	0.68	1.5	0.56	1.2	0.46	1.0	0.39	0.84	0.33	0.71
2.5	0.81	1.8	0.67	1.5	0.56	1.2	0.46	1.0	0.39	0.84	0.33	0.71
2.6	0.81	1.8	0.67	1.4	0.55	1.2	0.46	1.0	0.38	0.83	0.32	0.70
2.7	0.81	1.7	0.67	1.4	0.55	1.2	0.46	0.99	0.38	0.83	0.32	0.70
2.8	0.80	1.7	0.66	1.4	0.55	1.2	0.45	0.98	0.38	0.82	0.32	0.70
2.9	0.80	1.7	0.66	1.4	0.55	1.2	0.45	0.98	0.38	0.82	0.32	0.69
3.0	0.79	1.7	0.66	1.4	0.54	1.2	0.45	0.97	0.38	0.81	0.32	0.69
3.1	0.79	1.7	0.65	1.4	0.54	1.2	0.45	0.97	0.38	0.81	0.32	0.68
3.2	0.79	1.7	0.65	1.4	0.54	1.2	0.45	0.96	0.37	0.81	0.32	0.68
3.3	0.79	1.7	0.65	1.4	0.54	1.2	0.45	0.96	0.37	0.80	0.32	0.68
3.4	0.78	1.7	0.65	1.4	0.53	1.1	0.44	0.95	0.37	0.80	0.31	0.67
3.5	0.78	1.7	0.64	1.4	0.53	1.1	0.44	0.95	0.37	0.79	0.31	0.67
3.6	0.78	1.7	0.64	1.4	0.53	1.1	0.44	0.95	0.37	0.79	0.31	0.67
3.7	0.77	1.7	0.64	1.4	0.53	1.1	0.44	0.94	0.37	0.79	0.31	0.67
3.8	0.77	1.7	0.64	1.4	0.53	1.1	0.44	0.94	0.37	0.78	0.31	0.66
3.9	0.77	1.6	0.64	1.4	0.53	1.1	0.44	0.93	0.37	0.78	0.31	0.66
4.0	0.77	1.6	0.63	1.4	0.52	1.1	0.44	0.93	0.36	0.78	0.31	0.66

13. **Limitations and Discharge Requirements, Section V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** Remove Section V.A.1.c.viii and replace it with the following:

viii. Salinity

- (a) **Applicable to All Discharges.** The effluent electrical conductivity concentration shall not exceed the annual average effluent limitation in Table 21 as follows, if specified in the Notice of Applicability from the Executive Officer:

Table 21. Effluent Limitations – Electrical Conductivity at 25°C (EC)

Maximum Annual Average Facility Performance Electrical Conductivity (µmhos/cm)	Annual Average Effluent Limitation Electrical Conductivity (µmhos/cm)
0 < EC ≤ 500	625
500 < EC ≤ 600	750
600 < EC ≤ 700	875
700 < EC ≤ 800	1,000
800 < EC ≤ 900	1,125
900 < EC ≤ 1,000	1,250
1,000 < EC ≤ 1,100	1,375
1,100 < EC ≤ 1,200	1,500
1,200 < EC	1,600

14. **Limitations and Discharge Requirements, Section VI. RECEIVING WATER LIMITATIONS.** To clarify the receiving water temperature compliance determination for the City of Roseville, Dry Creek Wastewater Treatment Plant, modify Section VI.A.16.d.i to the text shown below:
- i. The natural temperature to be increased by more than 5°F on an annual average. Compliance to be determined based on the difference in temperature at Monitoring Locations RSW-001 and RSW-002.
15. **Limitations and Discharge Requirements, Section VII. PROVISIONS and Attachment F – Fact Sheet, Section VII. Rationale for Provisions.** Add “ City of Placerville, Hangtown Creek Water Reclamation Facility;” to Section VII.C.1.d of the Limitations and Discharge Requirements and Section VII.B.1.c of Attachment F – Fact Sheet for Water Effect Ratios (WERs) and Metals Translators for zinc after “City of Grass Valley, Wastewater Treatment Plant;”.
16. **Limitations and Discharge Requirements, Section VII. PROVISIONS.** Remove the last paragraph of Section VII.C.1.d and replace it with the following:

If a Discharger performs studies to determine discharger-specific WERs (as defined in the SIP and hereinafter site-specific WER) and/or site-specific dissolved-to-total metal translators, this General Order may be reopened to allow effluent

limitations to be modified using a site-specific WER or translator for a particular Discharger.

17. **Limitations and Discharge Requirements, Section VII. PROVISIONS and Attachment F – Fact Sheet, Section VII. Rationale for Provisions.** Remove the text of Section VII.C.1.h of the Limitations and Discharge Requirements and Section VII.B.1.g of Attachment F - Fact Sheet that includes the text shown below:

Basin Plan Amendment – Salinity Objectives for the Lower San Joaquin River. The Central Valley Water Board adopted a Basin Plan Amendment on 9 June 2017, which establishes salinity water quality objectives in the Lower San Joaquin River from Merced River to Vernalis. Furthermore, the Basin Plan Amendment modified the Salt and Boron TMDL to clarify that NPDES point source dischargers could participate in the real-time salinity management program in lieu of complying with the wasteload allocations. Therefore, this Order may be reopened to modify salinity requirements, as appropriate, in accordance with the Basin Plan Amendment upon approval by the State Water Board, Office of Administrative Law, and U.S. EPA.

18. **Limitations and Discharge Requirements, Section VII. PROVISIONS.** In the first sentence of Section VII.C.2.a.i and VII.C.2.a.ii, change “issuance” to “effective date”.
19. **Limitations and Discharge Requirements, Section VII. PROVISIONS.** Remove the last sentence of Section VII.C.2.a.iii and replace it with the following:

The monitoring trigger is not an effluent limitation; it is the toxicity threshold above which the Discharger is required to initiate additional actions to evaluate effluent toxicity as specified in subsection iv, below.

20. **Limitations and Discharge Requirements, Section VII. PROVISIONS.** Remove Section VII.C.2.a.iv.(a) and replace it with the following:

(a) **Initial Toxicity Check.** If the result is less than or equal to 1.3 TUc (as 100/EC₂₅) OR the percent effect is less than 25 percent, check for any operation or sample collection issues and return to routine chronic toxicity monitoring¹. Otherwise, if the result is greater than 1.3 TUc (as 100/EC₂₅) AND the percent effect is greater than or equal to 25 percent at 100 percent effluent, proceed to step (b).

21. **Limitations and Discharge Requirements, Section VII. PROVISIONS.** Remove Section VII.C.3.c and replace it with the following:

c. **Salinity Evaluation and Minimization Plan.** Dischargers, if specified in the Notice of Applicability, shall implement a Salinity Evaluation and Minimization Plan to identify and address sources of salinity discharged from the Facility. If a Salinity Evaluation and Minimization Plan has not been previously submitted, the Discharger shall submit a Salinity Evaluation and Minimization Plan by the due date specified in the Notice of Applicability. If a Salinity Evaluation and Minimization Plan has already been submitted, the Discharger shall continue to implement the Salinity Evaluation and Minimization Plan.

