



Central Valley Regional Water Quality Control Board

11 June 2026

Philip Howard
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United Auburn Indian Community
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NOTICE OF APPLICABILITY (NOA); MUNICIPAL WASTEWATER DISCHARGERS THAT MEET OBJECTIVES/CRITERIA AT THE POINT OF DISCHARGE TO SURFACE WATER ORDER R5-2023-0025 (MUNICIPAL GENERAL ORDER), NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CAG585001; UNITED AUBURN INDIAN COMMUNITY, THUNDER VALLEY CASINO WASTEWATER TREATMENT PLANT, PLACER COUNTY

Our office received a Notice of Intent (NOI) dated 30 January 2025 from United Auburn Indian Community (Discharger), for discharge of tertiary treated domestic wastewater to surface water from the Thunder Valley Casino Wastewater Treatment Plant (Facility) to Orchard Creek. The Municipal General Order requires the submittal of an NOI to apply for regulatory coverage of a surface water discharge. Based on the NOI and subsequent information submitted by the Discharger, staff have determined that the NOI requirements have been fulfilled and the Facility is eligible to retain coverage under the Municipal General Order. This Facility's discharge is assigned Municipal General Order Enrollee Number R5-2023-0025-017 under NPDES Permit CAG585001. Please reference your Municipal General Order Enrollee Number, **R5-2023-0025-017**, in your correspondence and submitted documents.

Discharges to surface water from the Facility are currently regulated by the Municipal General Order R5-2017-0085-02 through an NOA issued by the Executive Officer on 15 December 2020, Municipal General Order Enrollee Number R5-2017-0085-014 (NOA R5-2017-0085-014). This NOA, Enrollee Number R5-2023-0025-017 (NOA R5-2023-0025-017), authorizing coverage under the 2023 Municipal General Order, shall become effective on **1 July 2026**, at which time the terms and conditions in NOA R5-2017-0085-014 and General Order R5-2017-0085-02 will cease to be effective except for enforcement purposes. To meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements contained in the 2023 Municipal General Order and as specified in this NOA R5-2023-0025-017. This action in no way prevents the Central Valley Water Board from taking enforcement action for past violations of NOA R5-2017-0085-014.

NICHOLAS AVDIS, CHAIR | PATRICK PULUPA, EXECUTIVE OFFICER

The enclosed [Municipal General Order](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2023-0025.pdf) is available online (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2023-0025.pdf) and can be requested by email or phone from the [NPDES Permitting Contacts webpage](https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/contacts/) (https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/contacts/). You are urged to familiarize yourself with the entire contents of the enclosed document.

The Monitoring and Reporting Program, Attachment E to the Municipal General Order, contains the general monitoring and reporting requirements. The Discharger specific monitoring and reporting requirements are included within this NOA R5-2023-0025-017 as Appendix D. **Only the monitoring and reporting requirements specifically listed in Appendix D of this NOA R5-2023-0025-017 are applicable to this Facility**

The discharge of treated domestic wastewater shall be in accordance with the requirements contained in the Municipal General Order, as specified in this NOA R5-2023-0025-017.

Table 1. Facility Information

| | |
|--|--|
| WDID | 5A31NP00001 |
| CIWQS Facility Place ID | 206730 |
| Discharger | United Auburn Indian Community |
| Name of Facility | Thunder Valley Casino Wastewater Treatment Plant |
| Facility Street Address | 1200 Athens Avenue |
| Facility City, State, Zip Code | Lincoln, CA 95648 |
| Facility County | Placer County |
| Facility Contact, Title and Phone | Philip Howard, Chief Engineer, (916) 408-7777 |
| Authorized Person to Sign and Submit Reports | Same as above |
| Mailing Address | Same as Facility address |
| Billing Address | Same as Facility address |
| Type of Facility | Publicly Owned Treatment Works (POTW) |
| Major or Minor Facility | Minor |
| Threat to Water Quality | 1 |
| Complexity | A |
| Pretreatment Program | No |
| Recycling Requirements | Not Applicable |
| Facility Design Average Dry Weather Flow (ADWF) | Current Facility: 0.70 Million Gallons Per Day (MGD) Upgraded Facility: 0.875 MGD |
| Permitted ADWF | Current Facility: 0.70 MGD Upgraded Facility: 0.875 MGD |
| Watershed | Lower Sacramento |
| Receiving Water | Orchard Creek |
| Receiving Water Type | Inland surface water |
| Discharge Point 001 | 38° 50' 44" North, 121° 19' 01" West |

I. FACILITY INFORMATION

The Discharger provides sewerage service for the Thunder Valley Casino, a gaming and entertainment facility, and serves a population that fluctuates with the patronage at the Facility. The Facility treats the wastewater collected from the Thunder Valley Casino Resort, Fire Station, onsite laundry, and blowdown generated from the Central Plant that provides heating, ventilation, and air conditioning. Due to the low hardness from water supplied by Placer County Water Agency, the Facility blends high hardness well water with the water supply to increase the potable water hardness and reduce water distribution system corrosion. The design average dry weather flow capacity of the current Facility is 0.70 MGD.

The tertiary treatment system at the Facility consists of the following:

- influent pump station
- headworks (with flow measurement and fine screening)
- four immersed membrane bioreactors (IMBs), each IMB combines an anoxic zone, aeration, clarification, and membrane filtration in a single tank
- ultraviolet light (UV) disinfection

Effluent is discharged at Discharge Point 001 to Orchard Creek or is directed to a recycled water storage tank where it may be used onsite for landscape irrigation on trust land.

Solids collection and disposal consist of the following:

- sludge is pumped as needed directly from the process overflow tank;
- solids are dewatered using the belt filter press unit;
- dewatered solids are stored in a 20-yard bin before they are hauled offsite to a local landfill

In 2010, the design flow of the Facility was expanded to an average dry weather flow of 0.70 MGD; the second phase of the expansion to an average dry weather flow of 0.875 MGD is approved by the Tribe, and Placer County has also agreed to Conditions of Approval; however, the Discharger does not currently plan to expand the Facility in the next five years. The Discharger has also committed to participating in a permanent gravity sewer line project connecting the Facility to the City of Lincoln Wastewater Treatment and Reclamation Facility in accordance with a Memorandum of Understanding (MOU) with the City of Lincoln. The Discharger agreed in the MOU to connect to the gravity sewer line if it becomes available.

II. RECEIVING WATER BENEFICIAL USES

The Facility discharges from Discharge Point 001 to Orchard Creek, a tributary to Auburn Ravine, East Side Canal, Natomas Cross Canal, and the Sacramento River within the Lower Sacramento watershed. According to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basin (Basin Plan) and the Tributary Rule, the following beneficial uses apply to Orchard Creek:

- Municipal and Domestic Supply (MUN)

- Agricultural Supply (AGR)
- Navigation (NAV)
- Water Contact Recreation (REC-1)
- Non-contact Water Recreation (REC-2)
- Warm Freshwater Habitat (WARM)
- Cold Freshwater Habitat (COLD)
- Wildlife Habitat (WILD)
- Migration of Aquatic Organisms (MIGR)
- Spawning, Reproduction, and/or Early Development (SPWN)

According to the Basin Plan, groundwater underlying the Facility is designated with the following existing beneficial uses:

- Municipal and Domestic Supply (MUN);
- Agricultural Supply, including Irrigation and Stock Watering (AGR);
- Industrial Service Supply (IND); and
- Industrial Process Supply (PRO);

III. PROVISIONS AND REQUIREMENTS IMPLEMENTING STATE LAW

Provisions and requirements to implement State law only are included in the following sections of this NOA:

- Groundwater Limitations – section VII.2
- Filtration System Operating Specifications, UV Disinfection System Operating Specifications, and Pond Operating Specifications – section IX.C, Table 3 Special Provision 4

IV. RECEIVING WATER TOTAL MAXIMUM DAILY LOADS (TMDLS)

Orchard Creek is not listed for constituent(s) on the Clean Water Act 303(d) List of impaired water bodies. Therefore, no additional 303(d) based effluent limitations or monitoring requirements are included in this NOA.

V. DISCHARGE PROHIBITIONS

Discharge prohibitions are contained in section IV of the Municipal General Order. Only the discharge prohibitions listed below are applicable to this Facility.

- A. The discharge of wastes, other than those described in section I.A and meeting the eligibility criteria in section I.B of the Municipal General Order, is prohibited unless the Discharger obtains coverage under another general or individual Order that regulates the discharge of such wastes. (see Municipal General Order section IV.A)
- B. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Federal Standard Provisions sections I.G. and I.H in Attachment D, Standard Provisions, of the Municipal General Order. (see Municipal General Order section IV.B)

- C. Neither the discharge nor its treatment shall create a nuisance as defined in section 13050 of the Water Code. (see Municipal General Order section IV. C)
- D. **Average Dry Weather Flow.** Discharges exceeding an average dry weather flow of 0.70 million gallons per day (MGD) are prohibited. (see Municipal General Order section IV.D)

VI. EFFLUENT LIMITATIONS

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001. Effluent limitations are provided in the Municipal General Order. Only the effluent limitations listed below in Table 2 and items 1 through 3 are applicable to this Facility. Unless otherwise specified in this NOA, compliance shall be measured at Monitoring Location EFF-001, as described in the Monitoring and Reporting Program (MRP), Appendix D of this NOA.

The Discharger shall maintain compliance with the effluent limitations specified in Table 2 and items 1 through 3.

Table 2. Effluent Limitations

| Parameter | Units | Average Monthly | Average Weekly | Maximum Daily |
|--|-----------------------------|-----------------|----------------|---------------|
| Biochemical Oxygen Demand (5-day @ 20°Celsius) (BOD ₅) | milligrams per liter (mg/L) | 10 | 15 | -- |
| Total Suspended Solids (TSS) | mg/L | 10 | 15 | -- |
| Ammonia Nitrogen, Total (as N) | mg/L | 2.0 | 4.6 | -- |
| Nitrate plus Nitrite, Total (as N) | mg/L | 10 | 14 | -- |
| Dichlorobromomethane | µg/L | 0.6 | -- | 1.1 |

1. **pH.** The pH shall at all times be within the range of 6.5 and 8.5.
2. **Percent Removal.** The average monthly percent removal of BOD₅ and TSS shall not be less than 85 percent.
3. **Total Coliform Organisms.** (Measured at UVS-001). Effluent total coliform organisms shall not exceed:
 - i. 2.2 most probable number per 100 milliliters (MPN/100 mL), as a 7-day median;
 - ii. 23 MPN/100 mL, more than once in any 30-day period; and
 - iii. 240 MPN/100 mL, at any time.

VII. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations.

Receiving water limitations for surface water are contained in section VI.A of the Municipal General Order. Based on the information provided in the NOI, only the following receiving water limitations listed in Municipal General Order (section number given below) are applicable to this Facility.

- Biostimulatory Substances (VI.A.3);
- Chemical Constituents (VI.A.4);
- Color (VI.A.5);
- Dissolved Oxygen (VI.A.6.a);
- Floating Material (VI.A.7);
- Oil and Grease (VI.A.8);
- pH (VI.A.9.a);
- Pesticides (VI.A.10.a and b);
- Radioactivity (VI.A.11);
- Suspended Sediments (VI.A.12);
- Settleable Substances (VI.A.13);
- Suspended Material (VI.A.14);
- Taste and Odors (VI.A.15);
- Temperature (VI.A.16.a);
- Toxicity (VI.A.17); and
- Turbidity (VI.A.18.a).

B. Groundwater Limitations

Release of waste constituents from any storage, treatment, or disposal component associated with the Facility shall not cause the underlying groundwater to contain waste constituents in concentrations greater than background water quality or groundwater quality objectives, whichever is greater.

VIII. MONITORING AND REPORTING

Monitoring and reporting program requirements are contained in Appendix D of this NOA.

IX. PROVISIONS

Provisions are contained in section VII of the Municipal General Order and the applicable provisions are referenced below:

A. Standard Provisions.

Applicable to all Dischargers.

B. Monitoring and Reporting Program Requirements.

The MRP applicable to this Facility is contained in Appendix D of this NOA R5-2023-0025-017.

