Central Valley Regional Water Quality Control Board

XX November 2025

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VIA EMAIL:
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CERTIFIED MAIL
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TENTATIVE NOTICE OF APPLICABILITY (NOA); MUNICIPAL WASTEWATER DISCHARGERS THAT MEET OBJECTIVES/CRITERIA AT THE POINT OF DISCHARGE TO SURFACE WATER ORDER R5-2023-0025 (MUNICIPAL GENERAL ORDER), NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CAG585001; NEVADA COUNTY SANITATION DISTRICT NO. 1, LAKE WILDWOOD WASTEWATER TREATMENT PLANT, NEVADA COUNTY

Our office received a Notice of Intent (NOI) dated 29 July 2024 from the Nevada County Sanitation District No. 1 (Discharger), for discharge of tertiary treated domestic wastewater to surface water from the Lake Wildwood Wastewater Treatment Plant (Facility) to Deer Creek. The Municipal General Order requires the submittal of an NOI to apply for regulatory coverage of a surface water discharge. Based on the NOI and subsequent information submitted by the Discharger, staff have determined that the NOI requirements have been fulfilled and the Facility is eligible to retain coverage under the Municipal General Order. This Facility's discharge is assigned Municipal General Order Enrollee Number R5-2023-0025-013 under NPDES Permit CAG585001. Please reference your Municipal General Order Enrollee Number, **R5-2023-0025-013**, in your correspondence and submitted documents.

Discharges to surface water from the Facility are currently regulated by the Municipal General Order R5-2017-0085-02 through an NOA issued by the Executive Officer on 23 June 2020, Municipal General Order Enrollee Number R5-2017-0085-012 (NOA R5-2017-0085-012). This NOA, Enrollee Number R5-2023-0025-013 (NOA R5-2023-0025-013), authorizing coverage under the 2023 Municipal General Order, shall become effective on **1 January 2026**, at which time the terms and conditions in the Discharger's NOA R5-2017-0085-012 and General Order R5-2017-0085-02 will cease to be effective except for enforcement purposes. To meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements contained in the 2023 Municipal General Order and as specified in this NOA R5-2023-0025-013. This action in no way prevents the Central Valley Water Board from taking enforcement action for past violations of NOA R5-2017-0085-012.

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

The Monitoring and Reporting Program, Attachment E to the Municipal General Order, contains the general monitoring and reporting requirements. The Discharger specific monitoring and reporting requirements are included within this NOA R5-2023-0025-013 as Appendix D. **Only the monitoring and reporting requirements specifically listed in Appendix D of this NOA R5-2023-0025-013 are applicable to this Facility**

The discharge of treated domestic wastewater shall be in accordance with the requirements contained in the Municipal General Order, as specified in this NOA R5-2023-0025-013.

Table 1. Facility Information

WDID	5A290104001
CIWQS Facility Place ID	236292
Discharger	Nevada County Sanitation District No.1
Name of Facility	Lake Wildwood Wastewater Treatment Plan
Facility Street Address	12622 Pleasant Valley Road
Facility City, State, Zip Code	Penn Valley, CA 95946
Facility County	Nevada County
Facility Contact, Title and Phone	Chad McBride Wastewater Plant Operations Supervisor 530-913-0272
Authorized Person to Sign and Submit Reports	Same as Facility Contact
Mailing Address	950 Maidu Avenue, Nevada City, CA 95959
Billing Address	Same as Mailing Address
Type of Facility	Publicly Owned Treatment Works (POTW)
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	B
Pretreatment Program	No
Recycling Requirements	No
Average Dry Weather Flow (ADWF)	0.69 Million Gallons Per Day (MGD)
Permitted ADWF	0.69 MGD
Watershed	Upper Yuba
Receiving Water	Deer Creek
Receiving Water Type	Inland surface water
Discharge Point 001	Latitude: 39° 14’ 0” N, Longitude: 121° 13’ 22” W

I. FACILITY INFORMATION

The Discharger provides sewerage service for the communities of Lake Wildwood and Penn Valley and serves a population of approximately 8,100. The design average dry weather flow capacity of the Facility is 0.69 MGD.

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

- headworks with an odor scrubber, auger-type fine screen, grit removal;
- inground concrete flow equalization basin;
- emergency storage basin with concrete floor and Aqua 40 Coextruded Geomembrane liner;
- two oxidation ditches providing biological nutrient removal;
- two secondary clarifiers;
- four parallel dual media (anthracite coal and sand) tertiary filters; and,
- ultraviolet light (UV) disinfection.

Solids collection and disposal consist of the following:

- scum and waste activated sludge from the secondary clarifiers are pumped to an aeration basin for aerobic digestion;
- sludge from the digestion area is pumped to a centrifuge for dewatering; and,
- the dewatered sludge is taken off-site for disposal as alternative daily cover at a regional municipal solid waste landfill.

The Facility includes sludge drying beds; however, the sludge drying beds have not been used for that purpose for since the upgrade to aerobic digestion and centrifuge dewatering.

II. RECEIVING WATER BENEFICIAL USES

The Facility discharges from Discharge Point 001 to Deer Creek, which flows to the Yuba River, within the Upper Yuba watershed. According to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan), and the Tributary Rule, the following existing beneficial uses apply to Deer Creek:

- Municipal and Domestic Supply (MUN)
- Agricultural Supply, including Stock Watering (AGR)
- Hydropower Generation (POW)
- Water Contact Recreation (REC-1)
- Non-contact Water Recreation (REC-2)
- Warm Freshwater Habitat (WARM)
- Cold Freshwater Habitat (COLD)
- Migration of Aquatic Organisms (MIGR)
- Spawning, Reproduction, and/or Early Development (SPWN)
- Wildlife Habitat (WILD)

III. RECEIVING WATER TOTAL MAXIMUM DAILY LOADS (TMDLS)

Deer 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 (R5-2023-0025-013).

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. The discharge of wastes at a location or in a manner different from that described in the NOI and this NOA R5-2023-0025-013 is prohibited.

B. The bypass 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.

C. Neither the discharge nor its treatment shall create a nuisance as defined in section 13050 of the Water Code.

D. Discharge of waste classified as 'hazardous', as defined in the CCR, Title 22, section 66261.1 et seq., is prohibited.

E. Average Dry Weather Flow. Discharges exceeding an average dry weather flow of 0.69 MGD are prohibited.

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 are applicable to this Facility. Unless otherwise specified in this NOA, compliance shall be measured at Monitoring Location EFF-001, as described in the Monitoring and Reporting Program (MRP), Appendix D of this NOA.

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

Table 2. Effluent Limitations

Parameter	Units	Average Monthly	Average Weekly
Biochemical Oxygen Demand (5-day @ 20°Celcius) (BOD_5)	milligrams per liter (mg/L)	10	15
Total Suspended Solids (TSS)	mg/L	10	15
Ammonia Nitrogen, Total as Nitrogen (as N)	mg/L	0.83	2.7
Nitrate plus Nitrite, Total (as N)	mg/L	10	13

1. pH. The pH shall at all times be within the range of 6.5 and 8.5.

2. **Percent Removal.** The average monthly percent removal of BOD_5 and TSS shall not be less than 85 percent.

3. **Total Coliform Organisms.** (Measured at UVS-002). 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.