22. **Limitations and Discharge Requirements, Section VII. PROVISIONS.** Remove the second sentence of Section VII.C.4.a and replace it with the following:

As specified in the Notice of Applicability, the turbidity of the filter effluent measured at Monitoring Location FIL-002 shall not exceed the applicable measurements in i and ii below when discharging to surface water.
23. **Limitations and Discharge Requirements, Section VII. PROVISIONS and Attachment E – Monitoring and Reporting Program, OTHER MONITORING REQUIREMENTS.** Insert “, Mariposa Public Utility District,” after “City of Atwater” in Section VII.C.4.a and Section VII.C.4.a.iii of the Limitations and Discharge Requirements and Section IX.D.1.a of Attachment E – Monitoring and Reporting Program.
24. **Limitations and Discharge Requirements, Section VII. PROVISIONS.** Remove the second sentence of Section VII.C.4.b and replace it with the following:

The UV disinfection system must be operated in accordance with an operations and maintenance program that assures adequate disinfection, and shall meet the following minimum specifications to provide virus inactivation equivalent to Title 22 Disinfected Tertiary Recycled Water, as specified in the Notice of Applicability, when discharging to surface water.
25. **Limitations and Discharge Requirements, Section VII. PROVISIONS.** In Section VII.C.5.b.iv, change “Fact Sheet (Attachment F, Section II.A)” to “Notice of Applicability”.
26. **Limitations and Discharge Requirements, Section VIII. COMPLIANCE DETERMINATION.** Remove Section VIII.D and replace it with the following:

D. Average Dry Weather Flow Prohibition or Effluent Limitations (Section IV or V.A.1.a.iii, respectively). The average dry weather discharge flow represents the daily average flow when groundwater is at or near normal and runoff is not occurring. Compliance with the average dry weather flow prohibition or effluent limitations will be determined annually based on the average daily flow over three consecutive dry weather months (e.g., July, August, and September).
27. **Limitations and Discharge Requirements, Section VIII. COMPLIANCE DETERMINATION.** Remove Section VIII.J and replace it with the following:

J. Chronic Whole Effluent Toxicity Effluent Limitation or Trigger (Section V.A.1.c.ii). To evaluate compliance with the chronic whole effluent toxicity effluent limitation or trigger, the median chronic toxicity units (TUc) shall be the median of up to three consecutive chronic toxicity bioassays during a six-week period. This includes a routine chronic toxicity monitoring event and two subsequent optional compliance monitoring events. If additional compliance monitoring events are not conducted the median is equal to the result for routine chronic toxicity monitoring event. If only one additional compliance monitoring event is conducted, the median will be established as the arithmetic mean of the routine monitoring event and compliance monitoring event.

Where the median chronic toxicity units exceed 1 TUc (as 100/NOEC), the Discharger will be deemed out of compliance with the chronic toxicity effluent limitation if the median chronic toxicity units for any endpoint also exceed a reporting level of 1.3 TUc (as 100/EC₂₅) AND the percent effect at 100 percent effluent exceeds 25 percent. The percent effect used to evaluate compliance with the chronic toxicity effluent limitation or trigger shall be based on the chronic toxicity bioassay result(s) from the sample(s) used to establish the median TUc result. If the median TUc is based on two equal chronic toxicity bioassay results, the percent effect of the sample with the greatest percent effect shall be used to evaluate compliance with the chronic toxicity effluent limitation.

28. **Attachment A – Definitions.** Under Effect Concentration (EC), change the “incapitation” to “incapacitation”.
29. **Attachment A – Definitions.** Remove the definition for Method Detection Limit (MDL) and replace it with the following:

Method Detection Limit (MDL)

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

30. **Attachment B – Notice of Intent.** Remove the text under 1. Fee Requirements and replace it with the following:

Provide the applicable fees. Information regarding the [current fee schedule](http://www.waterboards.ca.gov/resources/fees) (<http://www.waterboards.ca.gov/resources/fees>) and how to [make a payment](https://www.waterboards.ca.gov/make_a_payment) (https://www.waterboards.ca.gov/make_a_payment) by check or credit card is available online. Checks must be made payable to the State Water Resources Control Board.

31. **Attachment C – Screening Levels, Section I. Screening Levels for Priority Pollutants (Excluding Hardness-Based Metals).** Only sections of the table with changes are shown. Modify Table C-1 Screening Levels for Priority Pollutants and update the footnotes to the following:

Parameter	Units	Screening Level (Based on MUN ¹)	Screening Level (Based on non MUN ¹)
Mercury (Maximum Effluent Concentration)	µg/L	0.05	0.051
Mercury (Annual Average Concentration) ²	µg/L	0.012	0.012
PCBs sum ³	µg/L	0.00017	0.00017

¹ MUN = Municipal and Domestic Supply Beneficial Use.

² The Central Valley Water Board will conduct an RPA using the maximum calendar annual average mercury concentration for effluent and receiving water in accordance with the procedures described in the Final Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions, Section IV.D.2.

³ This objective applies to the sum of PCB Aroclors 1242, 1254, 1221, 1232, 1248, 1280, and 1016.

32. **Attachment C – Screening Levels, Section II. Screening Levels for Priority Pollutants (Excluding Hardness-Based Metals).** Change the reference for Table C-2D in the first paragraph of Section II to “C-2F”.

33. **Attachment C – Screening Levels, Section II. Screening Levels for Priority Pollutant Hardness-Based Metals and Attachment F – Fact Sheet, Section V. Rationale for Effluent Limitations and Discharge Specifications.** Only sections of the table with changes are shown. Add the zinc WER 1.7 to Table C-2M Site Specific Water Effect Ratios for Copper and Zinc and Table F-4 Site-Specific Water Effect Ratios for Copper and Zinc as follows:

Discharger	Order / NPDES No.	Site-Specific WER Copper	Site-Specific WER Zinc
City of Placerville, Hangtown Creek Water Reclamation Facility	R5-2017-0085-01 / CAG585001	--	1.7

34. **Attachment C – Screening Levels, Section III. Screening Levels for Other Constituents of Concern.** In Table C-3 Screening Levels for Other Constituents of Concern, change the Screening Level (Based on MUN) from “900” to “1,600” and the Screening Level (Based on non-MUN) from “--” to 1,600 for the parameter Electrical Conductivity @ 25°C.