C. Special Provisions.

Special Provisions are contained in section VII.C of the Municipal General Order. Only the following Special Provision sections from the Municipal General Order apply to this Facility, as specified in Table 3 below:

Table 3: Summary of Applicable Special Provisions

| Special Provision | Section Reference |
|--|--|
| 1. Reopener Provisions | a. Major Modification of the Municipal General Order c. Water Effect Ratios (WERs) and Metal Translators |
| 2. Special Studies, Technical Reports and Additional Monitoring Requirements | b. Cyanide Constituent Study. The study includes a quarterly monitoring (1/Quarter) sampling schedule at minimum for cyanide starting 1 July 2026 and concluding on 30 June 2028 ; followed by a report of its findings submitted electronically via CIWQS submittal by the due date specified in Table D-8 of this NOA. |
| 3. Best Management Practices and Pollution Prevention | b. Salinity Evaluation and Minimization Plan (SEMP) for the Alternative Salinity Permitting Approach. Annual average electrical conductivity trigger of 1100 µmhos/cm. |
| 4. Construction, Operation and Maintenance Specifications | a.ii. Filtration System – Membrane Filtration Systems b.i.(b). UV Disinfection System – Dose b.ii.(b). UV Disinfection System – Transmittance b.iii-vi. UV Disinfection System – General |
| 5. Special Provisions for Municipal Facilities | b. Sludge/Biosolids Treatment or Discharge Specifications |
| 6. Other Special Provisions | a. Title 22, or Equivalent, Disinfection Requirements |
| 7. Compliance Schedules | Not applicable |

D. Facility Expansion. The Discharger is planning a Facility expansion and has conducted the necessary antidegradation analyses to allow the increased flow rate to Orchard Creek, which was authorized in Order R5-2010-0005. To request an increase in discharge flow, the Discharger shall submit the following to the Central Valley Water Board:

- A revised Notice of Intent; and
- A report certified by a registered and licensed Civil Engineer that the Facility has appropriate treatment capacity to the new design average dry weather flow rate up to 0.875 MGD.

The permitted flow increase shall not be effective until this NOA is modified to reflect the increase in flow and is signed into effect by the Executive Officer.

X. COMPLIANCE DETERMINATION

Compliance determination language is contained and more fully described in section VIII of the Municipal General Order. Additional reporting requirements are included in section X of the MRP, Appendix D. Only the following compliance determination sections from the Municipal General Order apply to this Facility:

- BOD₅ and TSS Effluent Limitations (VIII.A);
- Average Dry Weather Flow Effluent Prohibition (VIII.E);
- Total Coliform Organisms Effluent Limitations (VIII.F);

- Effluent Limitations (VIII.I);
- Dissolved Oxygen Receiving Water Limitation (VIII.J);
- Chronic Whole Effluent Toxicity Effluent Trigger (VIII.K.2); and
- Turbidity Receiving Water Trigger (VIII.P).

XI. ANTI-BACKSLIDING REQUIREMENTS

Anti-backsliding requirements are specified in the Municipal General Order, section V.D.3, Attachment F (Fact Sheet). Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 Code of Federal Regulations (C.F.R.) section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

Effluent limitations for acute toxicity, electrical conductivity, and ammonia are less stringent than prescribed in the NOA R5-2017-0085-014. A more detailed anti-backsliding analysis is provided in Appendix C to this NOA R5-2023-0025-017 in section II.A Satisfaction of Anti-Backsliding Requirements, the relaxation of effluent limitations meets the exceptions provided in the federal anti-backsliding regulations.

XII. ANTIDegradation REQUIREMENTS

Antidegradation requirements are specified in the Municipal General Order, section V.D.4, Attachment F (Fact Sheet). This NOA R5-2023-0025-017 does not allow an increase in flow or mass of pollutants to the receiving water and the relaxation of effluent limitations for acute toxicity is consistent with the antidegradation provisions of 40 C.F.R. 131.12 and State Water Board Resolution 68-16.

A more detailed discussion of antidegradation is provided in Appendix C to this NOA R5-2023-0025-017, section II.B Antidegradation Policies.

XIII. RATIONALE FOR LIMITATIONS AND MONITORING REQUIREMENTS

Additional rationale for limitations and monitoring requirements is included in Attachment F, section V (Rationale for Effluent Limitations and Discharge Specifications), of the Municipal General Order and Appendix C of this NOA R5-2023-0025-017.

XIV. ENFORCEMENT

Failure to comply with the applicable requirements of the Municipal General Order, as specified in this NOA R5-2023-0025-017, may result in enforcement actions, which could include civil liability (penalties). Effluent limitation violations may be subject to a Mandatory Minimum Penalty (MMP) of \$3,000 per violation. In addition, late monitoring reports may be subject to MMPs and/or discretionary penalties of up to \$1,000 per day late. If discharges do not occur during any report monitoring period, the Discharger must still submit the monitoring report indicating that no discharge occurred to avoid being subject to enforcement actions.

XV. COMMUNICATION

Until this NOA R5-2023-0025-017 becomes effective on 1 July 2026, you will need

to comply with the effluent limitations, and monitoring and reporting requirements, contained in NOA R5-2017-0085-014. For your monthly SMRs, you will need to demonstrate compliance with NOA R5-2017-0085-014, through 30 June 2026. You will need to demonstrate compliance with this NOA R5-2023-0025-017 beginning 1 July 2026.

The Central Valley Water Board is implementing a Paperless Office system to reduce our paper use, increase efficiency, and provide a more effective way for our staff, the public, and interested parties to view documents in electronic form. Therefore, the Discharger is required to submit all self-monitoring, technical, and progress reports required by this NOA R5-2023-0025-017 via California Integrated Water Quality System (CIWQS) submittal. In general, if any monitoring data for a monitoring location can be submitted using a computable document format (CDF) file upload, then it should be submitted as a CDF file upload, such as characterization monitoring data. However, certain parameters that cannot be uploaded to the CIWQS data tables, such as Annual Operations Reports, should be uploaded as a Portable Document Format (PDF), Microsoft Word, or Microsoft Excel file attachment. Also, please upload or enter a cover letter summarizing the content of the report to the submittal tab of the CIWQS module for each submittal.

All other documents not required to be submitted via CIWQS shall be converted to a searchable PDF and submitted by email to centralvalleysacramento@waterboards.ca.gov. Please include the following information in the body of the email:

- Attention: NPDES Compliance and Enforcement Section
- Discharger: United Auburn Indian Community
- Facility: Thunder Valley Casino Wastewater Treatment Plant
- County: Placer County
- CIWQS Place ID: 206730

Documents that are 50 megabytes or larger must be transferred to a DVD or flash drive, and mailed to our office, attention "ECM Mailroom-NPDES".

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 California Water Code section 13320 and California Code of Regulations, Title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date this NOA R5-2023-0025-017 is issued, except that if the thirtieth day following the date this NOA R5-2023-0025-017 is issued falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. [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.

Now that your NOA R5-2023-0025-017 has been issued, the Central Valley Water Board's Compliance and Enforcement Section will take over management of your case. Paul Wadding of the Compliance and Enforcement section is your point of contact for any questions regarding this NOA R5-2023-0025-017. If you find it necessary to make a change to your permitted operations, you will be directed to the appropriate Permitting

staff. You may contact Paul Wadding by phone at (916) 464-4826 or email at Paul.Wadding@waterboards.ca.gov.

Patrick Pulupa
Executive Officer

Appendices:

Appendix A – Location Map
Appendix B – Flow Schematic
Appendix C – Supplemental Fact Sheet
Appendix D – Monitoring and Reporting Program
Appendix E – Determination of WQBELs

Enclosures:

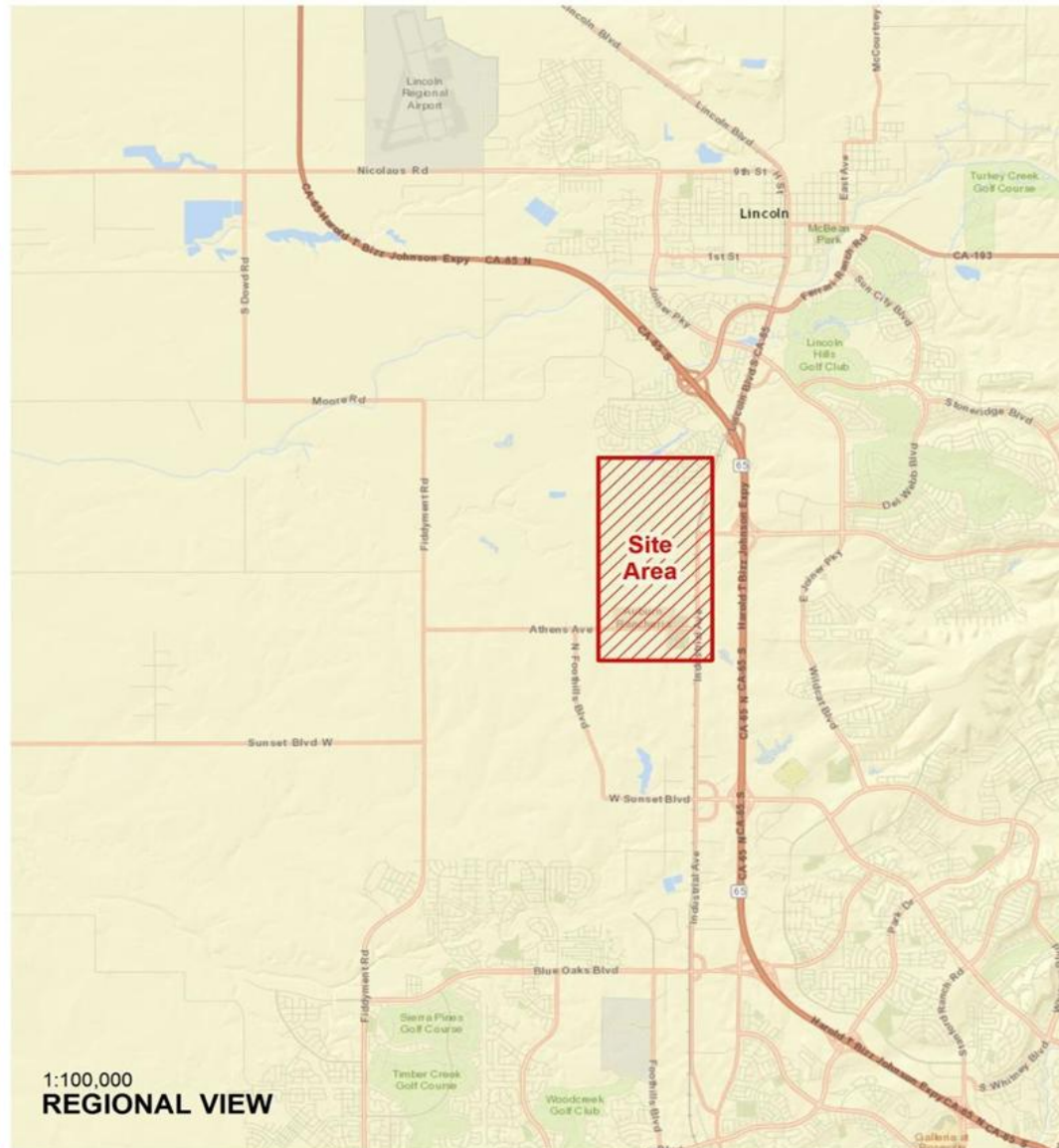
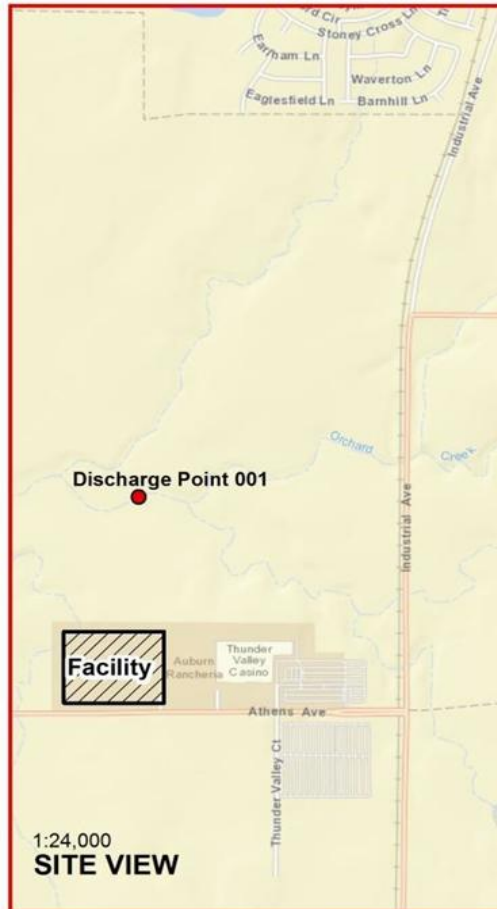
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cc:

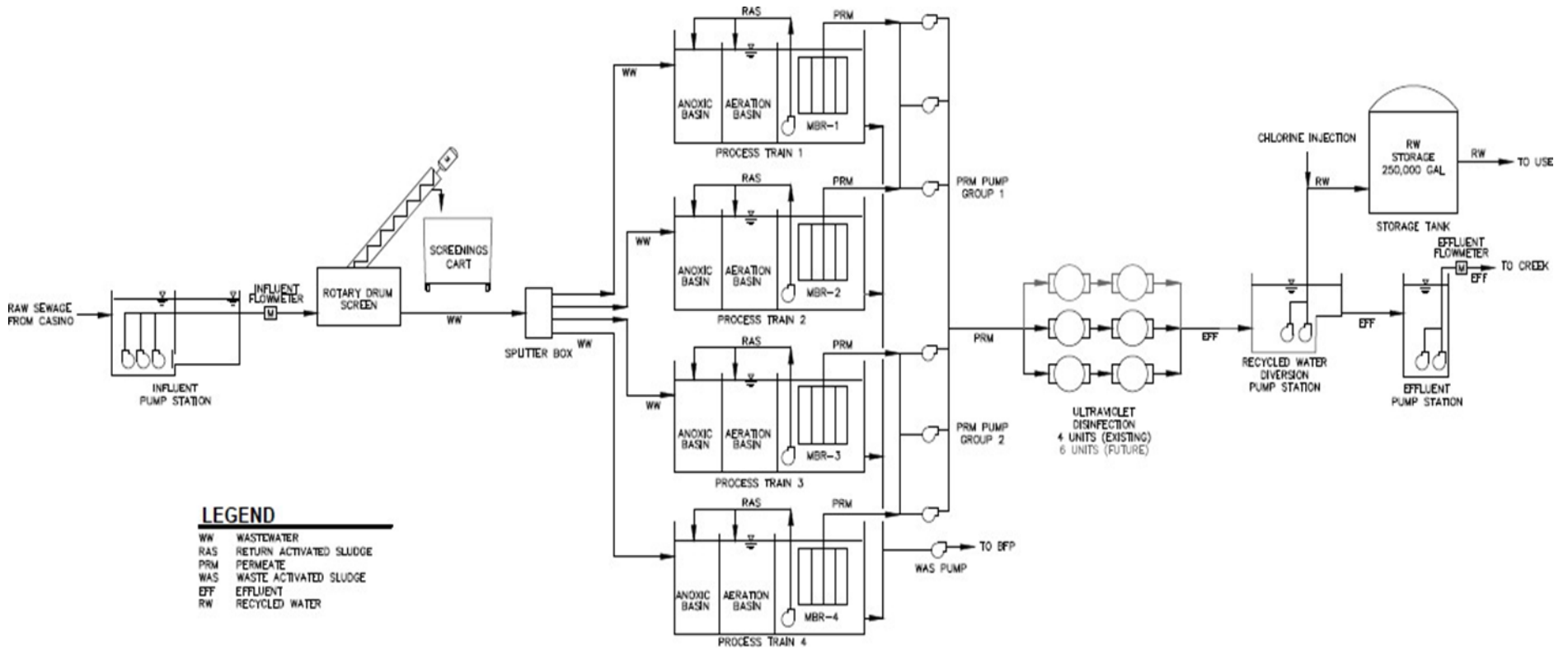
Peter Kozelka, U.S. EPA, Region IX, San Francisco (email only)
Prasad Gullapalli, U.S. EPA Region IX, San Francisco (email only)
Afrooz Farsimadan, California State Water Resources Control Board (email only)
Renan Jauregui, California State Water Resources Control Board (email only)
Jarma Bennett, California State Water Resources Control Board (email only)
Discharge Monitoring Reports, California State Water Resources Control Board (via email at dmr@waterboards.ca.gov)
Chron File (RB5S-chron@Waterboards.ca.gov)
Xuan Luo, Central Valley Water Board, Rancho Cordova (email only)
Debbie Mackey, Central Valley Clean Water Association, Grass Valley (email only)

APPENDIX A – LOCATION MAP

United Auburn Indian Community
**Thunder Valley Casino
Wastewater Treatment Plant**
NPDES Permit No. CA0084697



APPENDIX B – FLOW SCHEMATIC



APPENDIX C – SUPPLEMENTAL FACT SHEET

I. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this NOA R5-2023-0025-017 are based on the requirements and authorities described in Attachment F, section III of the Municipal General Order. In addition to the Fact Sheet contained in the Municipal General Order, the Central Valley Water Board incorporates this Supplemental Fact Sheet as findings of the Central Valley Water Board supporting the issuance of this NOA R5-2023-0025-017.

A. Tribal Council Resolution 1-26-10-01 Approving a Limited Waiver of Sovereign Immunity.

As described in Order R5-2010-0005, the Tribal Council for the United Auburn Indian Community adopted Resolution 1-26-10-01 on 26 January 2010, recognizing Order R5-2010-0005 as a legal and binding obligation of the Discharger and acknowledging and consenting to a Limited Waiver of Sovereign Immunity. Tribal Council Resolution 1-26-10-01 includes any subsequent renewals or revisions thereof, thus including this NOA.

II. RATIONALE FOR EFFLUENT LIMITATIONS

A. Cyanide

Sampling conducted during effluent and receiving water characterization monitoring detected total cyanide at a concentration of 6.0 µg/L in the 12 December 2022 effluent sample, which exceeds the applicable water quality criterion of 5.2 µg/L and resulted in a finding of reasonable potential. Cyanide did not exhibit reasonable potential in effluent samples collected on 17 January 2022, 24 October 2022, and 29 March 2023. The 12 December 2022 detection also occurred in the upstream receiving water sample collected on the same date, suggesting the potential for laboratory or sample collection contamination. Attachment F of the Municipal General Order provides the Central Valley Water Board discretion to require additional monitoring or evaluation where there are indications that a discharge may contain a pollutant at concentrations that have reasonable potential to cause or contribute to an exceedance of water quality objectives.

Based on the limited occurrence of the elevated cyanide concentration, the absence of reasonable potential in other sampling events, and the concurrent upstream detection on 12 December 2022, this NOA requires the Discharger to complete a Cyanide Constituent Study to determine the presence of cyanide in the effluent and Orchard Creek along with potential effects on Orchard Creek. The Cyanide Constituent Study includes a **quarterly monitoring (1/quarter)** sampling schedule at minimum for cyanide starting **1 July 2026** and concluding on **30 June 2028**; followed by a report of its findings submitted electronically via CIWQS submittal by the due date specified in Table D-8 of this NOA. Based on the results of the study, Central Valley Water Board staff will determine if this NOA R5-2023-0025-017 will be reopened and effluent limitations added for cyanide.

III. FINAL EFFLUENT LIMITATION CONSIDERATIONS

A. Satisfaction of Anti-Backsliding Requirements

The Clean Water Act specifies that a revised permit may not include effluent limitations that are less stringent than the previous permit unless a less stringent limitation is justified based on exceptions to the anti-backsliding provisions contained in CWA sections 402(o) or 303(d)(4), or, where applicable 40 Code of Federal Regulations (C.F.R.) section 122.44(l).

The effluent limitations in this NOA R5-2023-0025-017 are at least as stringent as the effluent limitations in the Facility's NOA R5-2017-0085-014, with the exception of effluent limitations for acute toxicity, electrical conductivity, and ammonia. This NOA establishes monitoring for chronic toxicity, which protects against acute and chronic toxicity. This relaxation and/or removal of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

1. **CWA section 402(o)(1) and 303(d)(4).** CWA section 402(o)(1) prohibits the establishment of less stringent water quality-based effluent limits (WQBELs) "except in compliance with section 303(d)(4)." CWA section 303(d)(4) has two parts: paragraph (A) which applies to nonattainment waters and paragraph (B) which applies to attainment waters.
 - a. For waters where standards are not attained, CWA section 303(d)(4)(A) specifies that any effluent limit based on a TMDL or other waste load allocation (WLA) may be revised only if the cumulative effect of all such revised effluent limits based on such TMDLs or WLAs will assure the attainment of such water quality standards.
 - b. For attainment waters, CWA section 303(d)(4)(B) specifies that a limitation based on a water quality standard may be relaxed where the action is consistent with the antidegradation policy.

Orchard Creek is considered an attainment water for acute toxicity, electrical conductivity, and ammonia because it is not listed as impaired on the 303(d) list for these constituents. The exceptions in section 303(d)(4) address both waters in attainment with water quality standards and those not in attainment, i.e., waters on the section 303(d) impaired waters list (State Water Resources Control Board Order WQ-2008-0006, Berry Petroleum Company, Poso Creek/McVan Facility). As discussed below, relaxation of the ammonia effluent limitations and removal of the acute toxicity and electrical conductivity effluent limitations complies with federal and state antidegradation requirements. Thus, relaxation and/or removal of these effluent limitations meets the exception in CWA section 303(d)(4)(B).

2. **CWA section 402(o)(2).** CWA section 402(o)(2) provides several exceptions to the anti-backsliding regulations. CWA 402(o)(2)(B)(i) allows a renewed, reissued, or modified permit to contain a less stringent effluent limitation for a pollutant if information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.

Updated information that was not available at the time NOA R5-2017-0085-014 was issued indicates that acute toxicity and electrical conductivity do not exhibit

reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water and new information supports relaxed effluent limitations for ammonia. The updated information that supports the removal of the effluent limitations for acute toxicity and electrical conductivity and relaxation of ammonia effluent limitations:

- a. **Acute Toxicity.** Acute toxicity testing performed from January 2022 through January 2025 resulted in 100% survival of the test species (rainbow trout); therefore, the discharge does not show reasonable potential to cause acute toxicity in the receiving water.
- b. **Ammonia.** The ammonia effluent limitations have been revised based on new pH and temperature data used for the calculation of the ammonia water quality criteria that was not available at the time of issuance of the previous NOA.
- c. **Electrical Conductivity.** Monitoring data collected over the permit term for NOA R5-2017-0085-014 indicates that electrical conductivity in the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of the respective water quality objectives/criteria.

Thus, removal of the effluent limitations for acute toxicity and electrical conductivity and relaxation of the ammonia effluent limitations in this NOA R5-2023-0025-017 is in accordance with CWA section 402(o)(2)(B)(i), which allows for the relaxation or removal of effluent limitations based on information that was not available at the time NOA R5-2017-0085-014 was issued.

B. Antidegradation Policies

This NOA R5-2023-0025-017 does not allow for an increase in flow or mass of pollutants to the receiving water. Therefore, a complete antidegradation analysis is not necessary. This NOA R5-2023-0025-017 requires compliance with applicable federal technology-based standards and with WQBELs where the discharge could have the reasonable potential to cause or contribute to an exceedance of water quality standards. The permitted discharge is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and the State Anti-Degradation Policy. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The impact on existing water quality will be insignificant.

This NOA R5-2023-0025-017 relaxes or removes effluent limitations for ammonia, acute toxicity, and electrical conductivity. Based on Facility performance, the relaxation or removal of these effluent limitations is not expected to result in an increase in pollutants concentration or loading, a decrease in the level of treatment or control, or a reduction of water quality. Implementation of this NOA R5-2023-0025-017 will result in the best practicable treatment or control of the discharge necessary to assure that a pollution or nuisance will not occur and the highest water quality consistent with the maximum benefit to the people of the State will be maintained. Thus, the relaxation and removal of effluent limitations for these constituents is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Resources Control Board (State Water Board) Resolution No. 68-16.

C. Salinity (Electrical Conductivity or EC)

When only considering the numeric water quality standards for salinity, the discharge does not have reasonable potential to cause or contribute to an in-stream excursion of water quality objectives for salinity. However, due to Region-wide concerns regarding salinity and to ensure implementation of the Basin Plan's Salinity Control Program the Municipal General Order includes performance-based triggers for EC that are applicable to this Facility. The EC concentration of the effluent is greater than the background concentration observed in Orchard Creek; therefore, limited degradation is occurring in a high-quality water. Under the State Antidegradation Policy, the waste discharge requirements must result in the best practicable treatment or control (BPTC) of the discharge necessary to assure 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. In this case, the Discharger is currently utilizing BPTC, and a performance-based trigger of 1100 µmhos/cm for EC is applied limiting the discharge to current levels (thus ensuring that BPTC will continue to be met).

In accordance with the Basin Plan's Salt Control Program the Discharger submitted a Notice of Intent on 28 January 2025 indicating participation in the Alternative Salinity Permitting Approach. Accordingly, the Municipal General Order includes a calendar annual average performance-based effluent trigger for electrical conductivity of **1100 µmhos/cm** that is applicable to this Facility.

IV. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

CWA section 303(a-c), requires states to adopt water quality standards, including criteria where they are necessary to protect beneficial uses. The Central Valley Water Board adopted water quality criteria as water quality objectives in the Basin Plan. The Basin Plan states that "[t]he numerical and narrative water quality objectives define the least stringent standards that the Regional Water Board will apply to regional waters in order to protect the beneficial uses." The Basin Plan includes numeric and narrative water quality objectives for various beneficial uses and water bodies. This NOA R5-2023-0025-017 contains receiving surface water limitations based on the Basin Plan numerical and narrative water quality objectives for bacteria, biostimulatory substances, color, chemical constituents, dissolved oxygen, floating material, oil and grease, pH, pesticides, radioactivity, suspended sediment, settleable substances, suspended material, tastes and odors, temperature, toxicity, and turbidity.

B. Groundwater

Groundwater limitations are required to protect the beneficial uses of the underlying groundwater.