VI. RECEIVING WATER LIMITATIONS

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

   - Biostimulatory Substances (VI.A.3);
   - Chemical Constituents (VI.A.4);
   - Color (VI.A.5);
   - Dissolved Oxygen (VI.A.6.a);
   - Floating Material (VI.A.7);
   - Oil and Grease (VI.A.8);
   - pH (VI.A.9.a);
   - Pesticides (VI.A.10.a);
   - 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**
   Release of waste constituents from any storage, treatment, or disposal component associated with the Facility shall not cause the underlying groundwater to contain waste constituents in concentrations greater than background water quality or groundwater quality objectives, whichever is greater.

VII. MONITORING AND REPORTING

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

VIII. PROVISIONS

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

A. Standard Provisions

Applicable to all Dischargers.

B. Monitoring and Reporting Program Requirements

The MRP applicable to this Facility is contained in Appendix D of this NOA R5-2023-0025-013.

C. Special Provisions.

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

Table 3: Summary of Applicable Special Provisions

Special Provision	Section Reference
1. Reopener Provisions	a. Major Modification of Treatment Works c. Water Effect Ratios (WERs) and Metal Translators
2. Special Studies, Technical Reports and Additional Monitoring Requirements	Not applicable
3. Best Management Practices and Pollution Prevention	b. Salinity Evaluation and Minimization Plan (SEMP) for the Alternative Salinity Permitting Approach
4. Construction, Operation and Maintenance Specifications	a. Filtration System Operating Specifications i. Granular Media Filtration System or Equivalent b. UV Disinfection System Operating Specifications i. UV Dose, subpart (a) only; and ii. UV Transmittance, subpart (a) only; and iii-vi. c. Pond Operating Specifications
5. Special Provisions for Municipal Facilities	b. Sludge/Biosolids Treatment or Discharge Specifications
6. Other Special Provisions	a. Disinfection Requirements
7. Compliance Schedules	Not applicable

IX. COMPLIANCE DETERMINATION

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

A. BOD_5 and TSS Effluent Limitations;

E. Average Dry Weather Flow Prohibition;
F. Total Coliform Organisms Effluent Limitations;
I. Effluent Limitations;
J. Dissolved Oxygen Receiving Water Limitation;
K. Whole Effluent Toxicity Effluent or Triggers;
O. Period Average, Calendar Month Average, and Annual Average; and
P. Turbidity Receiving Water Limitation.

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 CWA and federal regulations at 40 Code of Federal Regulations (C.F.R.) section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

Effluent limitations for acute toxicity, electrical conductivity, and ammonia are less stringent than prescribed in the previous NOA R5-2017-0085-012. A more detailed anti-backsliding analysis is provided in Appendix C to this NOA R5-2023-0025-013 in section II.A Satisfaction of Anti-Backsliding Requirements, the relaxation of effluent limitations meets the exceptions provided 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 R5-2023-0025-013 does not allow an increase in flow or mass of pollutants to the receiving water and the relaxation of effluent limitations for acute toxicity is consistent with the antidegradation provisions of 40 C.F.R. 131.12 and State Water Board Resolution 68-16.

A more detailed discussion of antidegradation is provided in Appendix C to this NOA R5-2023-0025-013, 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 R5-2023-0025-013.

XIII. ENFORCEMENT

Failure to comply with the applicable requirements of the Municipal General Order, as specified in this NOA R5-2023-0025-013, may result in enforcement actions, which could include civil liability (penalties). Effluent limitation violations may be subject to a Mandatory Minimum Penalty (MMP) of $3,000 per violation. In addition, late monitoring reports may be subject to MMPs and/or discretionary penalties of up to $1,000 per day late. If discharges do not occur during any report monitoring period, the Discharger must still submit the monitoring report indicating that no discharge occurred to avoid being subject to enforcement actions.

XIV. COMMUNICATION

Until this NOA R5-2023-0025-013 becomes effective on 1 January 2026, you will need to comply with the effluent limitations, and monitoring and reporting requirements, contained in your existing NOA R5-2017-0085-012. For your monthly SMRs, you will need to demonstrate compliance with your existing NOA R5-2017-0085-012, through 31 December 2025. You will need to demonstrate compliance with this NOA R5-2023-0025-013 beginning 1 January 2026.

The Central Valley Water Board is implementing a Paperless Office system to reduce our paper use, increase efficiency, and provide a more effective way for our staff, the public, and interested parties to view documents in electronic form. Therefore, the Discharger is required to submit all self-monitoring, technical, and progress reports required by this NOA R5-2023-0025-013 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: Nevada County Sanitation District No. 1
- Facility: Lake Wildwood Wastewater Treatment Plant
- County: Nevada County
- CIWQS Place ID: 236292

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

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, Title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date this NOA R5-2023-0025-013 is issued, except that if the thirtieth day following the date this NOA R5-2023-0025-013 is issued falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Links to the laws and regulations applicable to filing petitions (http://www.waterboards.ca.gov/public_notices/petitions/water_quality) may be found on the Internet or will be provided upon request.

Now that your NOA R5-2023-0025-013 has been issued, the Central Valley Water Board’s Compliance and Enforcement Section will take over management of your case. Paul Wadding of the Compliance and Enforcement section is your point of contact for any questions regarding this NOA R5-2023-0025-013. If you find it

necessary to make a change to your permitted operations, you will be directed to the appropriate Permitting staff. You may contact Paul Wadding by phone at (916) 464-4826 or email at Paul.Wadding@waterboards.ca.gov.