35. **Attachment C – Screening Levels, Section IV. Screening Levels for Ammonia.** Remove Table C-4 Screening Levels for Ammonia – Acute Criterion (CMC) in Section IV.A and replace it with the following table:

Table C-4. Screening Levels for Ammonia – Acute Criterion (CMC)

pH	CMC in mg/L for Ammonia Nitrogen with Salmonids Present	CMC in mg/L for Ammonia Nitrogen with Salmonids Present
7.5	13.3	19.9
7.6	11.4	17.0
7.7	9.64	14.4
7.8	8.11	12.1
7.9	6.77	10.1
8.0	5.62	8.41
8.1	4.64	6.95
8.2	3.83	5.73
8.3	3.15	4.71
8.4	2.59	3.88
8.5	2.14	3.20
8.6	1.77	2.65
8.7	1.47	2.20
8.8	1.23	1.84
8.9	1.04	1.56
9.0	0.880	1.32

36. **Attachment C – Screening Levels, Section V. Screening Levels for Site-Specific Water Bodies.** Remove Section V.A and V.B and replace them with the following:

A. Basin Plan for the Sacramento and San Joaquin River Basins

1. Table 3-1: Trace Element Water Quality Objectives

- a. **Screening Levels for Discharges to the Sacramento River and Its Tributaries Above the State Highway 32 Bridge at Hamilton City.** For dischargers seeking authorization to discharge under this General Order to the Sacramento River and its tributaries above the State Highway 32 Bridge at Hamilton City, the Central Valley Water Board will conduct an RPA in accordance with the procedures described in section I, above. The screening levels for total recoverable zinc contained in Table C-6 are based on hardness in mg/L as calcium carbonate (CaCO₃). For waters with hardness concentrations less than 100 mg/L, screening levels have been segmented into 5 mg/L increments. For waters with hardness concentrations greater than or equal to 100 mg/L but less than 180 mg/L, screening levels have been segmented into 20 mg/L increments. For waters with lowest observed hardness concentrations greater than or equal to 180 mg/L, a hardness value of 180 mg/L was used to determine the corresponding screening level. The hardness used to select the appropriate screening level shall be determined in accordance with section V.C.2.e of the Fact Sheet (Attachment F).

Table C-6. Screening Levels for Zinc for Discharges to the Sacramento River and Its Tributaries Above the State Highway 32 Bridge at Hamilton City – Hardness (H) 0 to \geq 180 mg/L

Hardness (H) in mg/L	Screening Level for Zinc in μ g/L
$0 \leq H < 5$	1.6
$5 \leq H < 10$	4.0
$10 \leq H < 15$	6.1
$15 \leq H < 20$	8.1
$20 \leq H < 25$	9.9
$25 \leq H < 30$	12
$30 \leq H < 35$	13
$35 \leq H < 40$	15
$40 \leq H < 45$	17
$45 \leq H < 50$	18
$50 \leq H < 55$	20
$55 \leq H < 60$	22
$60 \leq H < 65$	23
$65 \leq H < 70$	25
$70 \leq H < 75$	26
$75 \leq H < 80$	28
$80 \leq H < 85$	29
$85 \leq H < 90$	31
$90 \leq H < 95$	32
$95 \leq H < 100$	34
$100 \leq H < 120$	37
$120 \leq H < 140$	43
$140 \leq H < 160$	48
$160 \leq H < 180$	53
$180 \leq H$	56

2. Table 3-4: Specific Pesticide Objectives
3. Table 3-6: Electrical Conductivity and Total Dissolved Solids

B. Basin Plan for the Tulare Lake Basin

1. Table 3-2: Maximum Electrical Conductivity Levels
2. Table 3-3: Electrical Conductivity Objectives at Selected Streamflow Stations

37. **Attachment E – Monitoring and Reporting Program (MRP), Section I. GENERAL MONITORING PROVISIONS.** Remove the text in Section I.B, I.C, I.F, and I.G and replace them with the following respective sections shown below:

- B. Final effluent samples shall be taken downstream of the last addition of wastes to the treatment or discharge works where a representative sample may be obtained

prior to mixing with the receiving waters. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.

- C. Chemical, bacteriological, and bioassay analyses of any material required by this Order shall be conducted by a laboratory accredited for such analyses by the State Water Resources Control Board (State Water Board), Division of Drinking Water (DDW), in accordance with the provision of Water Code section 13176. Laboratories that perform sample analyses must be identified in all monitoring reports submitted to the Central Valley Water Board. Data generated from field measurements such as pH, dissolved oxygen, electrical conductivity (EC), turbidity, temperature, and residual chlorine are exempt pursuant to Water Code Section 13176. A manual containing the steps followed in this program for any field measurements such as pH, dissolved oxygen, EC, turbidity, temperature, and residual chlorine must be kept onsite in the treatment facility laboratory and shall be available for inspection by Central Valley Water Board staff. The Discharger must demonstrate sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform these field measurements. The Quality Assurance-Quality Control Program must conform to U.S. EPA guidelines or to procedures approved by the Central Valley Water Board.
- F. Laboratory analytical methods shall be sufficiently sensitive in accordance with the Sufficiently Sensitive Methods Rule (SSM Rule) specified under 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv). A U.S. EPA-approved analytical method is sufficiently sensitive for pollutant/parameter where:
- The method minimum level (ML) is at or below the applicable water quality objective for the receiving water, or;
 - The method ML is above the applicable water quality objective for the receiving water but the amount of the pollutant/parameter in the discharge is high enough that the method detects and quantifies the level of the pollutant/parameter, or;
 - The method ML is above the applicable water quality objective for the receiving water, but the ML is the lowest of the 40 C.F.R. 136 U.S. EPA-approved analytical methods for the pollutant/parameter.
- G. Dischargers shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Resources Control Board at the following address:

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

38. **Attachment E – Monitoring and Reporting Program (MRP), Section IV. EFFLUENT MONITORING REQUIREMENTS.** Only sections of the table with

changes, footnotes with changes, and cited footnotes are shown. Modify Table E-3 Effluent Monitoring and footnotes to the following:

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Major Discharger Minimum Sampling Frequency	Minor Discharger Minimum Sampling Frequency	Required Analytical Test Method
Dissolved Organic Carbon (DOC)	mg/L	Grab ⁴	7	7	3,19
Electrical Conductivity @ 25°C	µmhos/cm	Grab ⁴	1/Quarter	1/Quarter	3,6
Un-ionized Ammonia Nitrogen, Total (as N)	mg/L	Grab ⁴	1/Month ^{5,11}	1/Month ^{5,11}	3

³ Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

⁴ A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.

⁵ pH and temperature shall be recorded at the time of ammonia sample collection.

⁷ If monitoring is required, then the monitoring frequency shall be specified in the Notice of Applicability from the Executive Officer.

¹¹ Concurrent with whole effluent toxicity monitoring.

¹³ Total residual chlorine must be monitored using an analytical method that is sufficiently sensitive to measure at the permitted level of 0.01 mg/L.

¹⁵ Chlorpyrifos and diazinon shall be sampled using U.S. EPA Method 625M, Method 8141, or equivalent GC/MS method with a lower Reporting Limit than the Basin Plan Water Quality Objectives of 0.015 µg/L and 0.1 µg/L for chlorpyrifos and diazinon, respectively.