V. RATIONALE FOR MONITORING REQUIREMENTS

CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Central Valley Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program, Attachment E of the Municipal General Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state

requirements. The following provides the rationale for the monitoring requirements contained in Monitoring and Reporting Program, Appendix D, of this NOA R5-2023-0025-017.

A. Influent Monitoring

1. Influent monitoring is required to collect data on the characteristics of the wastewater and to assess compliance with effluent limitations (e.g., BOD5 and TSS reduction requirements). All monitoring frequencies from NOA R5-2017-0085-014 have been carried forward in this NOA R5-2023-0025-017.

B. Effluent Monitoring

1. Pursuant to the requirements of 40 C.F.R. section 122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations, assess the effectiveness of the treatment process, and to assess the impacts of the discharge on the receiving stream and groundwater.

The following effluent monitoring frequencies have been revised from NOA R5-2017-0085-014. All other effluent sampling frequencies from NOA R5-2017-0085-014 are carried forward to this NOA R5-2023-0025-017:

Table C-1. Revised Sampling Frequencies for Effluent Monitoring

| Parameter | Unit | Prior Sample Frequency | Revised Sample Frequency | Rationale for Sample Frequency Revision |
|----------------------|------|------------------------|--------------------------|---|
| Cyanide, Total | µg/L | Not Required | 1/Quarter | Note 1 |
| Dichlorobromomethane | µg/L | Not Required | 1/Quarter | Note 2 |

Table C-1 Notes:

1. **Cyanide.** The effluent monitoring frequency for cyanide (1/Quarter) in this NOA R5-2023-0025-017 will cease after two years, from 1 July 2026 through 30 June 2028, to comply with the Cyanide Constituent Study requirements. Upon review of the study, Central Valley Water Board staff will determine if this NOA R5-2023-0025-017 will be reopened and additional effluent monitoring added.
2. **Dichlorobromomethane.** The effluent monitoring frequency for dichlorobromomethane (1/Quarter) has been included in this NOA R5-2023-0025-017 to determine compliance with the effluent limitations and to determine the presence in the effluent. The Facility uses UV disinfection instead of chlorine disinfection; therefore, the presence of a chlorine-based constituent is not expected, since it is only used in small doses for UV lamp cleaning. The Discharger indicated that the draining of the pool on the premises occurred around the time of detection and may be responsible for the elevated concentration of dichlorobromomethane.

C. Receiving Water Monitoring

1. Receiving water monitoring is necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge to Orchard Creek. All monitoring frequencies from NOA R5-2017-0085-014 have been carried forward in this NOA R5-2023-0025-017.

D. Whole Effluent Toxicity Testing Requirements

1. The following effluent monitoring frequencies have been revised from NOA R5-2017-0085-015. All other effluent sampling frequencies from NOA R5-2017-0085-014 are carried forward to this NOA, R5-2023-0025-017:

Table C-2. Revised Sampling Frequencies for Whole Effluent Toxicity Monitoring

| Parameter | Unit | Prior Sample Frequency | Revised Sample Frequency | Rationale for Sample Frequency Revision |
|----------------|------------|------------------------|--------------------------|---|
| Acute Toxicity | % survival | 1/Year | Discontinue | Note 1 |

Table C-2 Note:

1. **Acute Toxicity.** A chronic toxicity test is generally protective of both chronic and acute toxicity and there were no acute toxicity failures during NOA R5-2017-0085-014; therefore, acute toxicity testing has been discontinued in this NOA R5-2023-0025-017.

E. Other Monitoring Requirements

1. **Biosolids Monitoring – Not Applicable**
2. **Water Supply Monitoring**
 - a. Order R5-2017-0085-0014 required quarterly monitoring of the water supply to evaluate the source of salinity in the wastewater. Based on the available data demonstrating that sufficient information has been collected to characterize the source of salinity, this NOA discontinues the water supply monitoring requirement because continued monitoring is not necessary to ensure compliance with applicable effluent limitations and receiving water limitations.
3. **Filtration System Monitoring**
 - a. Filtration system monitoring for turbidity is required for Dischargers of tertiary treated wastewater that meet the eligibility criteria in section I.B.4 of the Municipal General Order to determine compliance with the filtration system operating specifications in section VII.C.4.a of the Municipal General Order.
 - b. The monitoring frequency for turbidity (continuous) is retained from NOA R5-2017-0085-014 to evaluate compliance with the filtration system operating specifications.
4. **UV Disinfection System Monitoring**
 - a. Continuous monitoring for flow, number of UV banks in operation, UV transmittance, and UV dose has been retained from Order R5-2017-0085-0014. In addition, monitoring for total coliform organisms at EFF-001 (Total coliform monitoring frequency) has also been retained from Order R5-2017-0085-0014.
5. **Pond Monitoring – Not Applicable**
6. **Land Discharge Monitoring – Not Applicable**
7. **Title 22 Recycled Water Monitoring – Not Applicable**
8. **Pyrethroid Pesticides Monitoring – Not Applicable**

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

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

10. 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, the Municipal General Order requires annual reporting of wastewater and recycled water use into Geotracker and confirmation of annual reporting to Geotracker is required by this NOA R5-2023-0025-017.

11. Effluent and Receiving Water Characterization Monitoring

- a. Order R5-2017-0085-014 included quarterly effluent characterization monitoring for one year when discharging to Orchard Creek. This NOA retains the quarterly effluent characterization monitoring for one year.
- b. Order R5-2017-0085-014 included semiannual receiving water characterization monitoring. This NOA retains the semiannual receiving water characterization monitoring for one year.

VI. PRETREATMENT PROVISION – NOT APPLICABLE

VII. SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Abbreviations used in Table C-3:

MEC = Maximum Effluent Concentration
 B = Maximum Receiving Water Concentration
 C = Criterion used for Reasonable Potential Analysis
 CMC = Criterion Maximum Concentration
 CCC = Criterion Continuous Concentration
 Water and Org = Human Health Criterion for Consumption of Water and Organisms
 Org Only = Human Health Criterion for Consumption of Organisms Only
 Basin Plan = Numeric Site-Specific Basin Plan Water Quality Objective
 MCL = Drinking Water Standards Maximum Contaminant Level
 RP= Reasonable Potential

Table C-3: SUMMARY OF REASONABLE POTENTIAL ANALYSIS

| Parameter | Units | MEC | B | C | CMC | CCC | Water and Org | Org. Only | Basin Plan | MCL | RP |
|--------------------------------|----------|------|----|------|-----|-----|---------------|-----------|------------|-------|-----|
| Ammonia (as Nitrogen) | mg/L | 0.24 | -- | 2.3 | 5.1 | 2.3 | -- | -- | -- | -- | Yes |
| Nitrate plus Nitrite (as N) | mg/L | 7.0 | -- | 10 | -- | -- | -- | -- | -- | 10 | Yes |
| Electrical Conductivity @ 25°C | µmhos/cm | 760 | -- | -- | -- | -- | -- | -- | -- | 1,600 | No |
| Cyanide, Total | µg/L | 6.0 | -- | 5.2 | -- | -- | -- | -- | -- | 5.2 | Yes |
| Dichlorobromomethane | µg/L | 0.64 | -- | 0.56 | -- | -- | -- | -- | -- | 0.56 | Yes |

1. Table C-3 Notes:

- i. **CMC.** For ammonia, the CMC or criterion maximum concentration is based on the U.S. EPA National Recommended Ambient Water Quality Criteria Freshwater Aquatic Life Protection, 1-hour average. For copper and zinc, the CMC is based on the CTR, 1-hour average criterion.
- ii. **CCC.** For ammonia, the CCC or criterion continuous concentration is based on the U.S. EPA National Recommended Ambient Water Quality Criteria Freshwater Aquatic Life Protection, 30-day average. For copper and zinc, the CCC is based on the CTR, 4-day average criterion.
- iii. **Ammonia and Nitrate + Nitrite.** Reasonable potential exists due to the biological processes inherent to the treatment of domestic wastewater (see sections V.C.3.b.ii and V.C.3.b.ix in Attachment F, Fact Sheet, of the Municipal General Order).

Table C-4: SUMMARY OF CHRONIC TOXICITY REASONABLE POTENTIAL ANALISYS

| Test Start Date | <i>Pimephales promelas</i> | | | | <i>Ceriodaphnia dubia</i> | | | <i>Selenastrum capricornutum</i> | |
|-----------------|----------------------------|------------|-------------|------------|---------------------------|-------------------|------------|----------------------------------|------------|
| | Survival Test | | Growth Test | | Survival Test | Reproduction Test | | Growth Test | |
| | % Effect | TST Result | % Effect | TST Result | % Effect | % Effect | TST Result | % Effect | TST Result |
| 01/04/2022 | 0 | PASS | -5.11 | PASS | -- | -- | -- | -- | -- |
| 04/05/2022 | 0.06 | PASS | -6.69 | PASS | -- | -- | -- | -- | -- |
| 07/12/2022 | 0 | PASS | -2.31 | PASS | -- | -- | -- | -- | -- |
| 10/04/2022 | 0 | PASS | -12.53 | PASS | -- | -- | -- | -- | -- |
| 01/30/2023 | -- | -- | -- | -- | -- | -- | -- | -70.14 | PASS |
| 04/20/2023 | -- | -- | -- | -- | -- | -- | -- | -17.46 | PASS |
| 07/26/2023 | -- | -- | -- | -- | -- | -- | -- | -147.44 | PASS |
| 10/23/2023 | -- | -- | -- | -- | -- | -- | -- | -236.74 | PASS |
| 01/09/2024 | -- | -- | -- | -- | 0 | -19.21 | PASS | -- | -- |
| 04/02/2024 | -- | -- | -- | -- | -11.11 | -17.59 | PASS | -- | -- |
| 08/06/2024 | -- | -- | -- | -- | 0 | 1.02 | PASS | -- | -- |
| 10/08/2024 | -- | -- | -- | -- | -12.50 | 12.81 | PASS | -- | -- |

1. Table C-4 Notes:
 - i. **% Effect** at 100% effluent.
 - ii. **TST**. Test of Significant Toxicity.

APPENDIX D – MONITORING AND REPORTING PROGRAM

| | | |
|-------|--|----|
| I. | GENERAL MONITORING PROVISIONS | 23 |
| II. | MONITORING LOCATIONS | 24 |
| III. | INFLUENT MONITORING REQUIREMENTS | 25 |
| | A. Monitoring Location INF-001 | 25 |
| IV. | EFFLUENT MONITORING REQUIREMENTS | 26 |
| | A. Monitoring Location EFF-001 | 26 |
| V. | WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS | 28 |
| | A. Acute Toxicity Testing – Not Applicable | 28 |
| | B. Chronic Toxicity Testing. | 28 |
| | C. Quality Assurance and Additional Requirements..... | 30 |
| | D. WET Testing Notification Requirements | 31 |
| | E. WET Testing Reporting Requirements | 31 |
| | F. Most Sensitive Species Screening | 31 |
| | G. Toxicity Reduction Evaluations..... | 33 |
| VI. | LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE..... | 33 |
| VII. | RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE | 33 |
| VIII. | RECEIVING WATER MONITORING REQUIREMENTS | 34 |
| | A. Monitoring Locations RSW-001 and RSW-002..... | 34 |
| IX. | OTHER MONITORING REQUIREMENTS | 35 |
| | A. Biosolids – Not Applicable | 35 |
| | B. Ponds – Not Applicable | 35 |
| | C. Municipal Water Supply – Not Applicable | 35 |
| | D. Filtration System and Ultraviolet Light (UV) Disinfection System..... | 35 |
| | E. Effluent and Receiving Water Characterization | 36 |
| X. | REPORTING REQUIREMENTS..... | 42 |
| | A. General Monitoring and Reporting Requirements | 42 |
| | B. Self-Monitoring Reports | 42 |
| | C. Discharge Monitoring Reports (DMR’s) | 46 |
| | D. Other Reports | 46 |

Tables

| | | |
|------------|--|----|
| Table D-1. | Monitoring Station Locations | 24 |
| Table D-2. | Influent Monitoring | 25 |
| Table D-3. | Effluent Monitoring..... | 26 |
| Table D-4. | Receiving Water Monitoring Requirements | 34 |
| Table D-5. | Filtration and UV Disinfection System Monitoring Requirements..... | 35 |
| Table D-6. | Effluent and Receiving Water Characterization Monitoring | 37 |
| Table D-7. | Monitoring Periods and Reporting Schedule | 43 |
| Table D-8. | Technical Reports..... | 48 |

APPENDIX D – MONITORING AND REPORTING PROGRAM (MRP)

The Municipal General Order contains monitoring and reporting requirements in Attachment E. Some of the monitoring and reporting requirements listed in the Municipal General Order are not applicable to the Facility. The monitoring and reporting requirements applicable to the Facility are contained in this Appendix and are described herein.