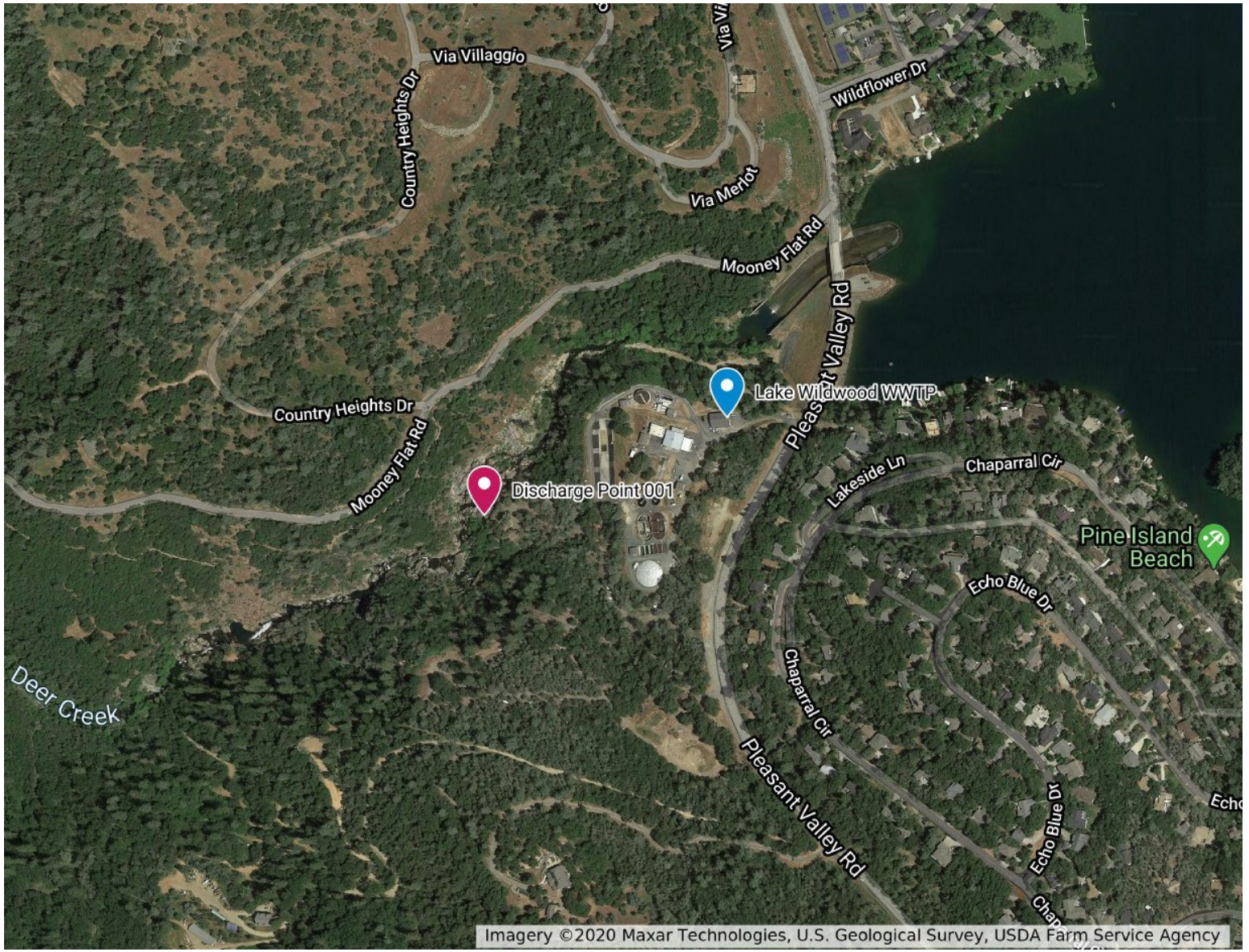
Patrick Pulupa
Executive Officer

Appendices:
Appendix A – Location Map
Appendix B – Flow Schematic
Appendix C – Rationale for Limitations and Monitoring Requirements
Appendix D – Monitoring and Reporting Program
Appendix E – Determination of WQBELs

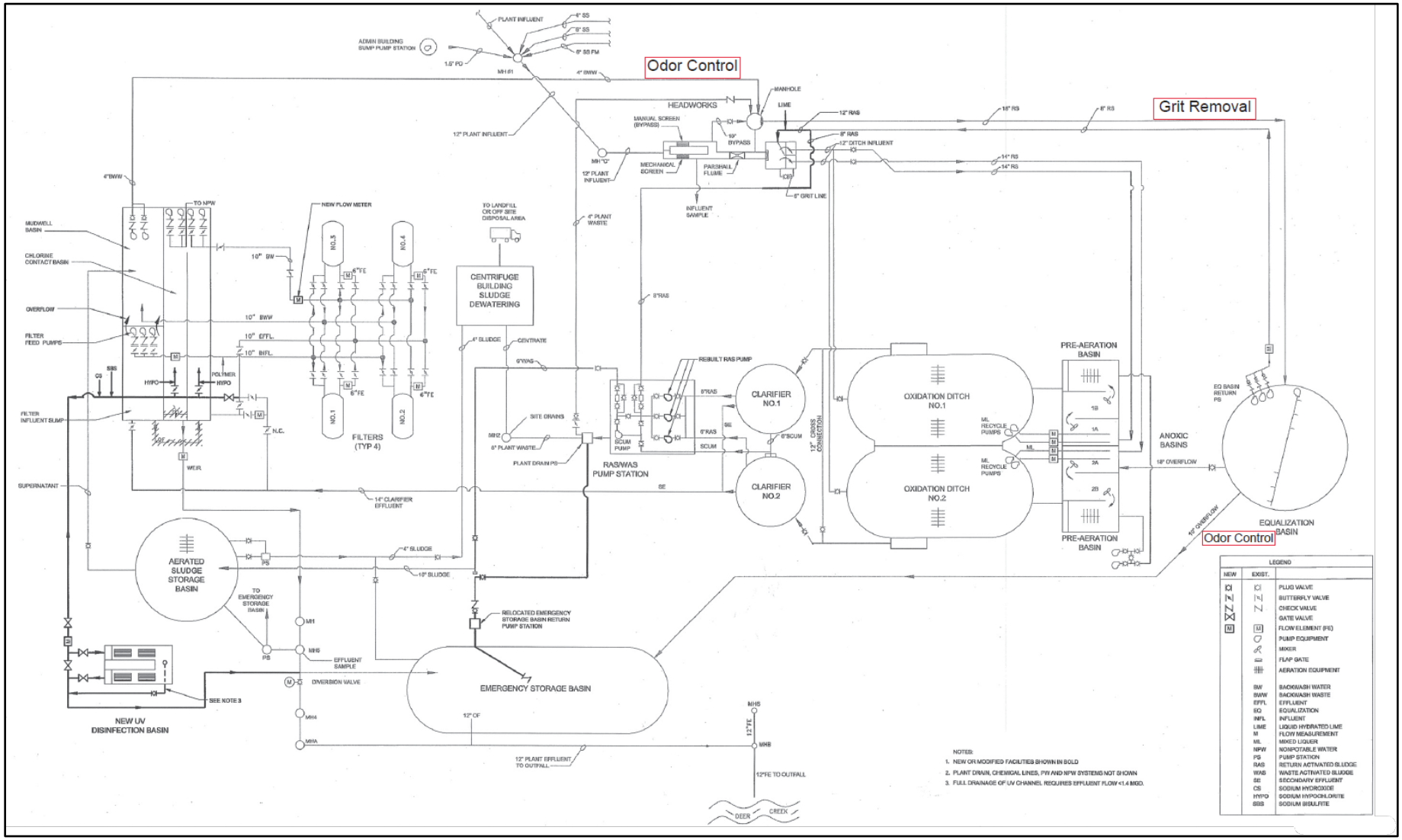
Enclosures:
Municipal General Order R5-2023-0025 (Discharger Only [email only])

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

APPENDIX A – LOCATION MAP



APPENDIX B – FLOW SCHEMATIC



APPENDIX C – SUPPLEMENTAL FACT SHEET

I. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this NOA R5-2023-0025-013 are based on the requirements and authorities described in Attachment F, section III of the Municipal General Order. In addition to the Fact Sheet contained in the Municipal General Order, the Central Valley Water Board incorporates this Supplemental Fact Sheet as findings of the Central Valley Water Board supporting the issuance of this NOA R5-2023-0025-013.

II. FINAL EFFLUENT LIMITATION CONSIDERATIONS

A. Satisfaction of Anti-Backsliding Requirements

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

The effluent limitations in this NOA R5-2023-0025-013 are at least as stringent as the effluent limitations in the Facility's previous NOA R5-2017-0085-012, with the exception of effluent limitations for acute toxicity. This NOA establishes monitoring for chronic toxicity, which protect against acute and chronic toxicity. This relaxation and/or removal of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

1. **CWA section 402(o)(1) and 303(d)(4).** CWA section 402(o)(1) prohibits the establishment of less stringent water quality-based effluent limits (WQBELs) "except in compliance with section 303(d)(4)." CWA section 303(d)(4) has two parts: paragraph (A) which applies to nonattainment waters and paragraph (B) which applies to attainment waters.

   a. For waters where standards are not attained, CWA section 303(d)(4)(A) specifies that any effluent limit based on a TMDL or other waste load allocation (WLA) may be revised only if the cumulative effect of all such revised effluent limits based on such TMDLs or WLAs will assure the attainment of such water quality standards.

   b. For attainment waters, CWA section 303(d)(4)(B) specifies that a limitation based on a water quality standard may be relaxed where the action is consistent with the antidegradation policy.

