Central Valley Regional Water Quality Control Board

15 December 2020

Dawn Clayton
General Manager
United Auburn Indian Community
1200 Athens Avenue
Lincoln, CA 95648

VIA EMAIL:
dawn.clayton@thundervalleyresort.com

CERTIFIED MAIL
7019 2280 0001 9244 0412

NOTICE OF APPLICABILITY (NOA); MUNICIPAL GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2017-0085-01, 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 7 February 2020 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 General Order for Municipal Wastewater Dischargers That Meet Objectives/Criteria at the Point of Discharge to Surface Water Order R5-2017-0085-01 (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 has determined that the NOI requirements have been fulfilled and the Facility is eligible for coverage under the Municipal General Order. This Facility's discharge is assigned Municipal General Order enrollee number R5-2017-0085-014 and National Pollutant Discharge Elimination System (NPDES) Permit CAG585001. Please reference your Municipal General Order enrollee number, **R5-2017-0085-014**, in your correspondence and submitted documents.

Discharges to surface water from the Facility are currently regulated by an individual NPDES permit, Order R5-2015-0077 (NPDES CA0085697) issued by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) on 5 June 2015. The current individual NPDES permit expired on 31 July 2020 and was administratively extended by the Executive Officer on 18 May 2020. This NOA, authorizing coverage under the Municipal General Order, shall become effective on **1 February 2021**, at which time the terms and conditions in Order R5-2015-0077 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 and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements contained in the Municipal General Order and as specified in this NOA. This action in no way prevents the Central Valley Water Board from taking enforcement action for past violations of Order R5-2015-0077.

The enclosed Municipal General Order is not currently available online but 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/). 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 as Appendix D. Only the monitoring and reporting requirements specifically listed in Appendix D of this NOA are applicable to this Facility. Additionally, please note the new requirement in Appendix D, Section X.B.6.c of this NOA to attach all final laboratory reports from all contracted commercial laboratories with your Self-Monitoring Reports (SMRs).

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

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	Dawn Clayton, General Manager, (916) 408-8472
Authorized Person to Sign and Submit Reports	Jack Wanner, Director of Facilities, (916) 408-8368
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	38º 50’ 44” North, 121º 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 treatment system at the Facility consists of the following:

- influent pump station
- headworks (with flow measurement and fine screening)

- four immersed membrane bioreactors (IMB's), combine 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 BENEFICAL 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. 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.

IV. 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)

V. 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 1-5 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, Appendix D of this NOA.

The Discharger shall maintain compliance with the effluent limitations specified in Table 2 and items 1-5 below.

Table 2. Effluent Limitations

Parameter	Units	Average Monthly	Average Weekly	Municipal General Order Section Reference
Biochemical Oxygen Demand (5-day @ 20°Celcius) (BOD_5)	milligrams per liter (mg/L)	10	15	V.A.1.a.ii.(a)
Total Suspended Solids (TSS)	mg/L	10	15	V.A.1.a.ii.(a)

Parameter	Units	Average Monthly	Average Weekly	Municipal General Order Section Reference
Ammonia Nitrogen, Total as Nitrogen (as N)	mg/L	1.3	2.7	V.A.1.c.v.(b) Table 17C
Nitrate plus Nitrite, Total (as N)	mg/L	10	14	V.A.1.c.vi Table 19B

1. **pH (Municipal General Order section V.A.1.c.iv.(a)).** The pH shall at all times be within the range of 6.5 and 8.5.
2. **Percent Removal (Municipal General Order section V.A.1.a.ii.(b).(1)).** The average monthly percent removal of BOD_5 and TSS shall not be less than 85 percent.
3. **Total Coliform Organisms (Municipal General Order section V.A.1.a.ii.(c)).** (Measured at EFF-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.
4. **Whole Effluent Toxicity, Acute (Municipal General Order section V.A.1.c.i).** Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:
   i. 70%, minimum for any one bioassay; and
   ii. 90%, median for any three consecutive bioassays**.**
5. **Electrical Conductivity (Municipal General Order section V.A.1.c.viii.(a) Table 21).**
   The effluent electrical conductivity shall not exceed the calendar annual average effluent limitation of 1,250 micromhos per centimeter (µmhos/cm).

VI. RECEIVING WATER LIMITATIONS

1. **Surface Water Limitations (Municipal General Order section VI.A).**
   The Municipal General Order includes receiving surface water limitations in Section VI.A. Based on the information provided in the NOI, only the following receiving surface water limitations listed in Municipal General Order Section VI.A are applicable to the Facility.
   - Biostimulatory Substances (VI.A.3);
   - Chemical Constituents (VI.A.4);
   - Color (VI.A.5);
   - Dissolved Oxygen (VI.A.6.a.i-iv);
   - Floating Material (VI.A.7);
   - Oil and Grease (VI.A.8);
   - pH (VI.A.9.a);

- Pesticides (VI.A.10);
- 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).

2. Groundwater Limitations (Municipal General Order section VI.B).

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 water quality objectives, whichever is greater.

VII. MONITORING AND REPORTING

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

VIII. PROVISIONS

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

A. Standard Provisions. (section VII.A of the Municipal General Order)

Applicable to all Dischargers.

B. Monitoring and Reporting Program (MRP) Requirements. (section VII.B of the Municipal General Order)

The MRP applicable to this Facility is contained in Appendix D of this NOA.

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 specified in Table 3 apply to this Facility:

Table 3: Summary of Applicable Special Provisions

Special Provision	Section Reference
1. Reopener Provisions	a. Major Modification of Treatment Works c. Whole Effluent Toxicity d. Water Effect Ratios (WERs) and Metal Translators
2. Special Studies, Technical Reports and Additional Monitoring Requirements	a.iii-iv. Toxicity Reduction Evaluation Requirements
3. Best Management Practices and Pollution Prevention	c. Salinity Evaluation and Minimization Plan

Special Provision	Section Reference
4. Construction, Operation and Maintenance Specifications	a.ii.(a)-(b). Filtration System Operating Specifications 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

2. **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.

IX. COMPLIANCE DETERMINATION

The following compliance determinations, as contained and more fully described in the Municipal General Order, are applicable to this discharge (Municipal General Order section given in brackets, if applicable):

- BOD_5 and TSS Effluent Limitations (VIII.A);
- Average Dry Weather Flow Prohibition (VIII.D);
- Total Coliform Organisms Effluent Limitations (VIII.E);
- Priority Pollutant Effluent Limitations (VIII.H);
- Dissolved Oxygen Receiving Water Limitation (VIII.I);
- Chronic Whole Effluent Toxicity Effluent Trigger (VIII.J);
- Use of Delta Regional Monitoring Program and Other Receiving Water Data to Determine Compliance with Receiving Water Limitations (VIII.M);
- Period Average, Calendar Month Average, and Annual Average (VIII.N);
- Turbidity Receiving Water Limitation (VIII.O); and
- Reporting Requirements **(NOA, Appendix D, section X).**

X. 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 Clean Water Act (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 mercury, ammonia, BOD_5, and TSS are less stringent than prescribed in previous Order R5-2015-0077. A more detailed anti-backsliding analysis is provided in Appendix C to this NOA in section II.A Satisfaction of Anti-Backsliding Requirements, the relaxation of effluent limitations meets the exceptions proved in the federal anti-backsliding regulations.