The Code of Federal Regulations (40 C.F.R. § 122.48) requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Central Valley Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement state and federal regulations.

I. GENERAL MONITORING PROVISIONS

- A.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of the Central Valley Water Board.
- 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 NOA R5-2023-0025-017 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, and temperature are exempt pursuant to Water Code section 13176. A manual containing the steps followed in this program for any field measurements such as, but not limited to pH, dissolved oxygen, EC, turbidity, and temperature 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.
- D.** Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. All monitoring instruments and devices used by the Discharger to fulfill the prescribed

monitoring program shall be properly maintained and calibrated as necessary, at least yearly, to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

- E. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.
- 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. The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually, [via email](mailto:QualityAssurance@waterboards.ca.gov), to QualityAssurance@waterboards.ca.gov to the State Water Resources Control.
- H. The Discharger shall file with the Central Valley Water Board technical reports on self-monitoring performed according to the detailed specifications contained in this MRP.
- I. The results of all monitoring required by this MRP shall be reported to the Central Valley Water Board and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of the NOA. Unless otherwise specified, discharge flows shall be reported in terms of the monthly average and the daily maximum discharge flows.

J. Multiple Discharge Points – Not Applicable.

II. MONITORING LOCATIONS

The Discharger shall establish the monitoring locations listed in Table D-1 to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in the NOA R5-2023-0025-017.

Table D-1. Monitoring Station Locations

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description |
|----------------------|--------------------------|---|
| -- | INF-001 | A location where a representative sample of the Facility influent can be obtained, prior to any additives, treatment processes, and |

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description |
|----------------------|--------------------------|---|
| | | plant return flows. Latitude: 38° 50' 27.9" North - Longitude: 121° 19' 3" West |
| 001 | EFF-001 | A location where a representative sample of the Facility effluent can be obtained prior to discharge to the receiving water. Grab samples are obtained from the sample port located just downstream of the ultraviolet light (UV) disinfection system. Composite samples are obtained downstream of the grab sample location prior to discharge into the recycled water diversion wet well Latitude: 38° 50' 44" North - Longitude: 121° 19' 1" West |
| -- | RSW-001 | In Orchard Creek, 50 feet upstream from Discharge Point 001. Latitude: 38° 50' 43.4" North - Longitude: 121° 19' 0.5" West |
| -- | RSW-002 | In Orchard Creek, 200 feet downstream from Discharge Point 001. Latitude: 38° 50' 43.1" North - Longitude: 121° 19' 1.9" West |
| -- | FIL-001 | Monitoring of the filter effluent to be measured immediately downstream of the filters prior to the UV disinfection system. |
| -- | UVS-001 | A location where a representative sample of wastewater can be collected immediately downstream of the ultraviolet light (UV) disinfection system. |

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

1. The Discharger shall monitor influent to the Facility at Monitoring Location INF-001 as specified in Table D-2 and the testing requirements described in section III.A.2 below:

Table D-2. Influent Monitoring

| Parameter | Units | Sample Type | Sampling Frequency |
|--|-------|-------------------|--------------------|
| Flow | MGD | Meter | Continuous |
| Biochemical Oxygen Demand (5-day @ 20°Celsius) | mg/L | 24-hour Composite | 1/Week |
| Total Suspended Solids | mg/L | 24-hour Composite | 1/Week |

| Parameter | Units | Sample Type | Sampling Frequency |
|--------------------------------|----------|-------------|--------------------|
| Electrical Conductivity @ 25°C | µmhos/cm | Grab | 1/Week |

2. **Table D-2 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-2:
- a. **Applicable to all parameters.** Parameters 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. In addition, if requested by the Discharger, the sample type may be modified by the Executive Officer to another 40 C.F.R. part 136 allowed sample type.
 - b. **Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.
 - c. **Field Meter.** A hand-held field meter may be used for **electrical conductivity**, 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 MRP shall be maintained at the Facility.

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

1. The Discharger shall monitor treated domestic wastewater at Monitoring Location EFF-001 as specified in Table D-3 and the testing requirements in section IV.A.2. If there was no discharge to receiving water during the designated monitoring period, monitoring is not required for that period. If there was no discharge, the Discharger shall so state in the monthly self-monitoring report (SMR).

Table D-3. Effluent Monitoring

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|-----------------|-----------------|----------------------------|
| Flow | MGD | Meter | Continuous |
| Biochemical Oxygen Demand (5-day @ 20° C) | mg/L | 24-hr Composite | 1/Week |
| Biochemical Oxygen Demand (5-day @ 20° C) | percent removal | Calculate | 1/Month |
| pH | standard units | Grab | 3/Week |
| Total Suspended Solids | mg/L | 24-hr Composite | 1/Week |
| Total Suspended Solids | percent removal | Calculate | 1/Month |

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|------------|-------------|----------------------------|
| Ammonia Nitrogen, Total (as N) | mg/L | Grab | 1/Week |
| Dissolved Oxygen | mg/L | Grab | 1/Month |
| Electrical Conductivity @ 25°C | µmhos/cm | Grab | 1/Week |
| Hardness, Total (as CaCO ₃) | mg/L | Grab | 1/Quarter |
| Dissolved Organic Carbon (DOC) | mg/L | Grab | 1/Quarter |
| Nitrate plus Nitrite, Total (as N) | mg/L | Calculate | 1/Month |
| Nitrate Nitrogen, Total (as N) | mg/L | Grab | 1/Month |
| Nitrite Nitrogen, Total (as N) | mg/L | Grab | 1/Month |
| Cyanide, Total | µg/L | Grab | 1/Quarter |
| Dichlorobromomethane | µg/L | Grab | 1/Quarter |
| Temperature | °F | Grab | 3/Week |
| Total Coliform Organisms | MPN/100 mL | Grab | 3/Week |

2. **Table D-3 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-3:
- a. **Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.
 - b. **Applicable to all parameters.** 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. In addition, if requested by the Discharger, the sample type may be modified by the Executive Officer to another 40 C.F.R. part 136 allowed sample type.
 - c. **Grab Sample.** 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.
 - d. **Ammonia.** Ammonia samples shall be taken at approximately the same time and on the same date as the pH and temperature samples.
 - e. **Field Meter.** A hand-held field meter may be used for **dissolved oxygen, electrical conductivity, pH, and temperature**, 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 MRP shall be maintained at the Facility.
 - f. **Dissolved Organic Carbon.** Hardness, total (as CaCO₃) and pH samples shall be taken concurrent with dissolved organic carbon samples.

- g. **Cyanide.** In order to verify if cyanide is consistently present in the effluent discharge, the Discharger shall take steps to assure that sample containers, sampling apparatus, and analytical equipment are not sources of the detected contaminant. Cyanide sampling is only required for the first two years following the effective date of this NOA to complete the Cyanide Constituent Study. This NOA may be reopened depending on the results of the Cyanide Constituent Study to reimplement cyanide monitoring.

V. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

A. Acute Toxicity Testing – Not Applicable

B. Chronic Toxicity Testing.

The Discharger shall meet the following chronic toxicity testing requirements:

1. **Instream Waste Concentration (IWC) for Chronic Toxicity.** The chronic toxicity IWC is 100 percent effluent.
2. **Routine Monitoring Frequency.** The Discharger shall perform routine chronic toxicity testing **once per toxicity calendar quarter** in which there is expected to be at least 15 days of discharge to the receiving water in at least one toxicity calendar quarter.
3. **Toxicity Calendar Month, Quarter, and Year**
 - a. **Toxicity Calendar Month.** The toxicity calendar month is defined as the period of time beginning on the day of the initiation of the routine toxicity monitoring to the day before the corresponding day of the next month if the corresponding day exists, or if not to the last day of the next month (e.g., from January 1 to January 31, from June 15 to July 14, from January 31 to February 27, etc.).
 - b. **Toxicity Calendar Quarter.** A toxicity calendar quarter is defined as **three consecutive toxicity calendar months** (e.g., from January 1 to March 31, from February 15 to May 14, from June 21 to September 20, etc.).
 - c. **Toxicity Calendar Year.** A toxicity calendar year is defined as **twelve consecutive toxicity calendar months** (e.g., from January 1 to December 31, from June 15 to June 14 of the following year, from September 10 to September 9 of the following year, etc.).
4. **Chronic Toxicity Median Monthly Effluent Target (MMET) Compliance Testing.** If a routine chronic toxicity monitoring test results in a “Fail” (as defined in section V.C below) at the IWC, then a maximum of two chronic toxicity MMET tests shall be completed. The chronic toxicity MMET tests shall be initiated within the same toxicity calendar month that the routine monitoring chronic toxicity test was initiated that resulted in the “Fail” at the IWC. If the first chronic toxicity MMET test results in a “Fail” at the IWC, then the second chronic toxicity MMET test is unnecessary and is waived.
5. **Additional Routine Monitoring Tests for Toxicity Reduction Evaluation (TRE) Determination.** In order to determine if a TRE is necessary, an additional routine monitoring test is required when one chronic toxicity

Maximum Daily Effluent Target (MDET) or MMET is not met, but not two in a single toxicity calendar month. The toxicity calendar month in which the MDET or MMET was not met and the toxicity calendar month of the additional routine monitoring shall be considered “successive toxicity calendar months” for purposes of determining whether a TRE is required. This additional routine monitoring test could result in the need to conduct MMET tests per Section V.B.4 above.

6. **Sample Volumes.** Adequate sample volumes shall be collected to provide renewal water to complete the test in the event that the discharge is intermittent.
7. **Test Species.** The Discharger shall conduct chronic toxicity tests with the test species as follows and continue the three year rotating cycle until a new NOA or individual permit is issued:
 - a. The cladoceran, water flea, *Ceriodaphnia dubia* (survival and reproduction test) for the remainder of the 2026 toxicity calendar year and the 2029 toxicity calendar year;
 - b. The fathead minnow, *Pimephales promelas* (larval survival and growth test) for the 2027 and 2030 toxicity calendar years; and
 - c. The green alga, *Selenastrum capricornutum* (growth test) for the 2028 and 2031 toxicity calendar years.

The Executive Officer shall have discretion to allow the temporary use of the next appropriate species as the most sensitive species when the Discharger submits documentation and the Executive Officer determines that the Discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms. The “next appropriate species” is a species in Table 1 of the Statewide Toxicity Provisions in the same test method classification (e.g., chronic aquatic toxicity test methods, acute aquatic toxicity test method), in the same salinity classification (e.g., freshwater or marine), and in the same taxon as the most sensitive species. When there are no other species in Table 1 in the same taxon as the most sensitive species (e.g., freshwater chronic toxicity tests), the “next appropriate species” is the species exhibiting the highest percent effect at the IWC tested in the species sensitivity screening other than the most sensitive species.

8. **Test Methods.** The Discharger shall conduct the chronic toxicity tests on effluent samples at the IWC for the discharge in accordance with species and test methods described in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R02/013, 2002; Table IA, 40 C.F.R. part 136).
9. **Dilution and Control Water.** Dilution water and control water shall be prepared and used as specified in the test methods manual. If dilution water and control water are different from test organism culture water, then a second control using culture water shall also be used. A receiving water control or laboratory water control may be used as the diluent.

10. **Test Failure.** If the effluent chronic toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method in EPA/821-R-02-013, the Discharger must conduct a Replacement Test as soon as possible, as specified in subsection B.11, below.
11. **Replacement Test.** When a required toxicity test for routine monitoring or a MMET test is not completed, a new toxicity test to replace the toxicity test that was not completed shall be initiated as soon as possible. The new toxicity test shall replace the routine monitoring or the MMET test, as applicable, for the toxicity calendar month in which the toxicity test that was not completed was required to be initiated, even if the new toxicity test is initiated in a subsequent toxicity calendar month. The new toxicity test for routine monitoring or for the MMET test, as applicable, and any MMET tests required to be conducted due to the results of the new toxicity test shall be used to determine compliance with the effluent targets for the toxicity calendar month in which the toxicity test that was not completed was required to be initiated. The new toxicity test and any MMET tests required to be conducted due to the results of the new toxicity test shall not be used to substitute for any other required toxicity tests.

If it is determined that any specific monitoring event was not initiated in the required time period due to circumstances outside of the Discharger's control that were not preventable with the reasonable exercise of care, the Discharger is not required to initiate the specific monitoring event in the required time period if the Discharger promptly initiates or ultimately completes a replacement test.

C. Quality Assurance and Additional Requirements

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

1. The discharge is subject to determination of "Pass" or "Fail" from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in section IV.B.1.c of the Statewide Toxicity Provisions.
2. The null hypothesis (Ho) for the TST statistical approach is:

Mean discharge IWC response \leq RMD x Mean control response, where the chronic RMD = 0.75 and the acute RMD = 0.80.

A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail".

3. The relative "Percent Effect" at the discharge IWC is defined and reported as:

Percent Effect = ((Mean control response – Mean discharge IWC response) / (Mean control response)) x 100.