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

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

   Updated information that was not available at the time NOA R5-2017-0085-012 was issued indicates that acute toxicity and electrical conductivity do not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water and new information supports relaxed effluent limitations for ammonia. The updated information that supports the removal of the effluent limitations for acute toxicity and electrical conductivity and relaxation of ammonia effluent limitations:

   a. **Acute Toxicity.** Acute toxicity testing performed from June 2021 through May 2024 resulted in 100% survival of the test species (rainbow trout); therefore, the discharge does not show reasonable potential to cause acute toxicity in the receiving water.

   b. **Ammonia.** The ammonia effluent limitations have been revised on updated pH and temperature data used for the calculation of the ammonia water quality criteria.

   c. **Electrical Conductivity.** Monitoring data collected over the permit term for NOA R5-2017-0085-012 indicates that electrical conductivity in the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of the respective water quality objectives/criteria.

   Thus, removal of the effluent limitations for acute toxicity and electrical conductivity and relaxation of the ammonia effluent limitations in this NOA R5-2023-0025-013 is in accordance with CWA section 402(o)(2)(B)(i), which allows for the relaxation or removal of effluent limitations based on information that was not available at the time the previous NOA R5-2017-0085-012 was issued.

B. Antidegradation Policies

This NOA R5-2023-0025-013 does not allow for an increase in flow or mass of pollutants to the receiving water. Therefore, a complete antidegradation analysis is not necessary. This NOA R5-2023-0025-013 requires compliance with applicable federal technology-based standards and with WQBELs where the discharge could have the reasonable potential to cause or contribute to an exceedance of water quality standards. The permitted discharge is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and the State Anti-Degradation Policy. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The impact on existing water quality will be insignificant.

This NOA R5-2023-0025-013 relaxes or removes effluent limitations for ammonia, acute toxicity, and electrical conductivity. Based on Facility performance, the removal of these effluent limitations is not expected to result in an increase in pollutants concentration or loading, a decrease in the level of treatment or control, or a reduction of water quality. Implementation of this NOA R5-2023-0025-013 will result in the best practicable

treatment or control of the discharge necessary to assure that a pollution or nuisance will not occur and the highest water quality consistent with the maximum benefit to the people of the State will be maintained. Thus, the relaxation and removal of effluent limitations for these constituents is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Resources Control Board (State Water Board) Resolution No. 68-16.

C. Salinity (Electrical Conductivity or EC)

When only considering the numeric water quality standards for salinity, the discharge does not have reasonable potential to cause or contribute to an in-stream excursion of water quality objectives for salinity. However, due to 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 Deer 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 625 µmhos/cm for EC is applied limiting the discharge to current levels (thus ensuring that BPTC will continue to be met).

In accordance with the Basin Plan's Salt Control Program the Discharger submitted a Notice of Intent on 26 July 2022 indicating participation in the Alternative Salinity Permitting Approach. Accordingly, the Municipal General Order includes a calendar annual average performance-based effluent trigger for electrical conductivity of 625 µmhos/cm that is applicable to this Facility.

III. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

CWA section 303(a-c), requires states to adopt water quality standards, including criteria where they are necessary to protect beneficial uses. The Central Valley Water Board adopted water quality criteria as water quality objectives in the Basin Plan. The Basin Plan states that "[t]he numerical and narrative water quality objectives define the least stringent standards that the Regional Water Board will apply to regional waters in order to protect the beneficial uses." The Basin Plan includes numeric and narrative water quality objectives for various beneficial uses and water bodies. This NOA R5-2023-0025-013 contains receiving surface water limitations based on the Basin Plan numerical and narrative water quality objectives for bacteria, biostimulatory substances, color, chemical constituents, dissolved oxygen, floating material, oil and grease, pH, pesticides, radioactivity, suspended sediment, settleable substances, suspended material, tastes and odors, temperature, toxicity, and turbidity.

B. Groundwater

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

IV. 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 (MRP), Appendix D, of this NOA R5-2023-0025-013.

A. Influent Monitoring

1. Influent monitoring is required to collect data on the characteristics of the wastewater and to assess compliance with effluent limitations (e.g., BOD5 and TSS reduction requirements). All monitoring frequencies from NOA R5-2017-0085-012 have been carried forward in this NOA R5-2023-0025-013.

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.

   The following effluent monitoring frequencies have been revised from NOA R5-2017-0085-012. All other effluent sampling frequencies from NOA R5-2017-0085-012 are carried forward to this NOA R5-2023-0025-013:

Table C-1. Revised Sampling Frequencies for Effluent Monitoring

Parameter	Unit	Prior Sample Frequency	Revised Sample Frequency	Rationale for Sample Frequency Revision
Acute Toxicity	% survival	2/Year	Discontinue	A chronic aquatic toxicity test is generally protective of both chronic and acute aquatic toxicity
Chronic Toxicity	Varies	1/Year	2/Year	Increased to meet Statewide Toxicity Provisions sampling requirements

C. Whole Effluent Toxicity Testing Requirements

1. **Acute Toxicity.** Acute whole effluent toxicity testing has been discontinued in accordance with the Statewide Toxicity Provisions and the Municipal General Order. Chronic toxicity testing is generally protective of both chronic and acute toxicity. Additionally, acute toxicity tests from June 2021 through May 2024 showed 100% survival of rainbow trout, indicating no reasonable potential for the discharge to cause acute toxicity in the receiving water.

2. **Chronic Toxicity.** Chronic whole effluent toxicity testing is required to demonstrate compliance with the Statewide Toxicity Provisions in this NOA R5-2023-0025-013. Based on the Statewide Toxicity Provisions and the Municipal General Order, the effluent discharge is now required to conduct chronic toxicity testing twice per year.

D. Receiving Water Monitoring

1. Deer Creek

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

The following receiving water monitoring frequencies have been revised from NOA R5-2017-0085-012. All other receiving water sampling frequencies from NOA R5-2017-0085-012 are carried forward to this NOA R5-2023-0025-013:

Table C-2. Revised Sampling Frequencies for Receiving Water Monitoring

Parameter	Unit	Prior Sample Frequency	Revised Sample Frequency	Rationale for Sample Frequency Revision
Electrical Conductivity @ 25°C	µmhos/cm	1/Month	1/Quarter	Quarterly monitoring is adequate for determining compliance

2. Groundwater – Not Applicable

E. Biosolids Monitoring – Not Applicable

F. Water Supply Monitoring – Not Applicable

G. Filtration System Monitoring

1. The monitoring frequency for turbidity (continuous) is retained from the previous NOA R5-2017-0085-012 to evaluate compliance with the filtration system operating specifications.

H. UV Disinfection System Monitoring

1. Monitoring frequencies for flow (continuous), number of UV banks in operation (continuous), UV transmittance (continuous), UV dose (continuous), and total coliform organisms (2/Week) have been retained from previous NOA R5-2017-0085-012, to evaluate compliance with UV disinfection system operating specifications.

I. Pond Monitoring

1. When any type of wastewater is directed to the emergency storage basin, this NOA requires the Discharger to keep a log for PND-001 to record the date, type of wastewater, volume, duration, and freeboard for the basin. Pond operating specifications contained in the Municipal General Order are applicable as specified in section VIII.1.C, Special Provisions, Table 3 of the NOA. Monitoring for these parameters is necessary to ensure proper operation of the storage basin; therefore, these parameters have been included in this NOA.