XI. ANTIDEGRADATION REQUIREMENTS

Antidegradation requirements are specified in the Municipal General Order, section V.D.4, Attachment F (Fact Sheet). This NOA does not allow an increase in flow or mass of pollutants to the receiving water and the relaxation of effluent limitations for mercury, ammonia, BOD_5, and TSS 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, section II.B Antidegradation Policies.

XII. 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.

XIII. ENFORCEMENT

Failure to comply with the applicable requirements of the Municipal General Order, as specified in this NOA, 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 MMP's 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.

XIV. COMMUNICATION

Until this NOA becomes effective on **1 February 2021**, you will need to comply with the effluent limitations and requirements contained in your existing permit, Order R5-2015-0077. For your December 2020 and January 2021 monthly self-monitoring reports, you will need to demonstrate compliance with existing Order R5-2015-0077 through 31 January 2021. For your February 2021 self-monitoring report, you will need to demonstrate compliance with this NOA beginning **1 February 2021**.

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 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 is issued, except that if the thirtieth day following the date this NOA 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 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. 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 at (916) 464-4826 or at Paul.Wadding@waterboards.ca.gov.

Date: 2020.12.15 16:00:50 -08'00'

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 WQBEL’s

Enclosure:
Municipal General Order R5-2017-0085-01 (Discharger Only)

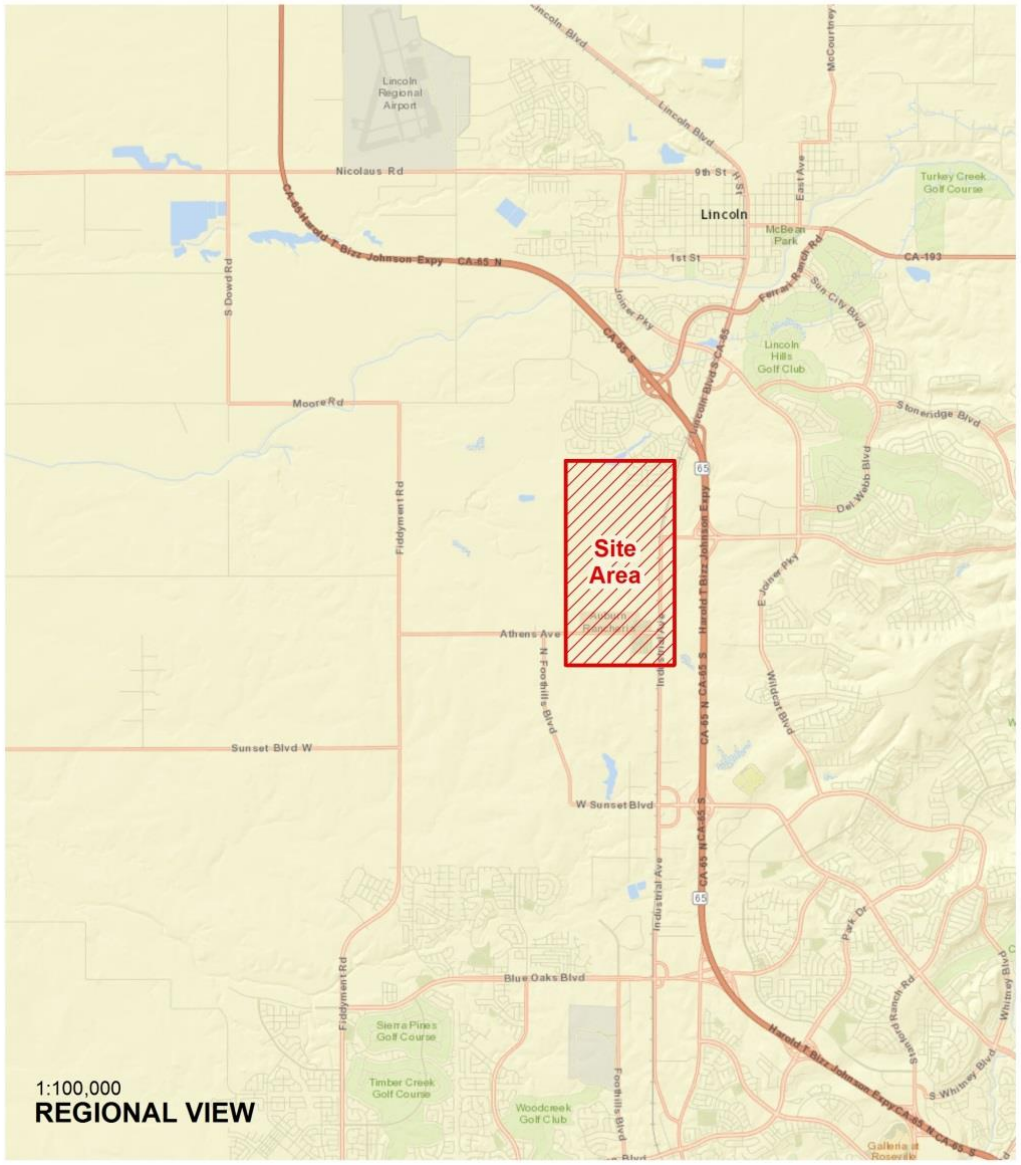
cc:
Elizabeth Sablad, U.S. EPA, Region IX, San Francisco (email only)
Peter Kozelka, U.S. EPA, Region IX, San Francisco (email only)
Afrooz Farsimadan, California State Water Resources Control Board (email only)
Renan Jauregui, California State Water Resources Control Board (email only)
Jarma Bennett, California State Water Resources Control Board, (email only)
Jack Sanchez, Save Auburn Ravine Salmon and Steelhead, Auburn
ICIS NPDES (Sarah Torres), PG Environmental (icis-npdes@pgenv.com)