This is a t-test, a statistical analysis comparing two sets of replicate observations, i.e., a control and IWC. The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving

water concentration differs from the control, the test result is “Fail”). The Welch’s t-test employed by the TST statistical approach is an adaptation of Student’s t-test and is used with two samples having unequal variances.

D. WET Testing Notification Requirements

The Discharger shall notify the Central Valley Water Board of test results exceeding the chronic toxicity monitoring target as soon as the Discharger learns of the exceedance, but no later than 24-hours after receipt of the monitoring results.

E. WET Testing Reporting Requirements

The Discharger shall submit the full laboratory report for all toxicity testing (routine, MMET, TRE, etc.) and, if applicable, progress reports on TREs as attachments to the biannual SMRs in CIWQS for the reporting period, and shall provide the data (i.e., Pass/Fail) in the Permittee Entry Template (PET) tool for uploading into CIWQS. The laboratory report shall include:

1. The valid toxicity test results for the TST statistical approach, reported as “Pass” or “Fail” and “Percent Effect” at the IWC for the discharge, the dates of sample collection and initiation of each toxicity test, and all results for effluent parameters monitored concurrently with the toxicity test(s);
2. The statistical analysis used in section IV.B.1.c of the Statewide Toxicity Provisions; and
3. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.

F. Most Sensitive Species Screening

If the effluent used in the species sensitivity screening is no longer representative of the current effluent, the Discharger shall perform rescreening to re-evaluate the most sensitive species. The species sensitivity screening shall be conducted as follows:

1. **Frequency of Testing for Species Sensitivity Screening.** Species sensitivity screening for chronic toxicity shall include, at a minimum, a set of chronic WET testing conducted in **each toxicity calendar quarter in which there is expected to be at least 15 days of discharge**. Species sensitivity screening for chronic toxicity shall be conducted using the water flea (*Ceriodaphnia dubia*), fathead minnow (*Pimephales promelas*), and green alga (*Pseudokirchneriella subcapitata*). The tests shall be performed at an IWC of no less than 100 percent effluent.
2. **Determination of Most Sensitive Species.** The Central Valley Water Board will determine the most sensitive species from the water flea (*Ceriodaphnia dubia*), fathead minnow (*Pimephales promelas*), and green alga (*Pseudokirchneriella subcapitata*) using the following procedure. If a single test in the species sensitivity screening testing results in a “Fail” using the TST statistical approach, then the species used in that test shall be established as the most sensitive species. If there is more than a single test that results in a “Fail”, then of the species with results of a “Fail”, the species

that exhibits the highest percent effect shall be established as the most sensitive species. If none of the tests in the species sensitivity screening results in a “Fail”, but at least one of the species exhibits a percent effect greater than 10 percent, then the single species that exhibits the highest percent effect shall be established as the most sensitive species. In all other circumstances, 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 “next appropriate species” is a species in Table 1 of the Statewide Toxicity Provisions in the same test method classification (e.g., chronic aquatic toxicity test methods, acute aquatic toxicity test method), in the same salinity classification (e.g., freshwater or marine), and in the same taxon as the most sensitive species. When there are no other species in Table 1 in the same taxon as the most sensitive species (e.g., freshwater chronic toxicity tests), the “next appropriate species” is the species exhibiting the highest percent effect at the IWC tested in the species sensitivity screening other than the most sensitive species. The Executive Officer shall have discretion to allow the temporary use of the next appropriate species as the most sensitive species when the Discharger submits documentation and the Executive Officer determines that the Discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms.

The most sensitive species shall be used for chronic toxicity testing for the remainder of the permit term. The Discharger may use the four most recent tests for use in determining the most sensitive species if the tests were conducted in a manner sufficient to make such determination.

If the most sensitive species cannot be determined from the species sensitivity screening discussed above, the Discharger shall rotate the test species as the most sensitive species every toxicity calendar year as follows:

- a. *Ceriodaphnia dubia* (survival and reproduction test) for the remainder of the toxicity calendar year this NOA R5-2023-0025-017 is issued;
- b. *Pimephales promelas* (larval survival and growth test) for the entire toxicity calendar year following the toxicity calendar year this NOA R5-2023-0025-017 is issued;
- c. *Pseudokirchneriella subcapitata* (growth test) for the entire toxicity calendar year of the second year following the toxicity calendar year this NOA R5-2023-0025-017 is issued; and
- d. Cycling back to *Ceriodaphnia dubia* (survival and reproduction test) after *Pseudokirchneriella subcapitata* (growth test) and continuing through the same rotation as above.

If a single test exhibits toxicity, demonstrated by a test that results in a “Fail” using the TST statistical approach, then the species used in that test shall be established as the most sensitive species until the next NOA reissuance.

G. Toxicity Reduction Evaluations

Reports for TREs shall be submitted in accordance with the schedule contained in the Discharger's approved TRE Work Plan, or as amended by the Discharger's TRE Action Plan.

1. TRE Targets

- a. **Chronic Whole Effluent Toxicity MMET.** No more than one chronic aquatic toxicity test with the most sensitive species initiated in a toxicity calendar month shall result in a "fail" at the IWC for any endpoint.
- b. **Chronic Whole Effluent Toxicity MDET.** No chronic aquatic toxicity test with the most sensitive species shall result in a "fail" at the IWC for the sub-lethal endpoint measured in the test and a percent effect for the survival endpoint greater than or equal to 50 percent.

2. **TRE Implementation.** The Discharger is required to initiate a TRE when there is any combination of two or more chronic toxicity MDET or MMET that are not met within a single toxicity calendar month or within two successive toxicity calendar months (as defined in paragraph V.B.5 above). If other information indicates toxicity (e.g., results of additional monitoring, results of monitoring at a higher concentration than the IWC, fish kills, or intermittent recurring toxicity), the Central Valley Water Board may require a TRE. A TRE may also be required when there is no effluent available to complete a routine monitoring test or MMET test.

- a. **Preparation and Implementation of Detailed TRE Action Plan.** The Discharger shall conduct TREs in accordance with an approved TRE Work Plan. Within 30 days of the test result that triggered the TRE, the Discharger shall submit to the Executive Officer a TRE Action Plan per the Discharger's approved TRE Work Plan. The TRE Action Plan shall include the following information, and comply with additional conditions set by the Executive Officer:
 - i. Specific actions the Discharger will take to investigate and identify the cause(s) of toxicity, including a TRE WET monitoring schedule;
 - ii. Specific actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and
 - iii. A schedule for these actions, progress reports, and the final report.
- b. The Central Valley Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Locations RSW-001 and RSW-002

1. The Discharger shall monitor Orchard Creek at Monitoring Locations RSW-001 and RSW-002 as specified in Table D-4 and the testing requirements in section VIII.A.2. If there was no discharge to receiving water during the designated monitoring period, monitoring is not required during that period. If there is no upstream flow in the receiving water during the designated monitoring period, monitoring is not required at RSW-001 during that period. Whenever monitoring is not required, the Discharger shall state so in the monthly SMR.

Table D-4. Receiving Water Monitoring Requirements

| Parameter | Units | Sample Type | Sampling Frequency |
|---|---------------------|-------------|--------------------|
| pH | standard units | Grab | 1/Week |
| Dissolved Oxygen | mg/L | Grab | 1/Month |
| Electrical Conductivity @ 25°C | µmhos/cm | Grab | 1/Month |
| Hardness, Total (as CaCO ₃) | mg/L | Grab | 1/Quarter |
| Temperature | °Fahrenheit (°F) | Grab | 1/Week |
| Dissolved Organic Carbon (DOC) | mg/L | Grab | 1/Quarter |

2. Table D-4 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-4:
 - a. **Field Meter.** A hand-held field meter may be used for **dissolved oxygen, electrical conductivity, pH, and temperature**, 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 MRP shall be maintained at the Facility.
 - b. **Applicable to all parameters.** 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. In addition, if requested by the Discharger, the sample type may be modified by the Executive Officer to another 40 C.F.R. part 136 allowed sample type.
 - c. **Dissolved Organic Carbon.** Hardness, total (as CaCO₃) and pH samples shall be taken concurrent with dissolved organic carbon samples.
 - d. **Temperature, pH, Hardness, Dissolved Oxygen, and Dissolved Organic Carbon.** The receiving water samples for temperature, pH, hardness, dissolved oxygen, and dissolved organic carbon shall be taken approximately the same time and on the same date with the effluent samples for these parameters.

3. In conducting the receiving water sampling required by section VIII.A.1 above, a log shall be kept of the receiving water conditions throughout the reach bounded by Monitoring Locations RSW-001 and RSW-002. Attention shall be given to the presence or absence of:
 - a. Floating or suspended matter;
 - b. Discoloration;
 - c. Bottom deposits;
 - d. Aquatic life;
 - e. Visible films, sheens, or coatings;
 - f. Fungi, slimes, or objectionable growths; and
 - g. Potential nuisance conditions.

Notes on receiving water conditions shall be summarized in the monitoring report

IX. OTHER MONITORING REQUIREMENTS

A. Biosolids – Not Applicable

B. Ponds – Not Applicable

C. Municipal Water Supply – Not Applicable

D. Filtration System and Ultraviolet Light (UV) Disinfection System

1. Monitoring Locations FIL-001 and UVS-001

- a. The Discharger shall monitor the filtration system and UV disinfection system at Monitoring Locations FIL-001 and UVS-001, respectively, as specified in Table D-5 and the testing requirements in section IX.D.2.

Table D-5. Filtration and UV Disinfection System Monitoring Requirements

| Parameter | Units | Sample Type | Monitoring Location | Sampling Frequency |
|---------------------------------|---|-------------|---------------------|--------------------|
| Flow | MGD | Meter | UVS-001 | Continuous |
| Turbidity | NTU | Meter | FIL-001 | Continuous |
| Number of UV banks in operation | Number | Observation | -- | Continuous |
| UV Transmittance | Percent | Meter | UVS-001 | Continuous |
| UV Dose | mJ/cm ² | Calculate | -- | Continuous |
| Total Coliform Organisms | Most Probable Number per 100 milliliters (MPN/100 mL) | Grab | UVS-001 | 3/Week |

2. Table D-5 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-5:

- a. **Total Coliform Organisms** 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.
- b. **Turbidity.** Report daily average and maximum turbidity.
- c. **Continuous Analyzers.** If analyzers are taken out of operation for routine maintenance activities and no continuous measurements are available from a redundant meter, the Discharger shall divert flow to another disinfection channel to the extent feasible. If the Discharger is not able to divert away from the analyzer and the analyzer is out of operation for longer than 30 minutes, 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 and no continuous measurements are available from a redundant meter. 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.
- d. **UV Banks.** Report daily minimum number of UV banks in operation.
- e. **UV Transmittance.** 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.
- f. **UV Dose.** 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.

E. Effluent and Receiving Water Characterization

The Discharger shall monitor the effluent at Monitoring Locations EFF-001 and the upstream receiving water at RSW-001 for the constituents listed in Table D-6, as described in this section.

1. Monitoring Frequency

- a. **Effluent Sampling.** Samples shall be collected from the effluent (Monitoring Location EFF-001) **quarterly between 1 July 2027 and 30 June 2028.**
- b. **Receiving Water Sampling.** Samples shall be collected from the upstream receiving water (Monitoring Location RSW-001) **once between 1 July 2027 and 30 September 2027 and once between 1 January 2028 and 31 March 2028.**

All sampling shall be analyzed for the constituents listed in Table D-6, below. The results of such monitoring shall be submitted to the Central Valley Water Board with the quarterly SMRs.

2. **Sample Type.** Effluent samples shall be taken as described in Table D-6, below and the testing requirements in section IX.F.4 below.
3. **Analytical Methods Report Certification.** Prior to beginning the Effluent Characterization monitoring, the Discharger shall provide a certification acknowledging the scheduled start date of the Effluent 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 this NOA R5-2023-0025-017 that the Discharger can use to satisfy this requirement. The certification form shall be submitted electronically via the State Water Board's California Integrated Water Quality System (CIWQS) in accordance with the reporting requirements in Technical Reports Table D-8.