K. Effluent and Receiving Water Characterization Monitoring

1. Order R5-2017-0085-012 included semiannual effluent monitoring for one year when discharging to Deer Creek. This NOA retains the semiannual effluent characterization monitoring of the effluent.
2. Order R5-2017-0085-012 included characterization monitoring of the upstream receiving water. This NOA includes characterization monitoring of the upstream receiving water semiannual for one year, concurrently with the effluent characterization monitoring.

III. PRETREATMENT PROVISION – Not Applicable

IV. 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	9.4	--	1.4	7.5	1.4	--	--	--	--	Yes
Nitrate Plus Nitrite (as N)	mg/L	9.2	--	10	--	--	--	--	--	10	Yes

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. For copper and zinc, the CMC is based on the CTR, 1-hour average criterion.
   ii. **CCC.** For ammonia, the CCC or criterion continuous concentration is based on the U.S. EPA National Recommended Ambient Water Quality Criteria Freshwater Aquatic Life Protection, 30-day average. For copper and zinc, the CCC is based on the CTR, 4-day average criterion.
   iii. **Ammonia and Nitrate plus 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).

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 Facility. The monitoring and reporting requirements applicable to the Facility are contained in this Appendix and are described herein.

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

I. GENERAL MONITORING PROVISIONS

A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of the Central Valley Water Board.

B. Final effluent samples shall be taken downstream of the last addition of wastes to the treatment or discharge works where a representative sample may be obtained prior to mixing with the receiving waters. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.

C. Chemical, bacteriological, and bioassay analyses of any material required by this NOA R5-2023-0025-013 shall be conducted by a laboratory accredited for such analyses by the State Water Resources Control Board (State Water Board), Division of Drinking Water (DDW), in accordance with the provision of Water Code section 13176. Laboratories that perform sample analyses must be identified in all monitoring reports submitted to the Central Valley Water Board. Data generated from field measurements such as pH, dissolved oxygen, electrical conductivity (EC), turbidity, and temperature are exempt pursuant to Water Code section 13176. A manual containing the steps followed in this program for any field measurements such as, but not limited to pH, dissolved oxygen, EC, turbidity, and temperature must be kept onsite in the treatment facility laboratory and shall be available for inspection by Central Valley Water Board staff. The Discharger must demonstrate sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform these field measurements. The Quality Assurance-Quality Control Program must conform to U.S. EPA guidelines or to procedures approved by the Central Valley Water Board.

D. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary, at least yearly, to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

E. Monitoring results, including noncompliance, shall be reported at intervals and in a

manner specified in this MRP.

F. Laboratory analytical methods shall be sufficiently sensitive in accordance with the Sufficiently Sensitive Methods Rule (SSM Rule) specified under 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv). A U.S. EPA-approved analytical method is sufficiently sensitive for pollutant/parameter where:

- The method minimum level (ML) is at or below the applicable water quality objective for the receiving water, or;
- The method ML is above the applicable water quality objective for the receiving water but the amount of the pollutant/parameter in the discharge is high enough that the method detects and quantifies the level of the pollutant/parameter, or;
- The method ML is above the applicable water quality objective for the receiving water, but the ML is the lowest of the 40 C.F.R. 136 U.S. EPA-approved analytical methods for the pollutant/parameter.

G. The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually, via email, to QualityAssurance@waterboards.ca.gov to the State Water Resources Control Board.

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 R5-2023-0025-013. Unless otherwise specified, discharge flows shall be reported in terms of the monthly average and the daily maximum discharge flows.

II. MONITORING LOCATIONS

The Discharger shall establish the monitoring locations listed in Table D-1 to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in the NOA R5-2023-0025-013.

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 influent into the Facility can be collected prior to entering the treatment process. Latitude: 39° 14’ 02” N, Longitude: 121° 13’ 11” W
001	EFF-001	A location where a representative sample of the effluent from the Facility can be collected after all treatment processes and prior to commingling with other waste streams or being discharged to Deer Creek. Latitude: 39° 14’ 0” N, Longitude: 121° 13’ 22” W
--	RSW-001	In Deer Creek, 850 feet upstream of Discharge Point 001.

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	RSW-002	In Deer Creek, 100 feet downstream of Discharge Point 001.
--	PND-001	Emergency storage pond.
--	FIL-001	Monitoring of the filter effluent to be measured immediately downstream of the filters prior to the ultraviolet light (UV) disinfection system.
--	UVS-001	A location where a representative sample of wastewater can be collected immediately upstream of the UV disinfection system.
--	UVS-002	A location where a representative sample of wastewater can be collected immediately downstream of the UV disinfection system.

The North latitude and West longitude information in Table D-1 are approximate for administrative purposes.

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

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

Table D-2. Influent Monitoring

Parameter	Units	Sample Type	Sampling Frequency
Flow	MGD	Meter	Continuous
Biochemical Oxygen Demand (5-day @ 20°Celcius)	mg/L	24-hour Composite	2/Month
Total Suspended Solids	mg/L	24-hour Composite	2/Month

2. **Table D-2 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-2:
   a. **Applicable to all parameters**. Parameters shall be analyzed using the analytical methods described in 40 C.F.R. part 136; or by methods approved by the Central Valley Water Board or the State Water Board. In addition, if requested by the Discharger, the sample type may be modified by the Executive Officer to another 40 C.F.R. part 136 allowed sample type.
   b. **Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.

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	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) Removal	percent removal	Calculate	1/Month
pH	standard units	Grab	1/Week
Total Suspended Solids	mg/L	24-hr Composite	1/Week
Total Suspended Solids Removal	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/Month
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
Peracetic Acid	mg/L	Meter or Grab	1/Day
Temperature	°F	Grab	1/Week

2. **Table D-3 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-3:

   a. **Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.

   b. **Applicable to all parameters.** Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board. In addition, if requested by the Discharger, the sample type may be modified by the Executive Officer to another 40 C.F.R. part 136 allowed sample type.

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

   d. **Ammonia.** Ammonia samples shall be taken at approximately the same time and on the same date as the pH and temperature samples.

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

f. **Dissolved Organic Carbon.** Dissolved organic carbon samples shall be taken at approximately the same time and on the same date as the hardness and pH samples.

g. **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 at approximately the same time and on the same date with the receiving water samples for these parameters (see Table D-4).

V. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

A. Acute Toxicity Testing – Not Applicable

B. Chronic Toxicity Testing.

The Discharger shall meet the following chronic toxicity testing requirements:

1. **Instream Waste Concentration (IWC) for Chronic Toxicity.** The chronic toxicity IWC is 100 percent effluent.

2. **Routine Monitoring Frequency.** The Discharger shall perform routine chronic toxicity testing **twice per toxicity calendar year** in years in which there is expected to be at least 15 days of discharge to the receiving water in at least one toxicity calendar quarter.

3. **Toxicity Calendar Month, Quarter, and Year**

   a. **Toxicity Calendar Month.** The toxicity calendar month is defined as the period of time beginning on the day of the initiation of the routine toxicity monitoring to the day before the corresponding day of the next month if the corresponding day exists, or if not to the last day of the next month (e.g., from January 1 to January 31, from June 15 to July 14, from January 31 to February 27, etc.).

   b. **Toxicity Calendar Quarter.** A toxicity calendar quarter is defined as **three consecutive toxicity calendar months** (e.g., from January 1 to March 31, from February 15 to May 14, from June 21 to September 20, etc.).

   c. **Toxicity Calendar Year.** A toxicity calendar year is defined as **twelve consecutive toxicity calendar months** (e.g., from January 1 to December 31, from June 15 to June 14 of the following year, from September 10 to September 9 of the following year, etc.).