APPENDIX A – LOCATION MAP

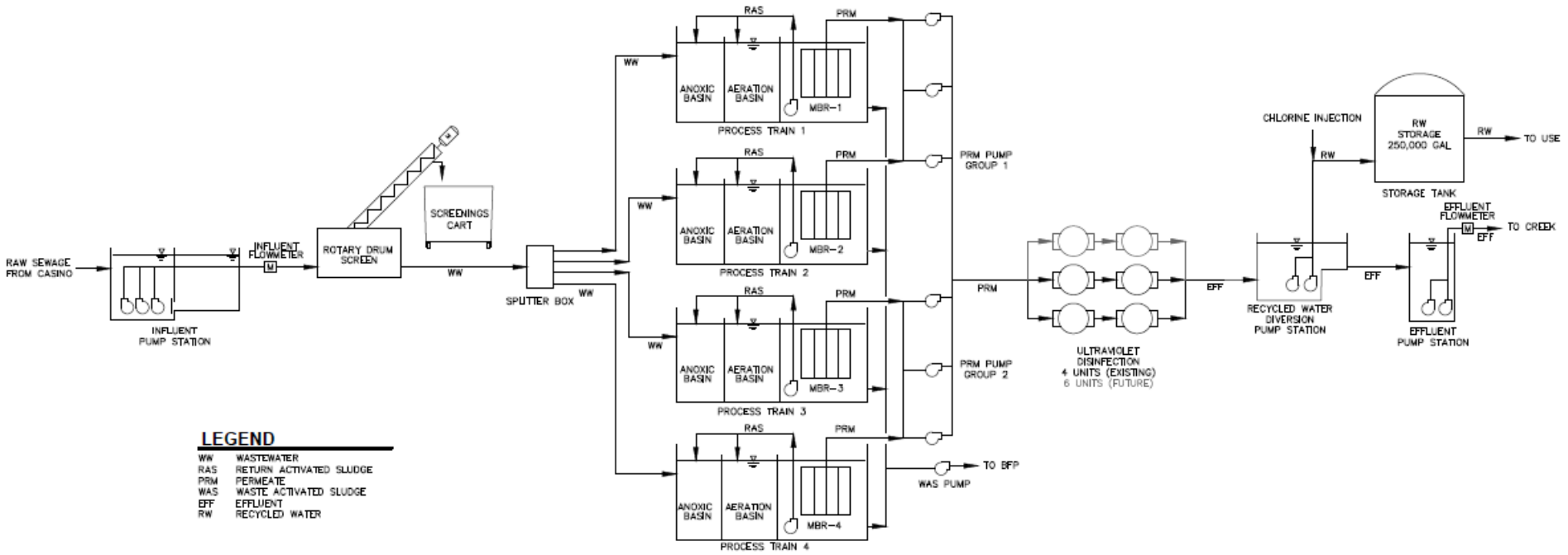
United Auburn Indian Community

Thunder Valley Casino Wastewater Treatment Plant

NPDES Permit No. CA0084697



APPENDIX B – FLOW SCHEMATIC



APPENDIX C – SUPPLEMENTAL FACT SHEET

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 Notice of Applicability.

I. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this the Municipal General Order and this NOA are based on the requirements and authorities described in Attachment F, Section III of the Municipal General Order. The following resolution is also applicable to this NOA.

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. FINAL EFFLUENT LIMITATION CONSIDERATIONS

A. Satisfaction of Anti-Backsliding Requirements

The Clean Water Act (CWA) 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 C.F.R. section 122.44(l).

The effluent limitations in this NOA are at least as stringent as the effluent limitations in the Facility's previous Order R5-2015-0077, with the exception of effluent limitations mercury, mass-based effluent limitations for ammonia, BOD_5, and TSS and maximum daily effluent limitations for BOD_5 and TSS. The effluent limitations for these pollutants are less stringent than those in Order R5-2015-0077. This relaxation 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 (WQBEL's) "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 TMDL's or WLA's 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 ammonia, mercury, BOD_5, and TSS because the receiving water 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, removal of the effluent limit for mercury, mass-based effluent limitations for ammonia, BOD_5, and TSS and maximum daily effluent limitations for BOD_5 and TSS complies with federal and state antidegradation requirements. Thus, 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 Order R5-2015-0077 was issued indicates that mercury does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water. Additionally, updated information that was not available at the time Order R5-2015-0077 was issued indicates that less stringent effluent limitations for mercury, based on available data, satisfy requirements in CWA section 402(o)(2). The updated information that supports the relaxation of mercury effluent limitations includes the following:

   a. **Mercury.** Monitoring data collected over the permit term for Order R5-2015-0077 indicates that mercury in the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of their respective water quality objectives/criteria.

   Thus, removal of the effluent limitations for mercury from this NOA is in accordance with CWA section 402(o)(2)(B)(i), which allows for the removal or relaxation of effluent limitations based on information that was not available at the time previous Order R5-2015-0077 was issued.

3. **Flow.** Order R5-2015-0077 included flow as an effluent limit at Discharge Point 001 based on the Facility design flow. Compliance with the flow limit was calculated using the average daily flow over three consecutive dry weather months. Flow is not a pollutant and therefore has been changed from an effluent limit to a discharge prohibition in this NOA, which is an equivalent level of regulation. This NOA is not less stringent because compliance with

flow as a discharge prohibition will be calculated the same way as the previous Order. Flow as a discharge prohibition adequately regulates the Facility, does not allow for an increase in the discharge of pollutants, and does not constitute backsliding.

B. Antidegradation Policies

The Discharger is planning an upgrade and expansion project that would increase the design capacity of the Facility from 0.70 MGD to 0.875 MGD. Order R5-2010-0005 provided antidegradation findings and authorized an increase in the permitted flow to 0.875 MGD from the expanded Facility, and Order R5-2015-0077 included updated information since the adoption of Order R5-2010-0005. The exact schedule for the Facility expansion has not been determined but is not currently planned within the next five years. This NOA 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 requires the Discharger to submit a 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 to 0.875 MGD shall not be effective until this NOA is modified to reflect the increase in flow and is signed into effect by the Executive Officer.

This NOA requires compliance with applicable federal technology-based standards and with WQBEL's 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 removes effluent limitations for mercury based on updated monitoring data demonstrating that the effluent does not cause or contribute to an exceedance of the applicable water quality criteria or objectives in the receiving water. The removal of effluent limitations 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.

This NOA also removes mass-based effluent limitations for ammonia, BOD_5, and TSS and maximum daily effluent limitations for BOD_5 and TSS based on 40 C.F.R. Part 122.45(d) and (f). These changes in effluent limitations will not result in a decrease in the level of treatment or control, or a reduction in water quality. Furthermore, concentration-based average monthly effluent limitations (AMEL's) and average weekly effluent limitations (AWEL's) are included for ammonia, BOD_5, and TSS, as well as a prohibition (section V.D of this NOA) on discharging flows greater than the average dry weather flow that limits the amount of flow that can be discharged to the receiving water during dry weather months. The combination of flow and concentration-based effluent limits in this NOA are equivalent to mass-based effluent limitations, which were redundant limits

contained in previous individual Orders by multiplying the concentration based effluent limits and permitted average dry weather flow by a conversion factor to determine the mass-based effluent limitations. These effluent limitation changes do not result in an allowed increase in pollutants or any additional degradation of the receiving water and are therefore consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and the State Antidegradation Policy.

C. Salinity (Electrical Conductivity or EC)

Based on effluent and upstream receiving water EC data collected from February 2017 to January 2020, the maximum calendar annual average EC of the effluent was 952 µmhos/cm and the upstream receiving water was 275 µmhos/cm. The Municipal General Order includes a screening level for EC of 1600 µmhos/cm based on the Secondary Maximum Contaminant Level (MCL) to protect the municipal and domestic supply beneficial use.

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 the Region-wide concerns regarding salinity and to ensure implementation of the Basin Plan's Salinity Control Program the Municipal General Order includes performance-based effluent limitations 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 calendar annual average effluent limitation of 1,250 µmhos/cm for EC is applied limiting the discharge to current levels (thus ensuring that BPTC will continue to be met).