Table D-6. Effluent and Receiving Water Characterization Monitoring

VOLATILE ORGANICS

| CTR Number | Volatile Organic Parameters | CAS Number | Units | Effluent Sample Type |
|------------|--------------------------------|------------|-------|----------------------|
| 25 | 2-Chloroethyl vinyl Ether | 110-75-8 | µg/L | Grab |
| 17 | Acrolein | 107-02-8 | µg/L | Grab |
| 18 | Acrylonitrile | 107-13-1 | µg/L | Grab |
| 19 | Benzene | 71-43-2 | µg/L | Grab |
| 20 | Bromoform | 75-25-2 | µg/L | Grab |
| 21 | Carbon Tetrachloride | 56-23-5 | µg/L | Grab |
| 22 | Chlorobenzene | 108-90-7 | µg/L | Grab |
| 24 | Chloroethane | 75-00-3 | µg/L | Grab |
| 26 | Chloroform | 67-66-3 | µg/L | Grab |
| 35 | Methyl Chloride | 74-87-3 | µg/L | Grab |
| 23 | Dibromochloromethane | 124-48-1 | µg/L | Grab |
| 27 | Dichlorobromomethane | 75-27-4 | µg/L | Grab |
| 36 | Methylene Chloride | 75-09-2 | µg/L | Grab |
| 33 | Ethylbenzene | 100-41-4 | µg/L | Grab |
| 89 | Hexachlorobutadiene | 87-68-3 | µg/L | Grab |
| 34 | Methyl Bromide (Bromomethane) | 74-83-9 | µg/L | Grab |
| 94 | Naphthalene | 91-20-3 | µg/L | Grab |
| 38 | Tetrachloroethylene (PCE) | 127-18-4 | µg/L | Grab |
| 39 | Toluene | 108-88-3 | µg/L | Grab |
| 40 | trans-1,2-Dichloroethylene | 156-60-5 | µg/L | Grab |
| 43 | Trichloroethylene (TCE) | 79-01-6 | µg/L | Grab |
| 44 | Vinyl Chloride | 75-01-4 | µg/L | Grab |
| NL | Methyl-tert-butyl ether (MTBE) | 1634-04-4 | µg/L | Grab |

| CTR Number | Volatile Organic Parameters | CAS Number | Units | Effluent Sample Type |
|------------|-----------------------------|------------|-------|----------------------|
| 41 | 1,1,1-Trichloroethane | 71-55-6 | µg/L | Grab |
| 42 | 1,1,2-Trichloroethane | 79-00-5 | µg/L | Grab |
| 28 | 1,1-Dichloroethane | 75-34-3 | µg/L | Grab |
| 30 | 1,1-Dichloroethylene (DCE) | 75-35-4 | µg/L | Grab |
| 31 | 1,2-Dichloropropane | 78-87-5 | µg/L | Grab |
| 32 | 1,3-Dichloropropylene | 542-75-6 | µg/L | Grab |
| 37 | 1,1,2,2-Tetrachloroethane | 79-34-5 | µg/L | Grab |
| 101 | 1,2,4-Trichlorobenzene | 120-82-1 | µg/L | Grab |
| 29 | 1,2-Dichloroethane | 107-06-2 | µg/L | Grab |
| 75 | 1,2-Dichlorobenzene | 95-50-1 | µg/L | Grab |
| 76 | 1,3-Dichlorobenzene | 541-73-1 | µg/L | Grab |
| 77 | 1,4-Dichlorobenzene | 106-46-7 | µg/L | Grab |

SEMI-VOLATILE ORGANICS

| CTR Number | Semi-Organic Volatile Parameters | CAS Number | Units | Effluent Sample Type |
|------------|----------------------------------|------------|-------|----------------------|
| 60 | Benzo(a)Anthracene | 56-55-3 | µg/L | Grab |
| 85 | 1,2-Diphenylhydrazine | 122-66-7 | µg/L | Grab |
| 45 | 2-Chlorophenol | 95-57-8 | µg/L | Grab |
| 46 | 2,4-Dichlorophenol | 120-83-2 | µg/L | Grab |
| 47 | 2,4-Dimethylphenol | 105-67-9 | µg/L | Grab |
| 49 | 2,4-Dinitrophenol | 51-28-5 | µg/L | Grab |
| 82 | 2,4-Dinitrotoluene | 121-14-2 | µg/L | Grab |
| 55 | 2,4,6-Trichlorophenol | 88-06-2 | µg/L | Grab |
| 83 | 2,6-Dinitrotoluene | 606-20-2 | µg/L | Grab |
| 50 | 2-Nitrophenol | 88-75-5 | µg/L | Grab |
| 71 | 2-Chloronaphthalene | 91-58-7 | µg/L | Grab |
| 78 | 3,3-Dichlorobenzidine | 91-94-1 | µg/L | Grab |
| 62 | Benzo(b)Fluoranthene | 205-99-2 | µg/L | Grab |
| 52 | 4-Chloro-3-methylphenol | 59-50-7 | µg/L | Grab |
| 48 | 2-Methyl-4,6-Dinitrophenol | 534-52-1 | µg/L | Grab |
| 51 | 4-Nitrophenol | 100-02-7 | µg/L | Grab |
| 69 | 4-Bromophenyl Phenyl Ether | 101-55-3 | µg/L | Grab |
| 72 | 4-Chlorophenyl Phenyl Ether | 7005-72-3 | µg/L | Grab |
| 56 | Acenaphthene | 83-32-9 | µg/L | Grab |
| 57 | Acenaphthylene | 208-96-8 | µg/L | Grab |
| 58 | Anthracene | 120-12-7 | µg/L | Grab |
| 59 | Benzenidine | 92-87-5 | µg/L | Grab |
| 61 | Benzo(a)Pyrene | 50-32-8 | µg/L | Grab |
| 63 | Benzo(ghi)Perylene | 191-24-2 | µg/L | Grab |
| 64 | Benzo(k)Fluoranthene | 207-08-9 | µg/L | Grab |
| 65 | Bis (2-Chloroethoxy) Methane | 111-91-1 | µg/L | Grab |
| 66 | Bis (2-Chloroethyl) Ether | 111-44-4 | µg/L | Grab |

| CTR Number | Semi-Organic Volatile Parameters | CAS Number | Units | Effluent Sample Type |
|------------|----------------------------------|------------|-------|----------------------|
| 67 | Bis (2-Chloroisopropyl) Ether | 108-60-1 | µg/L | Grab |
| 68 | Bis(2-Ethylhexyl) Phthalate | 117-81-7 | µg/L | Grab |
| 70 | Butylbenzyl Phthalate | 85-68-7 | µg/L | Grab |
| 73 | Chrysene | 218-01-9 | µg/L | Grab |
| 81 | Di-n-butyl Phthalate | 84-74-2 | µg/L | Grab |
| 84 | Di-n-Octyl Phthalate | 117-84-0 | µg/L | Grab |
| 74 | Dibenzo(a,h)anthracene | 53-70-3 | µg/L | Grab |
| 79 | Diethyl Phthalate | 84-66-2 | µg/L | Grab |
| 80 | Dimethyl Phthalate | 131-11-3 | µg/L | Grab |
| 86 | Fluoranthene | 206-44-0 | µg/L | Grab |
| 87 | Fluorene | 86-73-7 | µg/L | Grab |
| 88 | Hexachlorobenzene | 118-74-1 | µg/L | Grab |
| 90 | Hexachlorocyclopentadiene | 77-47-4 | µg/L | Grab |
| 91 | Hexachloroethane | 67-72-1 | µg/L | Grab |
| 92 | Indeno(1,2,3-cd) Pyrene | 193-39-5 | µg/L | Grab |
| 93 | Isophorone | 78-59-1 | µg/L | Grab |
| 98 | N-Nitrosodiphenylamine | 86-30-6 | µg/L | Grab |
| 96 | N-Nitrosodimethylamine | 62-75-9 | µg/L | Grab |
| 97 | N-Nitrosodi-n-Propylamine | 621-64-7 | µg/L | Grab |
| 95 | Nitrobenzene | 98-95-3 | µg/L | Grab |
| 53 | Pentachlorophenol (PCP) | 87-86-5 | µg/L | Grab |
| 99 | Phenanthrene | 85-01-8 | µg/L | Grab |
| 54 | Phenol | 108-95-2 | µg/L | Grab |
| 100 | Pyrene | 129-00-0 | µg/L | Grab |

INORGANICS

| CTR Number | Inorganic Parameters | CAS Number | Units | Effluent Sample Type |
|------------|----------------------|------------|-------|----------------------|
| NL | Aluminum | 7429-90-5 | µg/L | 24-hour Composite |
| 1 | Antimony, Total | 7440-36-0 | µg/L | 24-hour Composite |
| 2 | Arsenic, Total | 7440-38-2 | µg/L | 24-hour Composite |
| 15 | Asbestos | 1332-21-4 | µg/L | 24-hour Composite |
| 3 | Beryllium, Total | 7440-41-7 | µg/L | 24-hour Composite |
| 4 | Cadmium, Total | 7440-43-9 | µg/L | 24-hour Composite |
| 5a | Chromium, Total | 7440-47-3 | µg/L | 24-hour Composite |
| 6 | Copper, Total | 7440-50-8 | µg/L | 24-hour Composite |
| NL | Iron, Total | 7439-89-6 | µg/L | 24-hour Composite |
| 7 | Lead, Total | 7439-92-1 | µg/L | 24-hour Composite |
| 8 | Mercury, Total | 7439-97-6 | ng/L | Grab |
| NL | Manganese, Total | 7439-96-5 | µg/L | 24-hour Composite |
| 9 | Nickel, Total | 7440-02-0 | µg/L | 24-hour Composite |
| 10 | Selenium, Total | 7782-49-2 | µg/L | 24-hour Composite |
| 11 | Silver, Total | 7440-22-4 | µg/L | 24-hour Composite |

| CTR Number | Inorganic Parameters | CAS Number | Units | Effluent Sample Type |
|------------|----------------------|------------|-------|----------------------|
| 12 | Thallium, Total | 7440-28-0 | µg/L | 24-hour Composite |
| 13 | Zinc, Total | 7440-66-6 | µg/L | 24-hour Composite |

NON-METALS/MINERALS

| CTR Number | Non-Metal/Mineral Parameters | CAS Number | Units | Effluent Sample Type |
|------------|------------------------------|------------|-------|----------------------|
| NL | Boron | 7440-42-8 | µg/L | 24-hour Composite |
| NL | Chloride | 16887-00-6 | mg/L | 24-hour Composite |
| 14 | Cyanide, Total (as CN) | 57-12-5 | µg/L | Grab |
| NL | Sulfate | 14808-79-8 | mg/L | 24-hour Composite |
| NL | Sulfide (as S) | 5651-88-7 | mg/L | 24-hour Composite |

PESTICIDES/PCBs/DIOXINS

| CTR Number | Pesticide/PCB/Dioxin Parameters | CAS Number | Units | Effluent Sample Type |
|------------|---|------------|-------|----------------------|
| 110 | 4,4-DDD | 72-54-8 | µg/L | 24-hour Composite |
| 109 | 4,4-DDE | 72-55-9 | µg/L | 24-hour Composite |
| 108 | 4,4-DDT | 50-29-3 | µg/L | 24-hour Composite |
| 112 | alpha-Endosulfan | 959-98-8 | µg/L | 24-hour Composite |
| 103 | alpha-BHC (Benzene hexachloride) | 319-84-6 | µg/L | 24-hour Composite |
| 102 | Aldrin | 309-00-2 | µg/L | 24-hour Composite |
| 113 | beta-Endosulfan | 33213-65-9 | µg/L | 24-hour Composite |
| 104 | beta-BHC (Benzene hexachloride) | 319-85-7 | µg/L | 24-hour Composite |
| 107 | Chlordane | 57-74-9 | µg/L | 24-hour Composite |
| 106 | delta-BHC (Benzene hexachloride) | 319-86-8 | µg/L | 24-hour Composite |
| 111 | Dieldrin | 60-57-1 | µg/L | 24-hour Composite |
| 114 | Endosulfan Sulfate | 1031-07-8 | µg/L | 24-hour Composite |
| 115 | Endrin | 72-20-8 | µg/L | 24-hour Composite |
| 116 | Endrin Aldehyde | 7421-93-4 | µg/L | 24-hour Composite |
| 117 | Heptachlor | 76-44-8 | µg/L | 24-hour Composite |
| 118 | Heptachlor Epoxide | 1024-57-3 | µg/L | 24-hour Composite |
| 105 | gamma-BHC (Benzene hexachloride or Lindane) | 58-89-9 | µg/L | 24-hour Composite |
| 119 | Polychlorinated Biphenyl (PCB) 1016 | 12674-11-2 | µg/L | 24-hour Composite |
| 120 | PCB 1221 | 11104-28-2 | µg/L | 24-hour Composite |
| 121 | PCB 1232 | 11141-16-5 | µg/L | 24-hour Composite |
| 122 | PCB 1242 | 53469-21-9 | µg/L | 24-hour Composite |
| 123 | PCB 1248 | 12672-29-6 | µg/L | 24-hour Composite |
| 124 | PCB 1254 | 11097-69-1 | µg/L | 24-hour Composite |
| 125 | PCB 1260 | 11096-82-5 | µg/L | 24-hour Composite |
| 126 | Toxaphene | 8001-35-2 | µg/L | 24-hour Composite |
| 16 | 2,3,7,8-TCDD (Dioxin) | 1746-01-6 | mg/L | 24-hour Composite |

CONVENTIONAL PARAMETERS

| CTR Number | Conventional Parameters | CAS Number | Units | Effluent Sample Type |
|------------|-------------------------|------------|-------|----------------------|
| NL | pH | -- | SU | Grab |
| NL | Temperature | -- | °F | Grab |