4. **Chronic Toxicity Median Monthly Effluent Target (MMET) Compliance Testing.** If a routine chronic toxicity monitoring test results in a “Fail” (as defined in section V.C below) at the IWC, then a maximum of two chronic toxicity MMET tests shall be completed. The chronic toxicity MMET tests shall be initiated within the same toxicity calendar month that the routine monitoring chronic toxicity test was initiated that resulted in the “Fail” at the IWC. If the first chronic toxicity MMET test results in a

"Fail" at the IWC, then the second chronic toxicity MMET test is unnecessary and is waived.

5. **Additional Routine Monitoring Tests for Toxicity Reduction Evaluation (TRE) Determination.** In order to determine if a TRE is necessary, an additional routine monitoring test is required when one chronic toxicity Maximum Daily Effluent Target (MDET) or MMET is not met, but not two in a single toxicity calendar month. The toxicity calendar month in which the MDET or MMET was not met and the toxicity calendar month of the additional routine monitoring shall be considered "successive toxicity calendar months" for purposes of determining whether a TRE is required. This additional routine monitoring test could result in the need to conduct MMET tests per Section V.B.4 above.
6. **Sample Volumes.** Adequate sample volumes shall be collected to provide renewal water to complete the test in the event that the discharge is intermittent.
7. **Test Species.** The testing shall be conducted using the most sensitive species. The Discharger shall conduct chronic toxicity tests with the **water flea (*Ceriodaphnia dubia*)**.

   The Executive Officer shall have discretion to allow the temporary use of the next appropriate species as the most sensitive species when the Discharger submits documentation and the Executive Officer determines that the Discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms. The "next appropriate species" is a species in Table 1 of the Statewide Toxicity Provisions in the same test method classification (e.g., chronic aquatic toxicity test methods, acute aquatic toxicity test method), in the same salinity classification (e.g., freshwater or marine), and in the same taxon as the most sensitive species. When there are no other species in Table 1 in the same taxon as the most sensitive species (e.g., freshwater chronic toxicity tests), the "next appropriate species" is the species exhibiting the highest percent effect at the IWC tested in the species sensitivity screening other than the most sensitive species.
8. **Test Methods.** The Discharger shall conduct the chronic toxicity tests on effluent samples at the IWC for the discharge in accordance with species and test methods described in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R02/013, 2002; Table IA, 40 C.F.R. part 136).
9. **Dilution and Control Water.** Dilution water and control water shall be prepared and used as specified in the test methods manual. If dilution water and control water are different from test organism culture water, then a second control using culture water shall also be used. A receiving water control or laboratory water control may be used as the diluent.
10. **Test Failure.** If the effluent chronic toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method in EPA/821-R-02-013, the Discharger must conduct a Replacement Test as soon as possible, as specified in subsection B.11, below.
11. **Replacement Test.** When a required toxicity test for routine monitoring or a MMET test is not completed, a new toxicity test to replace the toxicity test that was not

completed shall be initiated as soon as possible. The new toxicity test shall replace the routine monitoring or the MMET test, as applicable, for the toxicity calendar month in which the toxicity test that was not completed was required to be initiated, even if the new toxicity test is initiated in a subsequent toxicity calendar month. The new toxicity test for routine monitoring or for the MMET test, as applicable, and any MMET tests required to be conducted due to the results of the new toxicity test shall be used to determine compliance with the effluent targets for the toxicity calendar month in which the toxicity test that was not completed was required to be initiated. The new toxicity test and any MMET tests required to be conducted due to the results of the new toxicity test shall not be used to substitute for any other required toxicity tests.

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

C. Quality Assurance and Additional Requirements

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

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

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

   A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail".
3. The relative "Percent Effect" at the discharge IWC is defined and reported as:

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

This is a t-test, a statistical analysis comparing two sets of replicate observations, i.e., a control and IWC. The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving water concentration differs from the control, the test result is "Fail"). The Welch's t-test employed by the TST statistical approach is an adaptation of Student's t-test and is used with two samples having unequal variances.

D. WET Testing Notification Requirements

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

E. WET Testing Reporting Requirements

The Discharger shall submit the full laboratory report for all toxicity testing (routine, MMEL, TRE, etc.) and, if applicable, progress reports on TREs as attachments to the SMRs in CIWQS for the reporting period (e.g., monthly, quarterly, semi-annually, or annually), and shall provide the data (i.e., Pass/Fail) in the PET tool for uploading into CIWQS. The laboratory report shall include:

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

F. Most Sensitive Species Screening

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

1. **Frequency of Testing for Species Sensitivity Screening.** Species sensitivity screening for chronic toxicity shall include, at a minimum, a set of chronic WET testing conducted in **each toxicity calendar quarter in which there is expected to be at least 15 days of discharge**. Species sensitivity screening for chronic toxicity shall be conducted using the water flea (*Ceriodaphnia dubia*), fathead minnow (*Pimephales promelas*), and green alga (*Pseudokirchneriella subcapitata*). The tests shall be performed at an IWC of no less than 100 percent effluent.
2. **Determination of Most Sensitive Species.** The Central Valley Water Board will determine the most sensitive species from the water flea (*Ceriodaphnia dubia*), fathead minnow (*Pimephales promelas*), and green alga (*Pseudokirchneriella subcapitata*) using the following procedure. If a single test in the species sensitivity screening testing results in a "Fail" using the TST statistical approach, then the species used in that test shall be established as the most sensitive species. If there is more than a single test that results in a "Fail", then of the species with results of a "Fail", the species that exhibits the highest percent effect shall be established as the most sensitive species. If none of the tests in the species sensitivity screening results in a "Fail", but at least one of the species exhibits a percent effect greater than 10 percent, then the single species that exhibits the highest percent effect shall be established as the most sensitive species. In all other circumstances, the Executive Officer shall have discretion to determine which single species is the most sensitive considering the test results from the species sensitivity screening.

   The "next appropriate species" is a species in Table 1 of the Statewide Toxicity Provisions in the same test method classification (e.g., chronic aquatic toxicity test methods, acute aquatic toxicity test method), in the same salinity classification (e.g., freshwater or marine), and in the same taxon as the most sensitive species. When there are no other species in Table 1 in the same taxon as the most sensitive species (e.g., freshwater chronic toxicity tests), the "next appropriate species" is the

species exhibiting the highest percent effect at the IWC tested in the species sensitivity screening other than the most sensitive species. The Executive Officer shall have discretion to allow the temporary use of the next appropriate species as the most sensitive species when the Discharger submits documentation and the Executive Officer determines that the Discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms.

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

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

a. *Ceriodaphnia dubia* (survival and reproduction test) for the remainder of the toxicity calendar year this NOA R5-2023-0025-013 is issued;

b. *Pimephales promelas* (larval survival and growth test) for the entire toxicity calendar year following the toxicity calendar year this NOA R5-2023-0025-013 is issued;

c. *Pseudokirchneriella subcapitata* (growth test) for the entire toxicity calendar year of the second year following the toxicity calendar year this NOA R5-2023-0025-013 is issued; and

d. Cycling back to *Ceriodaphnia dubia* (survival and reproduction test) after *Pseudokirchneriella subcapitata* (growth test) and continuing through the same rotation as above.

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

G. Toxicity Reduction Evaluations

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

1. **TRE Targets**

   a. **Chronic Whole Effluent Toxicity MMET.** No more than one chronic aquatic toxicity test with the most sensitive species initiated in a toxicity calendar month shall result in a “fail” at the IWC for any endpoint.