III. 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.

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., BOD_5 and TSS reduction requirements). The monitoring frequencies for flow

(continuous), BOD_5 (once per week), and TSS (once per week) have been retained from Order R5-2015-0077.

2. This NOA establishes influent monitoring for EC (once per week) to better determine the source of increasing EC.

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.
2. This NOA includes effluent monitoring for dissolved organic carbon (once per quarter) to calculate site-specific freshwater aluminum criteria in accordance with the 2018 United State Environmental Protection Agency (U.S. EPA) National Ambient Water Quality Criteria (NAWQC) for aluminum in freshwater for the next permit renewal.
3. Effluent monitoring for dissolved oxygen was not included in Order R5-2015-0077. This NOA includes effluent monitoring for dissolved oxygen (once per month). Monitoring of the effluent will provide information of the Facility's influence on dissolved oxygen concentrations at the downstream receiving water monitoring location, RSW-002, and will be used to assess compliance with dissolved oxygen receiving water limitations.
4. Effluent monitoring frequencies and sample types for flow (continuous), ammonia (once per week), BOD_5 (once per week), electrical conductivity (once per week), nitrate (once per month), nitrite (once per month), total coliform organisms (once per week), TSS (once per week) have been retained from Order R5-2015-0077 to determine compliance with effluent limitations, where applicable, and characterize the effluent for these parameters.
5. This NOA reduces the monitoring frequency for pH (once per day to three times per week), temperature (once per day to three times per week), and hardness (once per month to once per quarter) consistent with monitoring frequencies in other similar facilities. The Central Valley Water Board finds that this frequency is sufficient to characterize the effluent.
6. Monitoring data collected over the previous permit term for mercury and zinc did not demonstrate reasonable potential to exceed water quality objectives/criteria. Thus, specific monitoring requirements for these parameters have not been retained from Order R5-2015-0077.
7. As discussed in Section I.B of this Appendix, the mass-based effluent limitations for ammonia, BOD_5, and TSS and maximum daily effluent limitations for BOD_5 and TSS have not been retained from Order R5-2015-0077.

C. Whole Effluent Toxicity Testing Requirements

1. **Acute Toxicity**. Effluent monitoring frequency for acute toxicity 96-hour bioassay (once per year) has been retained from previous Order R5-2015-0077 to demonstrate compliance with the effluent limitation for acute toxicity.
2. **Chronic Toxicity.** Effluent monitoring frequency for chronic toxicity bioassay testing (once per quarter) has been retained from previous Order R5-2015-0077. Chronic whole effluent toxicity testing is required when discharging to Orchard Creek in order to demonstrate compliance with the Basin Plan's narrative toxicity objective.

D. Receiving Water Monitoring

1. Orchard Creek

a. Receiving water monitoring is necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge to Orchard Creek.

b. This NOA includes receiving water monitoring for dissolved organic carbon (once per quarter) to calculate site-specific freshwater aluminum criteria in accordance with the 2018 U.S. EPA NAWQC for aluminum in freshwater for the next permit renewal.

c. The receiving water monitoring frequencies and sample types for pH and temperature have been retained from Order R5-2015-0077 to determine compliance with receiving water limitations for these parameters. The frequencies for these parameters are shown on Table D-4 (Receiving Water Monitoring).

d. Order R5-2015-0077 required receiving water monitoring for dissolved oxygen (once per week) and electrical conductivity (once per week). Monitoring data collected during the term of Order R5-2015-0077 indicates that the discharge has not caused significant impacts to Orchard Creek. Therefore, this NOA decreases the monitoring frequency for dissolved oxygen (once per month) and electrical conductivity (once per month), which is consistent with monitoring frequencies in other similar facilities.

e. This NOA also reduces the monitoring frequency for hardness from once per month to once per quarter consistent with monitoring frequencies in other similar facilities. The Central Valley Water Board finds that this frequency is sufficient to characterize the receiving water.

2. Groundwater – Not Applicable

E. Biosolids Monitoring – Not Applicable

F. Water Supply Monitoring

1. Water supply monitoring is required to evaluate the source of salinity in the wastewater.

2. Order R5-2015-0077 required quarterly monitoring of the water supply. This NOA retains the quarterly monitoring frequency.

G. Filtration System Monitoring

1. 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.
2. Continuous monitoring for turbidity is included under the Filtration and UV Disinfection System monitoring requirements in previous Order R5-2015-0077. Continuous monitoring for turbidity is retained in this NOA as specified in section IX.C of the MRP, Appendix D.

H. UV Disinfection System Monitoring

1. Continuous monitoring for flow, number of UV banks in operation, UV transmittance, and UV dose has been retained from previous Order R5-2015-0077. In addition, monitoring for total coliform organisms at EFF-001 (Total coliform monitoring frequency) has also been retained from previous Order R5-2015-0077.

I. Pond Monitoring – Not Applicable

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

1. 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.

K. Effluent and Receiving Water Characterization Monitoring

1. Order R5-2015-0077 included quarterly effluent characterization monitoring for one year when discharging to Orchard Creek. This NOA retains the quarterly effluent characterization monitoring for one year.

2. Order R5-2015-0077 included quarterly receiving water characterization monitoring for one year. This NOA reduces the receiving water characterization monitoring to semiannual to determine receiving water constituent concentrations during both the dry and wet seasons.

IV. PRETREATMENT PROVISION – NOT APPLICABLE

V. SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Abbreviations used in Table C-1:

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-1: SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Parameter	Units	MEC	B	C	CMC	CCC	Water and Org	Org. Only	Basin Plan	MCL	RP
Ammonia (as N)	mg/L	0.32	0.11	1.42	5.73	1.42	--	--	--	--	Yes
Electrical Conductivity @ 25°Celcius (°C)	µmhos/cm	952	275	1,600	--	--	--	--	--	1,600	No

1. Table C-1 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.
   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.
   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).
   iv. **Electrical Conductivity @ 25°C.** Reasonable potential for electrical conductivity is determined using the maximum calendar annual average for the effluent and receiving water.

APPENDIX D – MONITORING AND REPORTING PROGRAM

Tables

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 Discharger. The monitoring and reporting requirements applicable to the Discharger 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. California 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 Order shall be conducted by a laboratory accredited for such analyses by the State Water Resources Control Board (State Water Board), Division of Drinking Water (DDW), in accordance with the provision of Water Code section 13176. Laboratories that perform sample analyses must be identified in all monitoring reports submitted to the Central Valley Water Board. Data generated from field measurements such as pH, dissolved oxygen, electrical conductivity (EC), turbidity, temperature, and residual chlorine are exempt pursuant to Water Code Section 13176. A manual containing the steps followed in this program for any field measurements such as pH, dissolved oxygen, EC, turbidity, temperature, and residual chlorine must be kept onsite in the treatment facility laboratory and shall be available for inspection by Central Valley Water Board staff. The Discharger must demonstrate sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform these field measurements. The Quality Assurance-Quality Control Program must conform to U.S. EPA guidelines or to procedures approved by the Central Valley Water Board.