¹⁹ Concurrent with aluminum monitoring.

39. **Attachment E – Monitoring and Reporting Program (MRP), Section V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS.** Remove the text in Section V.B.1 and replace it with the following:

1. ***Monitoring Frequency*** – At minimum major dischargers shall perform chronic toxicity testing during quarters in which there is a discharge to receiving water. Minor dischargers shall perform at minimum annual chronic toxicity testing. The Executive Officer may specify more frequent monitoring in the Notice of Applicability. If the result of the routine chronic toxicity testing event exhibits toxicity, demonstrated by a result greater than 1.3 TU_c (as 100/EC₂₅) **AND** a percent effect greater than 25 percent at 100 percent effluent, the Discharger has the option of conducting two additional compliance monitoring chronic toxicity testing events in order to calculate a median. The optional compliance monitoring events shall occur at least one week apart, and the final monitoring event shall be initiated no later than 6 weeks from the routine monitoring event that exhibited toxicity. See Compliance Determination Section VIII.J for procedures for calculating the 6-week median.

40. **Attachment E – Monitoring and Reporting Program (MRP), Section V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS.** Change the reference to “this Monitoring and Reporting Program” in the last sentence of Section V.B.2 to “the Notice of Applicability”.
41. **Attachment E – Monitoring and Reporting Program (MRP), Section V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS.** Insert the Most Sensitive Species Determination shown below as Section V.B.5 and update the subsequent section numbers as necessary:

5. Most Sensitive Species Determination – The Discharger shall determine the most sensitive species by performing, at minimum, one calendar year of chronic WET testing at a frequency of once per quarter or as specified in the Notice of Applicability using all three test species specified above. The tests shall be performed using 100 percent effluent and one control. If a single test in the species sensitivity screening testing exceeds 1 TUc (as 100/NOEC), then the species used in that test shall be established as the most sensitive species. If there is more than a single test that exceeds 1 TUc (as 100/NOEC), then of the species exceeding 1 TUc (as 100/NOEC) that exhibits the highest percent effect shall be established as the most sensitive species. If none of the tests in the species sensitivity screening exceeds 1 TUc (as 100/NOEC), but at least one of the species exhibits a percent effect greater than 25 percent, then the single species that exhibits the highest percent effect shall be established as the most sensitive species. In all other circumstances, including where documented issues with the sample analysis or related to the sample analysis prevent a clear selection of the most sensitive species, the Executive Officer shall have discretion to determine which single species is the most sensitive considering the test results from the species sensitivity screening.

The most sensitive species and shall be used for chronic toxicity testing for the remainder of the permit term. A Discharger may use the four most recent tests conducted prior to receiving a Notice of Applicability for use in determining the most sensitive species, if the tests were conducted in a manner sufficient to make such determination. The Discharger shall request Executive Officer approval of the most sensitive species determination after conducting the four sets of quarterly chronic toxicity monitoring events. If the Executive Officer approval has not been received, all three species must be tested as described in section V.B.1 Monitoring Frequency above until Executive Officer approval is granted.

42. **Attachment E – Monitoring and Reporting Program (MRP), Section V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS.** Update Section V.B.7 to Section V.B.8, remove the text in the first paragraph, and replace it with the following:
8. Dilutions –For routine and compliance chronic toxicity monitoring, chronic toxicity testing shall be performed using the dilution series identified in Table E-4, below. For TRE monitoring, chronic toxicity testing shall be performed using the dilution series identified, below, unless an alternative dilution series is detailed in the submitted TRE Action Plan. A receiving water control or laboratory water control may be used as the diluent.

43. **Attachment E – Monitoring and Reporting Program (MRP), Section VIII. RECEIVING WATER MONITORING REQUIREMENTS.** Only the sections of the table and footnotes with changes are shown. Modify Table E-5 Receiving Water Monitoring Requirements and update the footnote numbers to the revised footnote order as shown below:

Table E-5. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Major Discharger Minimum Sampling Frequency	Minor Discharger Minimum Sampling Frequency	Required Analytical Test Method
Dissolved Organic Carbon (DOC)	mg/L	Grab ²	5	5	2,4,7
Total Dissolved Solids	mg/L	Grab ²	5	5	4
Turbidity	NTU	Grab ²	5	5	4
Un-ionized Ammonia Nitrogen, Total (as N)	mg/L	Grab ⁴	5	5	4,6

- ² A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.
- ³ A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.
- ⁵ If monitoring is required, then the monitoring frequency shall be specified in the Notice of Applicability from the Executive Officer.
- ⁶ Concurrent with whole effluent toxicity monitoring.
- ⁷ Concurrent with pH and hardness monitoring.

44. **Attachment E – Monitoring and Reporting Program (MRP), Section IX. OTHER MONITORING REQUIREMENTS.** Remove the text in Section IX.A.1.b and replace it with the following:
- b. A composite sample of sludge shall be collected at Monitoring Location BIO-001 in accordance with EPA's POTW Sludge Sampling and Analysis Guidance Document, August 1989, and tested as follows:
- i. Dischargers with a flow less than 1.0 MGD shall monitor for the metals listed in Title 22 annually.
 - ii. Dischargers with flows between 1 MGD and 5 MGD shall monitor for the metals listed in Title 22 annually and for priority pollutants (excluding asbestos) once during the permit term.
 - iii. Dischargers with flows between 5 MGD and 10 MGD shall monitor for the metals listed in Title 22 quarterly and the priority pollutants (excluding asbestos) annually.

- iv. Dischargers with flows greater than 10 MGD shall monitor for the priority pollutants (excluding asbestos) quarterly.

45. **Attachment E – Monitoring and Reporting Program (MRP), Section IX. OTHER MONITORING REQUIREMENTS.** Remove Section IX.B.1.a.iv that includes the text shown below and update the subsequent section numbers as necessary:

- iv. The duration of time wastewater is collected in the basin prior to redirection back to the other units of the wastewater treatment plant; and

46. **Attachment E – Monitoring and Reporting Program (MRP), Section IX. OTHER MONITORING REQUIREMENTS.** In Section IX.C.1.a, remove “in the Tulare Lake Basin” in the first sentence. In Table E-7 Municipal Water Supply Monitoring Requirements, insert footnote 5 and update the footnote numbers to the revised footnote order as shown below:

- 1 Required sample type and frequency unless otherwise specified in the Notice of Applicability.
- 2 If the water supply is from more than one source electrical conductivity shall be reported as a weighted average and include copies of supporting calculations.
- 3 A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.
- 4 Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
- 5 A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer’s instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

47. **Attachment E – Monitoring and Reporting Program (MRP), Section IX. OTHER MONITORING REQUIREMENTS.** In Section IX.D.1.a, update the footnotes for Table E-8 Filtration System Monitoring Requirements described as follows and shown in the text below. Insert a new footnote 1 above the existing footnote 1 on the “Continuous” Minimum Sampling Frequency for turbidity and update the subsequent footnote numbers. Remove footnote 2 and replace it with the following text for footnote 2:

- 1 Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods that have been approved by the Central Valley Water Board or the State Water Board.
- 2 For continuous analyzers, the Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation. If analyzer(s) fail to provide continuous monitoring for more than two hours and influent and/or effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results.
- 3 Report daily average and maximum turbidity.