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

2. **TRE Implementation.** The Discharger is required to initiate a TRE when there is any combination of two or more chronic toxicity MDET or MMET that are not met within a single toxicity calendar month or within two successive toxicity calendar months (as defined in paragraph V.B.5 above). If other information indicates toxicity

(e.g., results of additional monitoring, results of monitoring at a higher concentration than the IWC, fish kills, or intermittent recurring toxicity), the Central Valley Water Board may require a TRE. A TRE may also be required when there is no effluent available to complete a routine monitoring test or MMET test.

a. **Preparation and Implementation of Detailed TRE Action Plan.** The Discharger shall conduct TREs in accordance with an approved TRE Work Plan. Within 30 days of the test result that triggered the TRE, the Discharger shall submit to the Executive Officer a TRE Action Plan per the Discharger's approved TRE Work Plan. The TRE Action Plan shall include the following information, and comply with additional conditions set by the Executive Officer:

   i. Specific actions the Discharger will take to investigate and identify the cause(s) of toxicity, including a TRE WET monitoring schedule;

   ii. Specific actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and

   iii. A schedule for these actions, progress reports, and the final report.

b. The Central Valley Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Locations RSW-001 and RSW-002

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

Table D-4. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
pH	standard units	Grab	1/Week
Dissolved Oxygen	mg/L	Grab	1/Month
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Quarter
Hardness, Total (as $CaCO_3$)	mg/L	Grab	1/Quarter
Temperature	ºF	Grab	1/Week
Turbidity	NTU	Grab	1/Month
Dissolved Organic Carbon (DOC)	mg/L	Grab	1/Quarter

2. **Table D-4 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-4:

   a. **Field Meter.** A hand-held field meter may be used for **dissolved oxygen, electrical conductivity, pH, temperature, 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 MRP shall be maintained at the Facility.

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

   c. **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. **Dissolved Organic Carbon.** Dissolved organic carbon samples shall be taken at approximately the same time and on the same date as the hardness and pH samples.

   e. **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 at 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

1. Monitoring Location PND-001

a. The Discharger shall keep a log regarding the use of the emergency storage basin. In particular, the Discharger shall record the following when any type of wastewater is directed to the pond:

   i. The date(s) when the wastewater is directed to the basin;

ii. The type(s) of wastewater (e.g., untreated due to plant upset, tertiary treated, etc.) directed to the basin;

iii. The total volume of wastewater directed to the basin (volume may be estimated); and

iv. The daily freeboard in the basin.

C. Municipal Water Supply – Not Applicable

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-5 and the testing requirements in section IX.D.2.

Table D-5. Filtration System Monitoring Requirements

Parameter	Units	Sample Type	Sampling Frequency
Turbidity	NTU	Meter	Continuous

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. **Continuous Analyzers.** The Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, for instances in which a continuous measurement is not available for a period of 30 minutes or more due to the analyzer(s) not being in operation due to maintenance activities. 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. **Turbidity.** Report daily average and maximum turbidity.

E. Ultraviolet Light (UV) Disinfection System

1. **Monitoring Locations UVS-001 and UVS-002**

a. The Discharger shall monitor the UV disinfection system at Monitoring Locations UVS-001 and UVS-002 as specified in Table D-6 and the testing requirements in section IX.E.2.

Table D-6. 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	mJ/cm^2	Calculated	Continuous	N/A
Total Coliform Organisms	MPN/100 mL	Grab	2/Week	UVS-002

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. **Continuous Analyzers.** If analyzers are taken out of operation for routine maintenance activities and no continuous measurements are available from a redundant meter, the Discharger shall divert flow to another disinfection channel to the extent feasible. If the Discharger is not able to divert away from the analyzer and the analyzer is out of operation for longer than 30 minutes, the Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation and no continuous measurements are available from a redundant meter. If analyzer(s) fail to provide continuous monitoring for more than two hours and influent and/or effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results.

b. **UV Banks.** Report daily minimum number of UV banks in operation.

c. **UV Transmittance.** Report daily minimum hourly average UV transmittance. The minimum hourly average transmittance shall consist of lowest average transmittance recorded over an hour of a day when flow is being discharged. If the system does not operate for an entire hour interval on a given day or if effluent flow is not discharged for an entire hour, the transmittance will be averaged based on the actual operation time when discharges are occurring.

d. **UV Dose.** Report daily minimum hourly average UV dose. The minimum hourly average dose shall consist of lowest hourly average dose provided in any channel that had at least one bank of lamps operating during the hour interval. For channels that did not operate for the entire hour interval or when effluent flow is not discharged for the entire hour, the dose will be averaged based on the actual operation time when discharges occurred.

e. **Total Coliform Organisms.** Pollutant 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.

F. Effluent and Receiving Water Characterization

The Discharger shall monitor the effluent at Monitoring Location EFF-001 and Deer Creek at Monitoring Location RSW-001 for the constituents listed in Table D-7, as described in this section.

1. **Monitoring Frequency**
   a. **Effluent Sampling.** Samples shall be collected from the effluent (Monitoring Location EFF-001) **once** between **1 January 2027 and 31 March 2027** and once between **1 July 2027 and 30 September 2027**.
   b. **Receiving Water Sampling.** A sample shall be collected from the upstream receiving water (Monitoring Location RSW-001) **once** between **1 January 2027 and 31 March 2027** and **once** between **1 July 2027 and 30 September 2027**. The upstream receiving water samples shall be collected concurrent (on the same date and at approximately the same time) with one of the effluent sampling events required in the section above.

   All sampling shall be analyzed for the constituents listed in Table D-7, below. The results of such monitoring shall be submitted to the Central Valley Water Board with the quarterly SMRs.

2. **Sample Type.** Effluent samples shall be taken as described in Table D-7, below and the testing requirements in section IX.F.4 below.

3. **Analytical Methods Report Certification**. Prior to beginning the Effluent Characterization monitoring, the Discharger shall provide a certification acknowledging the scheduled start date of the Effluent Characterization monitoring and confirming that samples will be collected and analyzed as described in the previously submitted Analytical Methods Report. If there are changes to the previously submitted Analytical Methods Report, the Discharger shall outline those changes. A one-page certification form will be provided by the Central Valley Water Board staff with this NOA R5-2023-0025-013 that the Discharger can use to satisfy this requirement. The certification form shall be submitted electronically via the State Water Board's California Integrated Water Quality System (CIWQS) in accordance with the reporting requirements in Technical Reports Table D-9.