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. Dischargers shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted via email 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. The North latitude and West longitude information in Table D-1 are approximate for administrative purposes.

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 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
--	SPL-001	A location where a representative sample of the municipal supply water can be obtained.

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	Minimum Sampling Frequency
Flow	MGD	Meter	Continuous
Biochemical Oxygen Demand (5-day @ 20°Celcius [°C])	mg/L	24-hour Composite	1/Week
Total Suspended Solids	mg/L	24-hour Composite	1/Week

Parameter	Units	Sample Type	Minimum 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. All composite samples shall be collected from a 24-hour flow proportional composite.

   c. All grab samples shall not be collected at the same time each day to get a complete representation of variations in the influent.

   d. 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 Monitoring and Reporting Program 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

Parameter	Units	Sample Type	Minimum Sampling Frequency
pH	standard units	Grab	3/Week
Total Suspended Solids	mg/L	24-hr Composite	1/Week
Total Suspended Solids	percent removal	Calculate	1/Month
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 Nitrogen, Total (as N)	mg/L	Grab	1/Month
Nitrite Nitrogen, Total (as N)	mg/L	Grab	1/Month
Nitrate Plus Nitrite (as N)	mg/L	Calculate	1/Month
Temperature	°C	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. 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.

   c. 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.** Samples for pH and temperature shall be recorded at the time of ammonia sample collection.

   e. A hand-held field meter may be used for pH, electrical conductivity, temperature, dissolved oxygen, and turbidity, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

   f. **Total Coliform Organisms**. Total coliform organisms samples may be collected at any point following disinfection.

   g. **Dissolved Organic Carbon.** Hardness, total (as $CaCO_3$) and pH samples shall be taken concurrent with dissolved organic carbon samples.

h. **Temperature, pH, Hardness, Dissolved Oxygen, and Dissolved Organic Carbon.** The effluent 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 receiving water samples for these parameters.

V. WHOLE EFFLUENT TOXICITY (WET)TESTING REQUIREMENTS

A. Acute Toxicity Testing.

The Discharger shall conduct acute toxicity testing to determine whether the effluent is contributing acute toxicity to the receiving water. The Discharger shall meet the following acute toxicity testing requirements:

1. *Monitoring Frequency* – The Discharger shall perform **annual** acute toxicity testing, while the Facility is discharging to Orchard Creek and concurrent with effluent ammonia sampling.
2. *Sample Types* – The Discharger may use flow-through or static renewal testing. For static renewal testing, the samples shall be grab samples, and shall be representative of the volume and quality of the discharge. The effluent samples shall be taken at Monitoring Location EFF-001.
3. *Test Species* – The test species shall be fathead minnows (*Pimephales promelas*).
4. *Test Duration* – Test duration shall be 96 hours.
5. *Methods* – The acute toxicity testing samples shall be analyzed using EPA-821-R-02-012, Fifth Edition. Temperature and pH shall be recorded at the time of sample collection. No pH adjustment may be made unless approved by the Executive Officer.
6. *Test Failure* – If an acute toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger must re-sample and re-test as soon as possible, not to exceed 7 days following notification of test failure.

B. Chronic Toxicity Testing.

The Discharger shall conduct chronic toxicity testing to determine whether the effluent is contributing chronic toxicity to the receiving water. The Discharger shall meet the following chronic toxicity testing requirements:

1. *Monitoring Frequency* – The Discharger shall perform **quarterly** chronic toxicity testing when discharging to Orchard Creek. If the result of the routine chronic toxicity testing event exhibits toxicity, demonstrated by a result greater than 1.3 TUc (as $100/EC_{25}$) **AND** a percent effect greater than 25 percent at 100 percent effluent, the Discharger has the option of conducting two additional compliance monitoring chronic toxicity testing events in order to calculate a median. The optional compliance monitoring events shall occur at least one week apart, and the final monitoring event shall be initiated no later than 6 weeks from the routine monitoring event that exhibited toxicity. See

Compliance Determination Section VIII.J of the Municipal General Order for procedures for calculating the 6-week median.

2. *Sample Types* – Effluent samples shall be flow proportional 24-hour composite samples and shall be representative of the volume and quality of the discharge. The effluent samples shall be taken at Monitoring Location EFF-001. The receiving water control shall be a grab sample obtained from Monitoring Location RSW-001.
3. *Sample Volumes* – Adequate sample volumes shall be collected to provide renewal water to complete the test in the event that the discharge is intermittent.
4. *Test Species* – Chronic toxicity testing measures sublethal (e.g., reduced growth, reproduction) and/or lethal effects to test organisms exposed to an effluent compared to that of the control organisms. The Discharger shall conduct chronic toxicity tests with one of the following species that is the most sensitive:
   a. The cladoceran, water flea, *Ceriodaphnia dubia* (survival and reproduction test);
   b. The fathead minnow, *Pimephales promelas* (larval survival and growth test); and
   c. The green alga, *Selenastrum capricornutum* (growth test).
5. *Most Sensitive Species Determination* – The Discharger conducted quarterly three species chronic toxicity testing over the previous permit term. The chronic toxicity test results for the most sensitive species determination did not exceeded the 1 TUc trigger with a percent effect greater than 25% in the routine tests or accelerated tests for routine test that did exceed the threshold. Therefore, consistent with the most sensitive species determination method in section V.B.5 of Attachment E (Monitoring and Reporting Program) of the Municipal General Order, the Executive Officer is requiring the Discharger to rotate the test species every calendar year as described below.
6. *Most Sensitive Species Monitoring Requirements* – If a single test exhibits toxicity, demonstrated by a result greater than 1.3 TUc (as $100/EC_{25}$) **AND** a percent effect greater than 25 percent at 100 percent effluent, then the species used in that test shall be established as the most sensitive species **until the next NOA renewal**. Otherwise, the species test rotation order shall be as follows:
   - *Ceriodaphnia dubia* **upon the effective date of this NOA** through the remainder of this calendar year;
   - *Pimephales promelas* **after** *Ceriodaphnia dubia* for the entire calendar year;
   - *Selenastrum capricornutum* **after** *Pimephales promelas* for the entire calendar year; and

cycling back to *Ceriodaphnia dubia* **after** *Selenastrum capricornutum* for the entire calendar year and back through the same rotation until the next permit renewal.

7. *Methods* – The presence of chronic toxicity shall be estimated as specified in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, EPA/821-R-02-013, October 2002.
8. *Reference Toxicant* – As required by the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP), all chronic toxicity tests shall be conducted with concurrent testing with a reference toxicant and shall be reported with the chronic toxicity test results.
9. *Dilutions* –For routine and compliance chronic toxicity monitoring, chronic toxicity testing shall be performed using the dilution series identified in Table D-4, below. For TRE monitoring, chronic toxicity testing shall be performed using the dilution series identified, below, unless an alternative dilution series is detailed in the submitted TRE Action Plan. A receiving water control or laboratory water control may be used as the diluent.