48. **Attachment E – Monitoring and Reporting Program (MRP), Section IX. OTHER MONITORING REQUIREMENTS.** Remove Section IX.E.1.a and replace it with the following:

- a. When discharging to surface water and/or producing Title 22 disinfected tertiary recycled water for reclamation/reuse, each Discharger utilizing a UV disinfection system shall monitor the UV disinfection system at Monitoring Location UVS-001 as follows, unless otherwise specified in the Notice of Applicability by the Executive Officer:

Table E-9. UV Disinfection System Monitoring Requirements

Parameter	Units	Sample Type	Monitoring Location	Minimum Sampling Frequency
Flow	MGD	Meter	UVS-001 ¹	Continuous ²
Number of UV banks in operation	Number	Observation	N/A	Continuous ^{2,3,4}
UV Transmittance	Percent (%)	Meter	UVS-001	Continuous ^{2,3,5}
UV Dose	mJ/cm ²	Calculated	N/A	Continuous ^{2,3,6}

- ¹ If specified in the Notice of Applicability, flow monitoring at EFF-001 may be used to satisfy the UVS-001 flow monitoring requirement, provided flow was not diverted or added between UVS-001 and EFF-001.
- ² For continuous analyzers, the Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation. If analyzer(s) fail to provide continuous monitoring for more than two hours and influent and/or effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results.
- ³ The Discharger shall not decrease power settings or reduce the number of UV lamp banks in operation while the continuous analyzers are out of service and water is being disinfected.
- ⁴ Report daily minimum number of UV banks in operation.
- ⁵ Report daily minimum hourly average UV transmittance. The minimum hourly average transmittance shall consist of lowest average transmittance recorded over an hour of a day when flow is being discharged. If the system does not operate for an entire hour interval on a given day or if effluent flow is not discharged for an entire hour, the transmittance will be averaged based on the actual operation time when discharges are occurring.
- ⁶ Report daily minimum hourly average UV dose. The minimum hourly average dose shall consist of lowest hourly average dose provided in any channel that had at least one bank of lamps operating during the hour interval. For channels that did not operate for the entire hour interval or when effluent flow is not discharged for the entire hour, the dose will be averaged based on the actual operation time when discharges occurred.

49. **Attachment E – Monitoring and Reporting Program (MRP), Section IX. OTHER MONITORING REQUIREMENTS.** Remove the text in Section IX.F.1 and Section IX.F.3, replace them with the following respective sections, and insert Section IX.F.4 below Section IX.F.3 as shown below:

1. **Monitoring Frequency.** Samples shall be collected from the effluent (Monitoring Location EFF-001) twice during the permit term, with all the sampling completed during the 2nd year after the effective date of the Notice of Applicability or as specified in the Notice of Applicability, and analyzed for the constituents listed in Table E-10, below. Constituents shall be collected and analyzed consistent with the Discharger's Analytical Methods Report (MRP, X.D.2) using sufficiently sensitive analytical methods and Reporting Levels per the SSM Rule (see also General Monitoring Provision F). Samples shall be collected from the upstream receiving water (Monitoring Location RSW-001) once during the permit term, with all the sampling completed during the 2nd year after the effective date of the Notice of Applicability or as specified in the Notice of Applicability, and analyzed for the constituents listed in Table E-10, below. Delta Regional Monitoring Program participants may be relieved from characterization monitoring of the receiving water according to section VIII of the MRP and section VIII.D.1.b of the Fact Sheet. The Executive Officer may specify more frequent monitoring in the Notice of Applicability, including for those Dischargers requesting an exemption to the monitoring requirements for priority pollutants per Section 1.3, Step 8 of the SIP. The results of such monitoring shall be submitted to the Central Valley Water Board with the monthly SMR's. Each individual monitoring event shall provide representative sample results for the effluent and upstream receiving water.
 3. **Sample Type.** All receiving water samples shall be taken as grab samples. Effluent samples shall be taken as described in Table E-10, below, or as specified in the Notice of Applicability. A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.
 4. **Analytical Methods Report Certification.** Prior to beginning the Effluent and Receiving Water Characterization monitoring, the Discharger shall provide a certification acknowledging the scheduled start date of the Effluent and Receiving Water Characterization monitoring and confirming that samples will be collected and analyzed as described in the previously submitted Analytical Methods Report. If there are changes to the previously submitted Analytical Methods Report, the Discharger shall outline those changes. A one-page certification form will be provided by the Central Valley Water Board staff with the Notice of Applicability that the Discharger can use to satisfy this requirement. The certification form shall be submitted electronically via CIWQS submittal by the due date in specified in the Notice of Applicability.
50. **Attachment E – Monitoring and Reporting Program (MRP), Section IX. OTHER MONITORING REQUIREMENTS.** In Table E-10 Effluent and Receiving Water Characterization Monitoring, add "Dissolved Organic Carbon (DOC)⁵" (The Discharger is not required to conduct effluent monitoring for constituents that have already been sampled in a given month, as required in Table E-3, except for hardness, pH, and temperature, which shall be conducted concurrently with the effluent sampling.) under Parameter with the units as mg/L, sample type as a grab, and no maximum reporting level.

51. **Attachment E – Monitoring and Reporting Program (MRP), Section X. REPORTING REQUIREMENTS.** Remove the text in Section X.B.6.c and replace it with the following:
- c. The Discharger shall attach final laboratory reports for all contracted, commercial laboratories, including quality assurance/quality control information, with all its SMR's for which sample analyses were performed or as otherwise specified in the Notice of Applicability. Bench sheets are not required but should be available upon request by Regional Board staff.
52. **Attachment E – Monitoring and Reporting Program (MRP), Section X. REPORTING REQUIREMENTS.** Add the “, Dry Creek Wastewater Treatment Plant” in Section X.B.7.j Temperature Receiving Water Limitations after City of Roseville’s “Pleasant Grove Wastewater Treatment Plant”.
53. **Attachment E – Monitoring and Reporting Program (MRP), Section X. REPORTING REQUIREMENTS.** Change the reference to Special Provisions from “VI.C” to “VII.C” in Section X.D.2.
54. **Attachment E – Monitoring and Reporting Program (MRP), Section X. REPORTING REQUIREMENTS.** Remove the text in Section X.D.3 and replace it with the following:
3. **Analytical Methods Report.** The Discharger shall complete and submit an Analytical Methods Report, electronically via CIWQS submittal, by the due date specified in the Notice of Applicability. The Analytical Methods Report shall include the following for each constituent to be monitored in accordance with this Order and the Notice of Applicability: 1) applicable water quality objective, 2) reporting level (RL), 3) method detection limit (MDL), and 4) analytical method. The analytical methods shall be sufficiently sensitive with RLs consistent with the SSM Rule (see also General Monitoring Provision F), and with the Minimum Levels (MLs) in the SIP, Appendix 4. The “Reporting Level or RL” is synonymous with the “Method Minimum Level” described in the SSM Rule. If an RL is not less than or equal to the applicable water quality objective for a constituent, the Discharger shall explain how the proposed analytical method complies with the SSM Rule. Central Valley Water Board staff will provide a tool with the Notice of Applicability to assist the Discharger in completing this requirement. The tool will include the constituents and associated applicable water quality objectives to be included in the Analytical Methods Report.
55. **Attachment E – Monitoring and Reporting Program (MRP), Section X. REPORTING REQUIREMENTS.** Remove the last sentence of Section X.D.5 and replace it with the following:
- An annual report shall be submitted by the due date in the Notice of Applicability and include the following items as specified by the Executive Officer in the Notice of Applicability:

56. **Attachment E – Monitoring and Reporting Program (MRP), Section X. REPORTING REQUIREMENTS.** Remove the Section X.D.5.f and replace it with the following:

If specified in the Notice of Applicability, a report describing the compliance status of each SIU characterized by the descriptions in items iii through vii above shall be submitted for each calendar quarter by the first day of the second month following the end of the quarter. The report shall identify the specific compliance status of each such SIU and shall also identify the compliance status of the POTW with regards to audit/pretreatment compliance inspection requirements. If none of the aforementioned conditions exist, at a minimum, a letter indicating that all industries are in compliance and no violations or changes to the pretreatment program have occurred during the quarter must be submitted. The information required in the fourth quarter report shall be included as part of the annual report due by the annual date specified in the Notice of Applicability. This quarterly reporting requirement shall commence upon issuance of this Order.

57. **Attachment E – Monitoring and Reporting Program (MRP), Section X. REPORTING REQUIREMENTS.** Insert the following as Section X.D.6 below Section X.D.5:

6. **Recycled Water Policy Annual Reports.** In accordance with Section 3 of the Water Quality Control Policy for Recycled Water (Recycled Water Policy) and as specified in the Notice of Applicability, the Discharger shall electronically submit an annual report of monthly data to the State Water Board by 30 April annually covering the previous calendar year using the State Water Board's [GeoTracker website](https://geotracker.waterboards.ca.gov/) (<https://geotracker.waterboards.ca.gov/>). Information for setting up and using the GeoTracker system can be found in the ESI Guide for Responsible Parties document on the State Water Board's website for [Electronic Submittal of Information](https://www.waterboards.ca.gov/ust/electronic_submittal/index.html) (https://www.waterboards.ca.gov/ust/electronic_submittal/index.html).

The annual report to GeoTracker must include volumetric reporting of the items listed in Section 3.2 of the [Recycled Water Policy](https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_oal.pdf) (https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_oal.pdf). A PDF of the upload confirmation from GeoTracker for the Recycled Water Policy Annual Report shall be uploaded into CIWQS to demonstrate compliance with this reporting requirement.

58. **Attachment F – Fact Sheet, Section I. PERMIT INFORMATION.** Insert the following text as Section I.A.1 beneath Section I.A:

1. **2020 Permit Amendment.** On 16 April 2020, the Central Valley Water Board adopted Order R5-2020-0022 amending the Municipal General Order. A summary of the changes are described below:
- a. **Site Specific Zinc WER Study.** The City of Placerville performed a study that determined a site-specific WER of 1.7 for total recoverable and dissolved zinc. This General Order was amended to allow for the CTR criteria and associated

effluent limitations (if necessary) to be calculated using the site-specific WER for the City of Placerville – Hangtown Creek Water Reclamation Facility.

- b. **Implementing New Mercury Water Quality Objectives.** This General Order was amended to include an annual average screening level of 12 ng/L for mercury based on the new water quality objective for fish consumption from the State Water Resources Control Board’s Resolution 2017-0027, Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California - Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions.
- c. **Discharges to Specific Waterbodies.** This General Order was amended to include site-specific effluent limitations for copper and zinc in Tables 13A through 13E and 14A through 14E, respectively, and screening levels for zinc in Table C-6 for discharges to the Sacramento River and its tributaries above the state Highway 32 Bridge at Hamilton City based on respective site-specific water quality objectives in the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, Fifth Edition, May 2018.
- d. **Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS).** As part of the CV-SALTS initiative, the Central Valley Water Board approved a Basin Plan Amendment to incorporate new strategies for addressing ongoing salt and nitrate accumulation in the Central Valley. This General Order was amended to incorporate the following changes based on the Basin Plan Amendment:
 - Revise electrical conductivity effluent limitations for the Tulare Lake Basin based on the updated water quality objectives for the Central Valley Region and require electrical conductivity effluent limits for all Dischargers that are enrolled under the Municipal General Order
 - Remove boron and chloride effluent limitations for the Tulare Lake Basin
 - Remove triggers for a Salinity Evaluation and Minimization Plan
- e. **Recycled Water Policy Annual Reports.** State Water Board Resolution 2018-0057, in part, amends the Recycled Water Policy, section 3 to require monitoring and reporting for wastewater treatment plants that supports evaluation of progress towards recycled water use goals. This General Order is amended to require annual reporting of monthly volumes of influent, wastewater produced, and effluent, including treatment level and discharge type, to Geotracker in acre-feet if specified in the Notice of Applicability for Dischargers that are enrolled under the Municipal General Order based on the requirements in section 3 of the amended Recycled Water Policy.

59. **Attachment F – Fact Sheet, Section IV. APPLICABLE PLANS, POLICIES, AND REGULATIONS.** Insert the following text as Section IV.C.10 below Section IV.C.9:

10. Statewide General Waste Discharge Requirements for Sanitary Sewer

Systems. The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order 2006-0003-DWQ (General Order) on 2 May 2006. The State Water Board amended the MRP for the General Order through Order WQ 2013-0058-EXEC on 6 August 2013. The General Order requires public agencies that own or operate sanitary sewer systems with greater than 1 mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans (SSMP's) and report all sanitary sewer overflows (SSO's), among other requirements and prohibitions.

The Discharger is subject to the requirements of, and must comply with, State Water Board Order 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, as amended by State Water Board Order WQ 2013-0058-EXEC and any subsequent order.

60. **Attachment F – Fact Sheet, Section IV. APPLICABLE PLANS, POLICIES, AND REGULATIONS.** Remove the third sentence of Section IV.D.1 and replace it with the following:

On 6 April 2018, U.S. EPA gave final approval to California's 2014-2016 section 303(d) List of Water Quality Limited Segments.