NON-CONVENTIONAL PARAMETERS

| CTR Number | Nonconventional Parameters | CAS Number | Units | Effluent Sample Type |
|------------|--|------------|----------|----------------------|
| NL | Foaming Agents (MBAS) | MBAS | mg/L | 24-hour Composite |
| NL | Hardness (as CaCO ₃) | 471-34-1 | mg/L | Grab |
| NL | Specific Conductance (Electrical Conductivity or EC) | EC | µmhos/cm | Grab |
| NL | Total Dissolved Solids (TDS) | TDS | mg/L | 24-hour Composite |
| NL | Dissolved Organic Carbon (DOC) | DOC | mg/L | Grab |

NUTRIENTS

| CTR Number | Nutrient Parameters | CAS Number | Units | Effluent Sample Type |
|------------|--------------------------|------------|-------|----------------------|
| NL | Ammonia, Total (as N) | 7664-41-7 | mg/L | Grab |
| NL | Nitrate (as N) | 14797-55-8 | mg/L | Grab |
| NL | Nitrite (as N) | 14797-65-0 | mg/L | Grab |
| NL | Phosphorus, Total (as P) | 7723-14-0 | mg/L | 24-hour Composite |

4. **Table D-6 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-6:
 - a. **Applicable to all parameters.** 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.
 - b. **Grab Sample.** 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.
 - c. **Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.
 - d. **Redundant Sampling.** The Discharger is not required to conduct effluent monitoring for constituents that have already been sampled in a given month, as required in Table D-3, except for dissolved organic carbon, hardness, pH, and temperature, which shall be conducted concurrently with the characterization sampling.
 - e. **Concurrent Sampling.** The Discharger is not required to conduct effluent monitoring for constituents that have already been sampled in a given month, as required in Table D-3, except for hardness, pH, and

temperature, which shall be conducted concurrently with the effluent sampling

- f. **Sample Type.** All receiving water samples shall be taken as grab samples. Effluent samples shall be taken as described in Table D-6.
- g. **Bis (2-ethylhexyl) phthalate.** In order to verify if bis (2-ethylhexyl) phthalate is truly present in the effluent discharge, the Discharger shall take steps to assure that sample containers, sampling apparatus, and analytical equipment are not sources of the detected contaminant.
- h. **Total Mercury and Methylmercury.** Samples for total mercury and methylmercury shall be taken using clean hands/dirty hands procedures, as described in U.S. EPA method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels, for collection of equipment blanks (section 9.4.4.2), and shall be analyzed by U.S. EPA method 1630/1631 (Revision E) with a reporting limit of 0.05 ng/L for methylmercury and 0.5 nanograms per liter (ng/L) for total mercury.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D of the Municipal General Order) related to monitoring, reporting, and recordkeeping. Upon written request of the Central Valley Water Board, the Discharger shall submit a summary monitoring report. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year(s).
2. The Discharger shall report to the Central Valley Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.
3. Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if a Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

B. Self-Monitoring Reports

1. The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) [Program website](http://www.waterboards.ca.gov/ciwqs/index.html) (www.waterboards.ca.gov/ciwqs/index.html). The CIWQS Web site will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly SMRs including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this MRP. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than

required by this MRP, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

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

Table D-7. Monitoring Periods and Reporting Schedule

| Sampling Frequency | Monitoring Period | SMR Due Date |
|--------------------|--|---|
| Continuous | All | Submit with monthly SMR |
| 1/Day | (Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling. | Submit with monthly SMR |
| 1/Week | Sunday through Saturday | Submit with monthly SMR |
| 2/Week | Sunday through Saturday | Submit with monthly SMR |
| 1/Month | 1st day of calendar month through last day of calendar month | First day of second calendar month following month of sampling |
| 2/Month | 1st day of calendar month through last day of calendar month | First day of second calendar month following month of sampling |
| 1/Quarter | 1 January through 31 March; 1 April through 30 June; 1 July through 30 September; 1 October through 31 December | 1 May; 1 August; 1 November; 1 February of following year (respectively) |
| 2/Year | 1 January through 30 June; 1 July through 31 December | 1 August; 1 February of following year (respectively) |
| 1/Year | 1 January through 31 December | 1 February of following year |

4. **Reporting Protocols.** The Discharger shall report with each sample result the applicable RL and the current laboratory's method detection limit (MDL), as determined by the procedure in 40 C.F.R. part 136.

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

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

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data

quality for the reported result. Numerical estimates of data quality may be percent accuracy (\pm a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
 - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
5. **Multiple Sample Data.** When determining compliance with an AMEL, AWEL, or maximum daily effluent limitation (MDEL) for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or ND. In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
- a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
 - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
6. The Discharger shall submit SMRs in accordance with the following requirements:
- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; discuss corrective actions taken or planned; explain all unusual results, and/or events which affect interpretation of the results; and discuss the proposed time schedule for corrective actions.

Identified violations must include a description of the requirement that was violated and a description of the violation. The cover letter must be uploaded directly into CIWQS and violations must be entered into CIWQS under the Violations tab for the reporting period in which the violation occurred in addition to them being identified in the cover letter.

- c. The Discharger shall attach final laboratory reports for all contracted commercial laboratories, including quality assurance/quality control information, with all its SMRs for which sample analyses were performed. This requirement only applies to Effluent and Receiving Water Characterization monitoring per section IX.F of Appendix D. Bench sheets are not required but should be available upon request by Regional Board staff.
7. The Discharger shall submit in the SMRs calculations and reports in accordance with the following requirements.
 - a. **Calendar Annual Average Limitations.** The Discharger shall report the calendar year annual average electrical conductivity in the December SMR. The annual average shall be calculated as the average of the samples gathered for the calendar year.
 - b. **Mass Loading Limitations – Not Applicable.**
 - c. **Removal Efficiency (BOD₅ and TSS).** The Discharger shall calculate and report the percent removal of BOD₅ and TSS in the SMRs. The percent removal shall be calculated as specified in section VIII.A of the Waste Discharge Requirements in the Municipal General Order.
 - d. **Total Coliform Organisms Effluent Limitations.** The Discharger shall calculate and report the 7-day median of total coliform organisms for the effluent. The 7-day median of total coliform organisms shall be calculated as specified in section VIII.F of the Waste Discharge Requirements in Municipal General Order.
 - e. **Total Calendar Annual Mass Loading Mercury Effluent Limitations. – Not Applicable.**
 - f. **Temperature Effluent Limitation. – Not Applicable.**
 - g. **Chlorpyrifos and Diazinon Effluent Limitations. – Not Applicable.**
 - h. **Dissolved Oxygen Receiving Water Limitations.** The Discharger shall report monthly in the SMR the dissolved oxygen concentrations in the effluent (Monitoring Location EFF-001) and the receiving water (Monitoring Locations RSW-001 and RSW 002).
 - i. **Turbidity Receiving Water Limitations.** The Discharger shall calculate and report the turbidity increase in the receiving water applicable to the natural turbidity condition specified in section VI.A.18.a, of the Limitations and Discharge Requirements in the Municipal General Order.
 - j. **Temperature Receiving Water Limitations.** The Discharger shall calculate and report the temperature increase in the receiving water based

on the difference in temperature at Monitoring Locations RSW-001 and RSW-002.

C. Discharge Monitoring Reports (DMR's)

1. The Discharger shall electronically submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic submittal of DMRs will be in addition to electronic submittal of SMRs. Information about electronic submittal of DMRs is provided by the [Discharge Monitoring Report website](https://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring/) (https://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring/).

D. Other Reports

1. **Special Study Reports.** Special study reports required by section VIII.C, Provisions, in this NOA shall be submitted in accordance with the reporting requirements in Table D-8, Technical Reports.
2. **Analytical Methods Report.** The Discharger shall complete and submit an Analytical Methods Report, electronically via CIWQS submittal, by the due date specified in Table D-8 below. The Analytical Methods Report shall include the following for each constituent listed in tables D-3, D-4 and D-6 of this NOA R5-2023-0025-017: 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 in the MRP, Attachment E of the Municipal General Order), 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 greater than 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 this NOA R5-2023-0025-017 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.
3. **Annual Operations Report.** The Discharger shall submit in accordance with the reporting requirements in Table D-8, Technical Reports, a written report containing the following:
 - a. The names, certificate grades, and general responsibilities of all persons employed at the Facility.
 - b. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.
 - c. A statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration.
 - d. A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as

currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.

- e. The Discharger may also be requested to submit an annual report to the Central Valley Water Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

4. Annual Pretreatment Reporting Requirements. – Not Applicable.

5. **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 this NOA R5-2023-0025-017, the Discharger shall electronically submit an annual report of monthly data to the State Water Board by 30 April each year covering the previous calendar year. The report shall be submitted 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).

The annual report 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). 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.

6. **Technical Report Submittals.** The Municipal General Order, as specified in this NOA R5-2023-0025-017, includes requirements to submit various reports and documents that may include a Notice of Intent, special study technical reports, progress reports, and other reports identified in the MRP (hereafter referred to collectively as “technical reports”). Table D-8 below summarizes the technical reports that are applicable to this discharge and required by this NOA R5-2023-0025-017, and the due dates for each submittal. All technical reports shall be submitted electronically via CIWQS submittal. Technical reports should be uploaded as a PDF, Microsoft Word, or Microsoft Excel file attachment.

Table D-8. Technical Reports

| Report # | Technical Report | Due Date | CIWQS Report Name |
|-----------------|---|------------------|--------------------------|
| 1 | Notice of Intent | 30 June 2030 | NOI |
| 2 | Analytical Methods Report | 1 October 2026 | MRP X.D.2 |
| 3 | Analytical Methods Report Certification | 1 April 2027 | MRP IX.E.4 |
| 4 | Cyanide Constituent Study | 31 December 2028 | MRP X.D.1 |
| 5 | Annual Operations Report #1 | 1 February 2027 | MRP X.D.3 |
| 6 | Annual Operations Report #2 | 1 February 2028 | MRP X.D.3 |
| 7 | Annual Operations Report #3 | 1 February 2029 | MRP X.D.3 |
| 8 | Annual Operations Report #4 | 1 February 2030 | MRP X.D.3 |
| 9 | Annual Operations Report #5 | 1 February 2031 | MRP X.D.3 |
| 10 | Recycled Water Policy Annual Reports #1 | 30 April 2027 | MRP X.D.4 |
| 11 | Recycled Water Policy Annual Reports #2 | 30 April 2028 | MRP X.D.4 |
| 12 | Recycled Water Policy Annual Reports #3 | 30 April 2029 | MRP X.D.4 |
| 13 | Recycled Water Policy Annual Reports #4 | 30 April 2030 | MRP X.D.4 |
| 14 | Recycled Water Policy Annual Reports #5 | 30 April 2031 | MRP X.D.4 |

APPENDIX E – DETERMINATION OF WATER QUALITY-BASED EFFLUENT LIMITATIONS (WQBELS)

The Central Valley Water Board determined water quality-based effluent limitations (WQBELS) as described in the Municipal General Order, section V.C.4 of the Fact Sheet (Attachment F), using the effluent limits tables included in the Municipal General Order, section V.A.1 of the Limitations and Discharge Requirements. For parameters with both human health and aquatic life objectives/criteria, the final effluent limitations in this NOA are based on the lower of the effluent limitations based on the aquatic life objectives/criteria and human health objectives/criteria.

Abbreviations and Notes for Table E-1:

1. CV = Coefficient of Variation (established in accordance with section 1.4 of the SIP)
2. MDEL = Maximum Daily Effluent Limitation
3. AMEL = Average Monthly Effluent Limitation
4. MDEL = Maximum Daily Effluent Limitation
5. AWEL = Average Weekly Effluent Limitation
6. CMC = Criterion Maximum Concentration
7. CCC = Criterion Continuous Concentration
8. Coefficient of Variation (CV) calculated using effluent sample data for the parameter listed.
9. Effluent Limit Table as indicated and contained in section VI, Effluent Limitations and Discharge Specifications, of the Municipal General Order. Specific table listed is used to determine the appropriate AMEL, AWEL, or MDEL.

Table E-1. Human Health WQBELS Calculations

| Parameter | Units | Criteria | CV | Effluent Limit Table in Municipal General Order | AMEL | AWEL |
|-----------------------------|-------|----------|------|---|------|------|
| Nitrate plus Nitrite (as N) | mg/L | 10 | 0.27 | Table 20B | 10 | 14 |

Table E-2. Aquatic Life WQBELS Calculations

| Parameter | Units | CMC | CCC | CV | Effluent Limit Table in Municipal General Order | AMEL | AWEL |
|-----------------------|-------|-----|-----|-----|---|------|------|
| Ammonia, Total (as N) | mg/L | 5.1 | 2.3 | 0.6 | 18E | 2.0 | 4.6 |