Table D-4. Chronic Toxicity Testing Dilution Series

Sample	100% Dilution	75% Dilution	50% Dilution	25% Dilution	12.5% Dilution	Control
% Effluent	100%	75%	50%	25%	12.5%	0%
% Control Water	0%	25%	50%	75%	87.5%	100%

10. *Test Failure* – The Discharger must re-sample and re-test as soon as possible, but no later than fourteen (14) days after receiving notification of a test failure. A test failure is defined as follows:
    a. The reference toxicant test or the effluent test does not meet all test acceptability criteria as specified in the Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, EPA/821-R-02-013, October 2002 (Method Manual), and its subsequent amendments or revisions; or
    b. The percent minimum significant difference (PMSD) measured for the test exceeds the upper PMSD bound variability criterion in Table 6 on page 52 of the Method Manual. (A retest is only required in this case if the test results do not exceed the monitoring trigger specified in the Special Provision at section VII.C.2.a.iii of the Municipal General Order.)

C. WET Testing Notification Requirements.

The Discharger shall notify the Central Valley Water Board within 24-hours after the receipt of test results exceeding the monitoring trigger during regular monitoring, or an exceedance of the acute toxicity effluent limitation.

D. WET Testing Reporting Requirements.

All toxicity test reports shall include the contracting laboratory's complete report provided to the Discharger and shall be in accordance with the appropriate "Report Preparation and Test Review" sections of the method manuals. At a minimum, whole effluent toxicity monitoring shall be reported as follows:

1. **Chronic WET Reporting.** Chronic toxicity monitoring results shall be reported to the Central Valley Water Board with the quarterly self-monitoring report, and shall contain, at minimum:
   a. The results expressed in TUc, measured as 100/NOEC, and also measured as 100/LC50, 100/EC25, 100/IC25, and 100/IC50, as appropriate.
   b. The percent effect at the instream waste concentration;
   c. The statistical methods used to calculate endpoints;
   d. The statistical output page, which includes the calculation of the percent minimum significant difference (PMSD);
   e. The dates of sample collection and initiation of each toxicity test; and
   f. The results compared to the numeric toxicity monitoring trigger or effluent limitation.

   Additionally, the quarterly SMR shall contain an updated chronology of chronic toxicity test results expressed in TUc (as $100/EC_{25}$) and percent effect at the instream waste concentration, and organized by type of test (survival, growth or reproduction), and monitoring frequency, i.e., either quarterly, monthly, monthly median, or TRE.
2. **Acute WET Reporting.** Acute toxicity test results shall be submitted with the annual SMR and reported as percent survival.
3. **TRE or Toxicity Evaluation Study Reporting**. Reports for TREs or a Toxicity Evaluation Study shall be submitted in accordance with the schedule contained in the Discharger's approved TRE Workplan, or as amended by the Discharger's TRE Action Plan.
4. **Quality Assurance (QA).** The Discharger must provide the following information for QA purposes:
   a. Results of the applicable reference toxicant data with the statistical output page giving the species, NOEC, LOEC, type of toxicant, dilution water used, concentrations used, PMSD, and dates tested.
   b. The reference toxicant control charts for each endpoint, which include summaries of reference toxicant tests performed by the contracting laboratory.
   c. Any information on deviations or problems encountered and how they were dealt with.

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-5 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-5. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum 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	ºFahrenheit (°F)	Grab	1/Week
Dissolved Organic Carbon (DOC)	mg/L	Grab	1/Quarter

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. A hand-held field meter may be used for pH, electrical conductivity, temperature, and dissolved oxygen, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

   b. 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. **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.

   d. **Whole Effluent Toxicity.** Ammonia nitrogen, Total (as N) shall be sampled concurrent with whole effluent toxicity monitoring

e. **Dissolved Organic Carbon.** Hardness, total (as $CaCO_3$) and pH samples shall be taken concurrent with dissolved organic carbon samples.

f. **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

1. **Monitoring Location SPL-001**

   a. The Discharger shall monitor the municipal water supply at Monitoring Location SPL-001 as specified in Table D-6 and the testing requirements in section IX.C.2.

Table D-6. Municipal Water Supply Monitoring Requirements

Parameter	Units	Sample Type	Sampling Frequency
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Quarter
Hardness, Total (as $CaCO_3$)	mg/L	Grab	1/Quarter

2. 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. If the water supply is from more than one source electrical conductivity shall be reported as a weighted average and include copies of supporting calculations.

b. 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. 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.

d. A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

D. Filtration System

1. Monitoring Location FIL-001

a. The Discharger shall monitor the filtration system at Monitoring Location FIL-001 as specified in Table D-7 and the testing requirements in section IX.D.2.

Table D-7. Filtration System Monitoring Requirements

Parameter	Units	Sample Type	Sampling Frequency
Turbidity	NTU	Meter	Continuous

2. Table D-7 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-7:

a. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods that have been approved by the Central Valley Water Board or the State Water Board.

b. For continuous analyzers, the Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation. If analyzer(s) fail to provide continuous monitoring for more than two hours and influent and/or effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results.

c. Report daily average and maximum turbidity.

E. Ultraviolet Light (UV) Disinfection System

1. Monitoring Locations UVS-001

a. The Discharger shall monitor the UV disinfection system at Monitoring Locations UVS-001 as specified in Table D-8 and the testing requirements in section IX.E.2.

Table D-8. UV Disinfection System Monitoring Requirements

Parameter	Units	Sample Type	Sampling Frequency	Monitoring Location
Flow	MGD	Meter	Continuous	UVS-001
Number of UV banks in operation	Number	Observation	Continuous	N/A
UV Transmittance	Percent (%)	Meter	Continuous	UVS-001
UV Dose	milliJoules per square centimeter (mJ/cm^2)	Calculated	Continuous	N/A

2. Table D-8 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-8:

   a. For continuous analyzers, the Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation. If analyzer(s) fail to provide continuous monitoring for more than two hours and influent and/or effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results.

   b. The Discharger shall not decrease power settings or reduce the number of UV lamp banks in operation while the continuous analyzers are out of service and water is being disinfected.

   c. Report daily minimum number of UV banks in operation.

   d. 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.

   e. 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.

F. Effluent and Receiving Water Characterization

The Discharger shall monitor the effluent and receiving water at Monitoring Locations EFF-001 and RSW-001, respectively, for the constituents listed in Table D-9, 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 January 2022 and 31 December 2022**.
   b. **Receiving Water Sampling.** Samples shall be collected from the upstream receiving water (Monitoring Location RSW-001 semi-annually, once between **1 January 2022 and 31 March 2022** (wet season) and once between **1 July 2022 and 30 September 2022** (dry season).