61. **Attachment F – Fact Sheet, Section V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** Change the reference for Discharge Prohibitions from “III” to “IV” for the respective Discharge Prohibitions in Sections V.A.1 through V.A.5 and remove the text in Section V.A.4 and replace it with the following:

4. **Prohibition IV.D (Average Dry Weather Flow).** This prohibition is based on the site-specific design average dry weather flow treatment capacity rating for the Facility, as specified in the Notice of Applicability, and ensures the Facility is operated within its treatment capacity. Flow is not a pollutant; therefore, including a discharge prohibition in lieu of a site-specific effluent limit for flow, which is an equivalent level of regulation, is not less stringent because compliance with flow as a discharge prohibition will be calculated the same way.

62. **Attachment F – Fact Sheet, Section V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** Remove Section V.B.2.b and replace it with the following:

- b. **Flow.** Effluent limitations for flow are included in this Order and may be specified in the Notice of Applicability to ensure that flows receive adequate treatment in accordance with the design specifications of the wastewater treatment system. If specified in the Notice of Applicability, the average dry weather discharge flow effluent limitation shall be based on the design average dry weather treatment capacity of the facility as specified in the Notice of Intent.

63. **Attachment F – Fact Sheet, Section V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** In Section V.C.3.a.iv, remove the paragraph before Table F-4 Site-Specific Water Effect Ratios for Copper and Zinc and replace it with the following:
- The CTR aquatic life criteria are also expressed as a function of the water effect ratio (WER). In the absence of a site-specific WER, a default WER of 1 was used to calculate the screening levels and effluent limitations for copper. The Central Valley Water Board has approved site-specific WER's for the following Dischargers (see Table F-4). This General Order allows for the CTR criteria and associated effluent limitations (if necessary) for copper to be calculated using the site-specific WER's for these Dischargers. If a Discharger performs studies to determine a site-specific WER, this General Order may be reopened to allow effluent limitations to be modified for that Discharger.
64. **Attachment F – Fact Sheet, Section V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** In Section V.C.3.a.ix, remove the third paragraph and replace it with the following:
- The CTR aquatic life criteria are also expressed as a function of the WER. In the absence of a site-specific WER, a default WER of 1 was used to calculate the screening levels and effluent limitations for zinc. The Central Valley Water Board has approved site-specific WER's for the above Dischargers (see Table F-4). This General Order allows for the CTR criteria and associated effluent limitations (if necessary) for zinc to be calculated using the site-specific WER's for these Dischargers. If a Discharger performs studies to determine a site-specific WER, this General Order may be reopened to allow effluent limitations to be modified for that Discharger.
65. **Attachment F – Fact Sheet, Section V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** Insert the following paragraph, below the Central Valley Region Site-Specific Aluminum Toxicity Data table in Section V.C.3.b.i, as shown below, and add “Applicable Water Quality Objectives” to the beginning of the paragraph below the insertion:
- 2018 U.S. EPA NAWQC.** On 21 December 2018, U.S. EPA finalized updated NAWQC for aluminum in freshwater that reflect the latest science and allow for development of criteria reflecting the impact of local water chemistry on aluminum toxicity to aquatic life. The updated criteria account for the site-specific bioavailability of aluminum in receiving waters, which is dependent on pH, dissolved organic carbon, and hardness. Receiving water monitoring for dissolved organic carbon is not available; therefore, sufficient data is not available to calculate updated applicable aluminum criteria for the receiving water. In addition to pH and hardness, this Order establishes effluent and receiving water monitoring requirements for dissolved organic carbon to collect sufficient data for calculating future site-specific freshwater aluminum criteria in accordance with the 2018 NAWQC.

66. **Attachment F – Fact Sheet, Section V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** Remove Section V.C.3.b.xii and replace it with the following:

(a) **All Dischargers.** The Basin Plans contain a chemical constituent objective that incorporates state MCL’s, contain a narrative objective, and contain numeric water quality objectives for certain specified water bodies for electrical conductivity, total dissolved solids, sulfate, and chloride. The U.S. EPA Ambient Water Quality Criteria for Chloride recommends acute and chronic criteria for the protection of aquatic life. There are no U.S. EPA water quality criteria for the protection of aquatic life for electrical conductivity, total dissolved solids, and sulfate. Additionally, there are no U.S. EPA numeric water quality criteria for the protection of agricultural, livestock, and industrial uses. Numeric values for the protection of these uses are typically based on site specific conditions and evaluations to determine the appropriate constituent threshold necessary to interpret the narrative chemical constituent Basin Plan objective. The Central Valley Water Board must determine the applicable numeric limit to implement the narrative objective for the protection of agricultural supply. The Central Valley Water Board adopted a Basin Plan Amendment on 31 May 2018, which established a Salt Control Program for the Central Valley. The Basin Plan Amendment was approved by the State Water Board on 16 October 2019 and Office of Administrative Law on 15 January 2020 and is pending approval by the U.S. EPA.

Table F-5. Salinity Water Quality Criteria/Objectives

Parameter	Agricultural Water Quality Objective ¹	Secondary MCL ^{2,3}	U.S. EPA NAWQC
Electrical Conductivity (µmhos/cm) OR Total Dissolved Solids (mg/L)	Varies	900, 1600, 2200 (EC) OR 500, 1000, 1500 (TDS)	N/A
Sulfate (mg/L)	Varies	250, 500, 600	N/A
Chloride (mg/L)	Varies	250, 500, 600	860 1-hour 230 4-day

¹ Narrative chemical constituent objective of the Basin Plan. Procedures for establishing the applicable numeric limitation to implement the narrative objective can be found in the Policy for Application of Water Quality Objectives, Section 4.2.2.1.9 of the Basin Plan. However, the Basin Plan does not require improvement over naturally occurring background concentrations. In cases where the natural background concentration of a particular constituent exceeds an applicable water quality objective, the natural background concentration will be considered to comply with the objective.

² The Secondary MCL’s are stated as a recommended level, upper level, and a short-term maximum level.

³ The Secondary MCL’s objectives are specified total dissolved solids or electrical conductivity in addition to sulfate and chloride per the Basin Plan.

- (1) **Chloride.** The Secondary MCL for chloride is 250 mg/L, as a recommended level, 500 mg/L as an upper level, and 600 mg/L as a short-term maximum.
- (2) **Electrical Conductivity or Total Dissolved Solids.** The Secondary MCL for electrical conductivity is 900 µmhos/cm as a recommended level, 1600 µmhos/cm as an upper level, and 2200 µmhos/cm as a short-term maximum or for total dissolved solids is 500 mg/L as a recommended level, 1000 mg/L as an upper level, and 1500 mg/L as a short-term maximum.
- (3) **Sulfate.** The Secondary MCL for sulfate is 250 mg/L as a recommended level, 500 mg/L as an upper level, and 600 mg/L as a short-term maximum.