   All sampling shall be analyzed for the constituents listed in Table D-9, below. The results of such monitoring shall be submitted to the Central Valley Water Board with the quarterly SMRs. Each individual monitoring event shall provide representative sample results for the effluent and upstream receiving water.
2. **Concurrent Sampling.** Receiving water sampling shall be performed at approximately the same time and on the same date as the two corresponding effluent sampling events.
3. **Sample Type.** All receiving water samples shall be taken as grab samples. Effluent samples shall be taken as described in Table D-9, below and the testing requirements in section IX.F.5.
4. **Analytical Methods Report Certification**. Prior to beginning the Effluent and Receiving Water Characterization monitoring, the Discharger shall provide a certification acknowledging the scheduled start date of the Effluent and Receiving Water Characterization monitoring and confirming that samples will be collected and analyzed as described in the previously submitted Analytical Methods Report. If there are changes to the previously submitted Analytical Methods Report, the Discharger shall outline those changes. A one-page certification form will be provided by the Central Valley Water Board staff with this NOA that the Discharger can use to satisfy this requirement. The certification form shall be submitted electronically via CIWQS in accordance with the reporting requirements in Table D-11, Technical Reports.

Table D-9. Effluent and Receiving Water Characterization Monitoring

Parameter	Units	Effluent Sample Type
2-Chloroethyl vinyl ether	µg/L	Grab
Acrolein	µg/L	Grab
Acrylonitrile	µg/L	Grab
Benzene	µg/L	Grab
Bromoform	µg/L	Grab
Carbon Tetrachloride	µg/L	Grab

Parameter	Units	Effluent Sample Type
Chlorobenzene	µg/L	Grab
Chloroethane	µg/L	Grab
Chloroform	µg/L	Grab
Chloromethane	µg/L	Grab
Dibromochloromethane	µg/L	Grab
Dichlorobromomethane	µg/L	Grab
Dichloromethane	µg/L	Grab
Ethylbenzene	µg/L	Grab
Hexachlorobenzene	µg/L	Grab
Hexachlorobutadiene	µg/L	Grab
Hexachloroethane	µg/L	Grab
Methyl bromide (Bromomethane)	µg/L	Grab
Naphthalene	µg/L	Grab
3-Methyl-4-Chlorophenol	µg/L	Grab
Tetrachloroethylene	µg/L	Grab
Toluene	µg/L	Grab
trans-1,2-Dichloroethylene	µg/L	Grab
Trichloroethene	µg/L	Grab
Vinyl chloride	µg/L	Grab
Methyl-tert-butyl ether (MTBE)	µg/L	Grab
Trichlorofluoromethane	µg/L	Grab
1,1,1-Trichloroethane	µg/L	Grab
1,1,2- Trichloroethane	µg/L	Grab
1,1-dichloroethane	µg/L	Grab
1,1-dichloroethylene	µg/L	Grab
1,2-dichloropropane	µg/L	Grab
1,3-dichloropropylene	µg/L	Grab
1,1,2,2-tetrachloroethane	µg/L	Grab
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/L	Grab
1,2,4-trichlorobenzene	µg/L	Grab
1,2-dichloroethane	µg/L	Grab
1,2-dichlorobenzene	µg/L	Grab
1,3-dichlorobenzene	µg/L	Grab
1,4-dichlorobenzene	µg/L	Grab
Styrene	µg/L	Grab
Xylenes	µg/L	Grab
1,2-Benzanthracene	µg/L	Grab
1,2-Diphenylhydrazine	µg/L	Grab

Parameter	Units	Effluent Sample Type
2-Chlorophenol	µg/L	Grab
2,4-Dichlorophenol	µg/L	Grab
2,4-Dimethylphenol	µg/L	Grab
2,4-Dinitrophenol	µg/L	Grab
2,4-Dinitrotoluene	µg/L	Grab
2,4,6-Trichlorophenol	µg/L	Grab
2,6-Dinitrotoluene	µg/L	Grab
2-Nitrophenol	µg/L	Grab
2-Chloronaphthalene	µg/L	Grab
3,3'-Dichlorobenzidine	µg/L	Grab
3,4-Benzofluoranthene	µg/L	Grab
4-Chloro-3-methylphenol	µg/L	Grab
4,6-Dinitro-2-methylphenol	µg/L	Grab
4-Nitrophenol	µg/L	Grab
4-Bromophenyl phenyl ether	µg/L	Grab
4-Chlorophenyl phenyl ether	µg/L	Grab
Acenaphthene	µg/L	Grab
Acenaphthylene	µg/L	Grab
Anthracene	µg/L	Grab
Benzidine	µg/L	Grab
Benzo(a)pyrene (3,4-Benzopyrene)	µg/L	Grab
Benzo(g,h,i)perylene	µg/L	Grab
Benzo(k)fluoranthene	µg/L	Grab
Bis(2-chloroethoxy) methane	µg/L	Grab
Bis(2-chloroethyl) ether	µg/L	Grab
Bis(2-chloroisopropyl) ether	µg/L	Grab
Bis(2-ethylhexyl) phthalate	µg/L	Grab
Butyl benzyl phthalate	µg/L	Grab
Chrysene	µg/L	Grab
Di-n-butylphthalate	µg/L	Grab
Di-n-octylphthalate	µg/L	Grab
Dibenzo(a,h)-anthracene	µg/L	Grab
Diethyl phthalate	µg/L	Grab
Dimethyl phthalate	µg/L	Grab
Fluoranthene	µg/L	Grab
Fluorene	µg/L	Grab
Hexachlorocyclopentadiene	µg/L	Grab
Indeno(1,2,3-c,d)pyrene	µg/L	Grab
Isophorone	µg/L	Grab

Parameter	Units	Effluent Sample Type
N-Nitrosodiphenylamine	µg/L	Grab
N-Nitrosodimethylamine	µg/L	Grab
N-Nitrosodi-n-propylamine	µg/L	Grab
Nitrobenzene	µg/L	Grab
Pentachlorophenol	µg/L	Grab
Phenanthrene	µg/L	Grab
Phenol	µg/L	Grab
Pyrene	µg/L	Grab
Aluminum	µg/L	24-hr Composite
Antimony	µg/L	24-hr Composite
Arsenic	µg/L	24-hr Composite
Asbestos	MFL	24-hr Composite
Barium	µg/L	24-hr Composite
Beryllium	µg/L	24-hr Composite
Cadmium	µg/L	24-hr Composite
Chromium (Total)	µg/L	24-hr Composite
Chromium (VI)	µg/L	24-hr Composite
Copper	µg/L	24-hr Composite
Cyanide	µg/L	24-hr Composite
Fluoride	µg/L	24-hr Composite
Iron	µg/L	24-hr Composite
Lead	µg/L	24-hr Composite
Mercury	µg/L	Grab
Manganese	µg/L	24-hr Composite
Molybdenum	µg/L	24-hr Composite
Nickel	µg/L	24-hr Composite
Selenium	µg/L	24-hr Composite
Silver	µg/L	24-hr Composite
Thallium	µg/L	24-hr Composite
Tributyltin	µg/L	24-hr Composite
Zinc	µg/L	24-hr Composite
4,4'-DDD	µg/L	Grab
4,4'-DDE	µg/L	Grab
4,4'-DDT	µg/L	Grab
alpha-Endosulfan	µg/L	Grab
alpha-Hexachlorocyclohexane (BHC)	µg/L	Grab
Alachlor	µg/L	Grab
Aldrin	µg/L	Grab

Parameter	Units	Effluent Sample Type
beta-Endosulfan	µg/L	Grab
beta-Hexachlorocyclohexane	µg/L	Grab
Chlordane	µg/L	Grab
delta-Hexachlorocyclohexane	µg/L	Grab
Dieldrin	µg/L	Grab
Endosulfan sulfate	µg/L	Grab
Endrin	µg/L	Grab
Endrin Aldehyde	µg/L	Grab
Heptachlor	µg/L	Grab
Heptachlor Epoxide	µg/L	Grab
Lindane (gamma-Hexachlorocyclohexane)	µg/L	Grab
PCB-1016	µg/L	Grab
PCB-1221	µg/L	Grab
PCB-1232	µg/L	Grab
PCB-1242	µg/L	Grab
PCB-1248	µg/L	Grab
PCB-1254	µg/L	Grab
PCB-1260	µg/L	Grab
Toxaphene	µg/L	Grab
Atrazine	µg/L	24-hr Composite
Bentazon	µg/L	24-hr Composite
Carbofuran	µg/L	24-hr Composite
2,4-D	µg/L	24-hr Composite
Dalapon	µg/L	24-hr Composite
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	24-hr Composite
Di(2-ethylhexyl)adipate	µg/L	24-hr Composite
Dinoseb	µg/L	24-hr Composite
Diquat	µg/L	24-hr Composite
Endothal	µg/L	24-hr Composite
Ethylene Dibromide	µg/L	24-hr Composite
Methoxychlor	µg/L	24-hr Composite
Molinate (Ordram)	µg/L	24-hr Composite
Oxamyl	µg/L	24-hr Composite
Picloram	µg/L	24-hr Composite
Simazine (Princep)	µg/L	24-hr Composite
Thiobencarb	µg/L	24-hr Composite
2,3,7,8-TCDD (Dioxin)	µg/L	24-hr Composite

Parameter	Units	Effluent Sample Type
2,4,5-TP (Silvex)	µg/L	24-hr Composite
Diazinon	µg/L	24-hr Composite
Chlorpyrifos	µg/L	24-hr Composite
Ammonia (as N)	mg/L	Grab
Boron	µg/L	24-hr Composite
Chloride	mg/L	24-hr Composite
Flow	MGD	Meter
Hardness (as $CaCO_3$)	mg/L	Grab
Foaming Agents (MBAS)	µg/L	24-hr Composite
Mercury, Methyl	ng/L	Grab
Nitrate (as N)	mg/L	Grab
Nitrite (as N)	mg/L	Grab
pH	Std Units	Grab
Phosphorus, Total (as P)	mg/L	24-hr Composite
Specific conductance (Electrical Conductivity)	µmhos/cm	Grab
Sulfate	mg/L	24-hr Composite
Sulfide (as S)	mg/L	24-hr Composite
Sulfite (as SO_3)	mg/L	24-hr Composite
Temperature	°C	Grab
Total Dissolved Solids (TDS)	mg/L	Grab
Dissolved Organic Carbon (DOC)	mg/L	Grab

5. Table D-9 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-9:

   a **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.

   b. All composite samples shall be collected from a 24-hour flow proportional composite.

   c. 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. 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.

e. **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. **Compliance Time Schedules - Not Applicable**
3. 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.
4. 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 SMR's using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (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 SMR's including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this MRP. SMR's 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 begin on **1 February 2021** and be completed according to the following:

Table D-10. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period	SMR Due Date
Continuous	All	Submit with monthly SMR
1/Week	Sunday through Saturday	Submit with monthly SMR
3/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
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)
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 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 (± 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 SMR's 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 are required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

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

Bench sheets are not required but should be available upon request by Regional Board staff.

7. The Discharger shall submit in the SMR's calculations and reports in accordance with the following requirements.

   a. **Calendar Annual Average Limitations.** For Dischargers subject to effluent limitations specified as "calendar annual average" (e.g., electrical conductivity), the Discharger shall report the calendar annual average 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 (BOD_5 and TSS).** The Discharger shall calculate and report the percent removal of BOD_5 and TSS in the SMR's. The percent removal shall be calculated as specified in section VIII.A of the Limitations and 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.E of the Limitations and Discharge Requirements in the 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 DMR's together with SMR's using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic submittal of DMR's will be in addition to electronic submittal of SMR's. Information about electronic submittal of DMR's is

provided by the Discharge Monitoring Report website: (http://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-11, 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-11 below. The Analytical Methods Report shall include the following for each constituent listed in Tables D-2, D-3, D-5, D-6, and D-9 of this NOA: 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 RL's consistent with the SSM Rule (see also General Monitoring Provision F in the Municipal General Order), and with the Minimum Levels (ML's) 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 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-11, 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, the Discharger shall electronically submit an annual report of monthly data to the State Water Board by 30 April annually covering the previous calendar year using the State Water Board's GeoTracker website (https://geotracker.waterboards.ca.gov/). 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 to GeoTracker must include volumetric reporting of the items listed in Section 3.2 of the Recycled Water Policy (https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_oal.pdf). 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, 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"). The Technical Reports Table D-11 below summarizes the technical reports that are applicable to this discharge and required by this NOA, 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-11. Technical Reports

Report #	Technical Report	Due Date	CIWQS Report Name
1	Notice of Intent	1 February 2025	NOI
2	Analytical Methods Report	1 April 2021	MRP IX.D.2
3	Analytical Methods Report Certification	1 October 2021	MRP IX.E.4
4	Annual Operations Report #1	1 February 2021	MRP X.D.3
5	Annual Operations Report #2	1 February 2022	MRP X.D.3
6	Annual Operations Report #3	1 February 2023	MRP X.D.3
7	Annual Operations Report #4	1 February 2024	MRP X.D.3
8	Annual Operations Report #5	1 February 2025	MRP X.D.3

Report #	Technical Report	Due Date	CIWQS Report Name
9	Recycled Water Policy Annual Reports #1	30 April 2021	MRP X.D.5
10	Recycled Water Policy Annual Reports #2	30 April 2022	MRP X.D.5
11	Recycled Water Policy Annual Reports #3	30 April 2023	MRP X.D.5
12	Recycled Water Policy Annual Reports #4	30 April 2024	MRP X.D.5
13	Recycled Water Policy Annual Reports #5	30 April 2025	MRP X.D.5
14	Updated Salinity Evaluation and Minimization Plan	1 February 2025	MGO VII.C.3.c

APPENDIX E – DETERMINATION OF WATER QUALITY-BASED EFFLUENT LIMITATIONS (WQBEL'S)

The Central Valley Water Board determined water quality-based effluent limitations (WQBEL's) 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 V, 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 WQBEL's Calculations

Parameter	Units	Criteria	CV	Effluent Limit Table in Municipal General Order	AMEL	AWEL
Nitrate plus Nitrite (as N)	mg/L	10	0.3	19B	10	14

Table E-2. Aquatic Life WQBEL's Calculations

Parameter	Units	CMC	CCC	CV	Effluent Limit Table in Municipal General Order	AMEL	AWEL	MDEL
Ammonia (as N)	mg/L	5.73	1.42	0.5	17C	1.3	2.7	--