Attachment C includes a screening level for electrical conductivity of 1600 µmhos/cm based on the Secondary MCL. The Secondary MCL is derived from human welfare considerations (e.g., taste, odor, laundry staining), not for toxicity. Secondary MCL's are drinking water standards contained in Title 22 of the California Code of Regulations. Title 22 requires compliance with these standards on an annual average basis, when sampling at least quarterly. To be consistent with how compliance with the standards is determined, the Central Valley Water Board will conduct the RPA for salinity for waters with the MUN use in the Sacramento and San Joaquin River Basins by comparing the maximum observed calendar year annual average effluent electrical conductivity concentration to the screening level.

Under the State Anti-Degradation Policy, the waste discharge requirements must result in the best practicable treatment or control (BPTC) of the discharge necessary to ensure that (a) a pollution or nuisance will not occur; and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained. Therefore, due to the region-wide concerns regarding salinity and to ensure compliance with the antidegradation requirements, the Executive Officer will specify a performance-based effluent limitation based on the maximum observed calendar year annual average electrical conductivity of the effluent in the Notice of Applicability.

Electrical conductivity is an indicator parameter for salinity, and controlling electrical conductivity should ensure compliance with objectives for other salinity parameters. Therefore, this Order does not include effluent limitations for chloride, sulfate, or total dissolved solids.

In order to ensure that all Dischargers will continue to control the discharge of salinity, this Order includes a requirement to implement a Salinity Evaluation and Minimization Plan that may be required in the Notice of Applicability to ensure compliance with the antidegradation requirements. This General Order also requires water supply monitoring to evaluate the relative contribution of salinity from the source water to the effluent.

67. **Attachment F – Fact Sheet, Section V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** In Section V.C.4.a, remove “boron, chloride, ”.

68. **Attachment F – Fact Sheet, Section V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** Remove Section V.C.4.c and replace it with the following:
- c. **Basin Plan Objectives and MCL's.** For nitrate plus nitrite and nitrite, the Primary MCL is applied directly as an AMEL and an AWEL is calculated using an AWEL/MDEL multiplier (see Attachment G). For other constituents of concern based on Primary and Secondary MCL's, an AMEL is calculated by multiplying the Secondary MCL by the AMEL multiplier from the SIP and an AWEL is calculated using the AWEL/AMEL multiplier where the AWEL multiplier is based on a 98th percentile occurrence probability and the AMEL multiplier is from Table 2 of the SIP (see Attachment G).
69. **Attachment F – Fact Sheet, Section V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** Remove Section V.C.4.d that includes the text shown below and update the subsequent section lettering as necessary:
- d. **Basin Plan Limits.** The Tulare Lake Basin Plan includes effluent limitations for discharges to surface water for boron and chloride. These limitations are included as average monthly limitations in this Order. The statistical procedures included in the SIP and TSD are for calculating WQBELs from water quality objectives/criteria. Therefore, since the Basin Plan specifies limitations, not objectives, for these constituents it is impracticable to statistically develop other limitations.
70. **Attachment F – Fact Sheet, Section V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS.** In Section V.D.3.a.i, change the reference for the Clean Water Act (CWA) section from “304(d)(4)(A)” to the correct reference “303(d)(4)(A)”.
71. **Attachment F – Fact Sheet, Section VII. RATIONALE FOR PROVISIONS.** Remove Section VII.B.3.c and replace it with the following:
- a. **Salinity Evaluation and Minimization Plan.** A Salinity Evaluation and Minimization Plan is required to be implemented in this General Order to ensure adequate measures are developed and implemented by the Dischargers to reduce the discharge of salinity to receiving waters. If specified in the Notice of Applicability, the Discharger will be required to submit and implement a Salinity Evaluation and Minimization Plan if one has not already been submitted.
72. **Attachment F – Fact Sheet, Section VIII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS.** After the second sentence of Section VIII, begin a new paragraph. Insert the following text as a new paragraph after the first paragraph:
- Water Code section 13176, subdivision (a)(1) requires that laboratory analyses shall be performed by laboratories accredited by the State Water Resources Control Board, Division of Drinking Water, which accredits laboratories through its Environmental Laboratory Accreditation Program (ELAP). Data generated using

field tests are exempt from this requirement pursuant to Water Code Section 13176, subdivision (a)(2).

73. **Attachment F – Fact Sheet, Section VIII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS.** Remove Section VIII.B.4 that includes the text shown below:

4. Water Code section 13176, subdivision (a), states: “The analysis of any material required by [Water Code sections 13000-16104] shall be performed by a laboratory that has accreditation or certification pursuant to Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code.” The DDW certifies laboratories through its Environmental Laboratory Accreditation Program (ELAP).

Section 13176 cannot be interpreted in a manner that would violate federal holding time requirements that apply to NPDES permits pursuant to the federal CWA. (Wat. Code §§ 13370, subd. (c), 13372, 13377.) Section 13176 is inapplicable to NPDES permits to the extent it is inconsistent with CWA requirements. (Wat. Code § 13372, subd. (a).) The federal maximum holding time is 15 minutes for chlorine residual, dissolved oxygen, pH, and other constituents as listed in the Notice of Applicability, and immediate analysis is required for temperature. (40 C.F.R. § 136.3(e), Table II) Due to the location of some facilities and their distance from certified laboratories, it is factually impossible for the Discharger to comply with both Water Code section 13176 and the federal requirements for constituents with short holding times. In this situation Water Code section 13176(a) is inapplicable.

74. **Attachment F – Fact Sheet, Section VIII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS.** Insert the following text at the end of Section VIII.E.1 as a new paragraph:

Biosolids monitoring is required to ensure compliance with pretreatment requirements contained in C.F.R. part 403 and implemented in Section VI.C.5.a of this Order and as specified in the Notice of Applicability. Biosolids monitoring is required per U.S. EPA guidance to evaluate the effectiveness of the pretreatment program.

75. **Attachment F – Fact Sheet, Section VIII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS.** Insert the following text as Section VII.E.7 below Section VII.E.6 as shown below:

7. Recycled Water Policy Annual Reports

On 11 December 2018, the State Water Board adopted Resolution 2018-0057, which amends the Recycled Water Policy, section 3, to require wastewater and recycled water dischargers to annually report monthly volumes of influent, wastewater produced, and effluent, including treatment level and discharge type. Therefore, to incorporate monitoring and reporting required by the Recycled Water Policy, this Order requires annual reporting of wastewater and recycled water use into Geotracker, as specified in the Notice of Applicability.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date that this Order becomes final, except that if the thirtieth day following the date that this Order becomes final falls on a Saturday, Sunday, or state holiday (including mandatory furlough days), the petition must be received by the State Water Board by 5:00 p.m. on the next business day.

[Links to the laws and regulations applicable to filing petitions](#)

(http://www.waterboards.ca.gov/public_notices/petitions/water_quality) may be found on the Internet or will be provided upon request.

I, PATRICK PULUPA, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 16 April 2020.

PATRICK PULUPA, Executive Officer