Table D-7. Effluent and Receiving Water Characterization Monitoring

VOLATILE ORGANICS

CTR Number	Volatile Organic Parameters	CAS Number	Units	Effluent Sample Type
25	2-Chloroethyl vinyl Ether	110-75-8	µg/L	Grab
17	Acrolein	107-02-8	µg/L	Grab
18	Acrylonitrile	107-13-1	µg/L	Grab
19	Benzene	71-43-2	µg/L	Grab
20	Bromoform	75-25-2	µg/L	Grab
21	Carbon Tetrachloride	56-23-5	µg/L	Grab
22	Chlorobenzene	108-90-7	µg/L	Grab
24	Chloroethane	75-00-3	µg/L	Grab
26	Chloroform	67-66-3	µg/L	Grab
35	Methyl Chloride	74-87-3	µg/L	Grab
23	Dibromochloromethane	124-48-1	µg/L	Grab
27	Dichlorobromomethane	75-27-4	µg/L	Grab
36	Methylene Chloride	75-09-2	µg/L	Grab
33	Ethylbenzene	100-41-4	µg/L	Grab
89	Hexachlorobutadiene	87-68-3	µg/L	Grab
34	Methyl Bromide (Bromomethane)	74-83-9	µg/L	Grab
94	Naphthalene	91-20-3	µg/L	Grab
38	Tetrachloroethylene (PCE)	127-18-4	µg/L	Grab
39	Toluene	108-88-3	µg/L	Grab
40	trans-1,2-Dichloroethylene	156-60-5	µg/L	Grab
43	Trichloroethylene (TCE)	79-01-6	µg/L	Grab
44	Vinyl Chloride	75-01-4	µg/L	Grab
NL	Methyl-tert-butyl ether (MTBE)	1634-04-4	µg/L	Grab
41	1,1,1-Trichloroethane	71-55-6	µg/L	Grab
42	1,1,2-Trichloroethane	79-00-5	µg/L	Grab
28	1,1-Dichloroethane	75-34-3	µg/L	Grab
30	1,1-Dichloroethylene (DCE)	75-35-4	µg/L	Grab
31	1,2-Dichloropropane	78-87-5	µg/L	Grab

CTR Number	Volatile Organic Parameters	CAS Number	Units	Effluent Sample Type
32	1,3-Dichloropropylene	542-75-6	µg/L	Grab
37	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	Grab
101	1,2,4-Trichlorobenzene	120-82-1	µg/L	Grab
29	1,2-Dichloroethane	107-06-2	µg/L	Grab
75	1,2-Dichlorobenzene	95-50-1	µg/L	Grab
76	1,3-Dichlorobenzene	541-73-1	µg/L	Grab
77	1,4-Dichlorobenzene	106-46-7	µg/L	Grab

SEMI-VOLATILE ORGANICS

CTR Number	Semi-Organic Volatile Parameters	CAS Number	Units	Effluent Sample Type
60	Benzo(a)Anthracene	56-55-3	µg/L	Grab
85	1,2-Diphenylhydrazine	122-66-7	µg/L	Grab
45	2-Chlorophenol	95-57-8	µg/L	Grab
46	2,4-Dichlorophenol	120-83-2	µg/L	Grab
47	2,4-Dimethylphenol	105-67-9	µg/L	Grab
49	2,4-Dinitrophenol	51-28-5	µg/L	Grab
82	2,4-Dinitrotoluene	121-14-2	µg/L	Grab
55	2,4,6-Trichlorophenol	88-06-2	µg/L	Grab
83	2,6-Dinitrotoluene	606-20-2	µg/L	Grab
50	2-Nitrophenol	88-75-5	µg/L	Grab
71	2-Chloronaphthalene	91-58-7	µg/L	Grab
78	3,3-Dichlorobenzidine	91-94-1	µg/L	Grab
62	Benzo(b)Fluoranthene	205-99-2	µg/L	Grab
52	4-Chloro-3-methylphenol	59-50-7	µg/L	Grab
48	2-Methyl-4,6-Dinitrophenol	534-52-1	µg/L	Grab
51	4-Nitrophenol	100-02-7	µg/L	Grab
69	4-Bromophenyl Phenyl Ether	101-55-3	µg/L	Grab
72	4-Chlorophenyl Phenyl Ether	7005-72-3	µg/L	Grab
56	Acenaphthene	83-32-9	µg/L	Grab
57	Acenaphthylene	208-96-8	µg/L	Grab
58	Anthracene	120-12-7	µg/L	Grab
59	Benzidine	92-87-5	µg/L	Grab
61	Benzo(a)Pyrene	50-32-8	µg/L	Grab
63	Benzo(ghi)Perylene	191-24-2	µg/L	Grab
64	Benzo(k)Fluoranthene	207-08-9	µg/L	Grab
65	Bis (2-Chloroethoxy) Methane	111-91-1	µg/L	Grab
66	Bis (2-Chloroethyl) Ether	111-44-4	µg/L	Grab
67	Bis (2-Chloroisopropyl) Ether	108-60-1	µg/L	Grab
68	Bis(2-Ethylhexyl) Phthalate	117-81-7	µg/L	Grab
70	Butylbenzyl Phthalate	85-68-7	µg/L	Grab
73	Chrysene	218-01-9	µg/L	Grab
81	Di-n-butyl Phthalate	84-74-2	µg/L	Grab
84	Di-n-Octyl Phthalate	117-84-0	µg/L	Grab

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

INORGANICS

CTR Number	Inorganic Parameters	CAS Number	Units	Effluent Sample Type
NL	Aluminum	7429-90-5	µg/L	24-hour Composite
1	Antimony, Total	7440-36-0	µg/L	24-hour Composite
2	Arsenic, Total	7440-38-2	µg/L	24-hour Composite
15	Asbestos	1332-21-4	µg/L	24-hour Composite
3	Beryllium, Total	7440-41-7	µg/L	24-hour Composite
4	Cadmium, Total	7440-43-9	µg/L	24-hour Composite
5a	Chromium, Total	7440-47-3	µg/L	24-hour Composite
6	Copper, Total	7440-50-8	µg/L	24-hour Composite
NL	Iron, Total	7439-89-6	µg/L	24-hour Composite
7	Lead, Total	7439-92-1	µg/L	24-hour Composite
8	Mercury, Total	7439-97-6	ng/L	Grab
NL	Manganese, Total	7439-96-5	µg/L	24-hour Composite
9	Nickel, Total	7440-02-0	µg/L	24-hour Composite
10	Selenium, Total	7782-49-2	µg/L	24-hour Composite
11	Silver, Total	7440-22-4	µg/L	24-hour Composite
12	Thallium, Total	7440-28-0	µg/L	24-hour Composite
13	Zinc, Total	7440-66-6	µg/L	24-hour Composite

NON-METALS/MINERALS

CTR Number	Non-Metal/Mineral Parameters	CAS Number	Units	Effluent Sample Type
NL	Boron	7440-42-8	µg/L	24-hour Composite

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

PESTICIDES/PCBs/DIOXINS

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

CONVENTIONAL PARAMETERS

CTR Number	Conventional Parameters	CAS Number	Units	Effluent Sample Type
NL	pH	--	SU	Grab
NL	Temperature	--	ºF	Grab

NON-CONVENTIONAL PARAMETERS

CTR Number	Nonconventional Parameters	CAS Number	Units	Effluent Sample Type
NL	Foaming Agents (MBAS)	MBAS	mg/L	24-hour Composite
NL	Hardness (as CaCO3)	471-34-1	mg/L	Grab
NL	Specific Conductance (Electrical Conductivity or EC)	EC	µmhos /cm	Grab
NL	Total Dissolved Solids (TDS)	TDS	mg/L	24-hour Composite
NL	Dissolved Organic Carbon (DOC)	DOC	mg/L	Grab

NUTRIENTS

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

5. **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. **Applicable to all parameters.** Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

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

   c. **Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.

   d. **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.

   e. **Total Mercury.** Samples for total mercury 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 maximum reporting limit (RL) of 0.5 nanograms per liter (ng/L) for total mercury.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D of the Municipal General Order) related to monitoring, reporting, and recordkeeping. Upon written request of the Central Valley Water Board, the Discharger shall submit a summary monitoring report. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year(s).

2. The Discharger shall report to the Central Valley Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.
3. Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if a Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

B. Self-Monitoring Reports

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

Table D-8. Monitoring Periods and Reporting Schedule

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

Sampling Frequency	Monitoring Period	SMR Due Date
1/Year	1 January through 31 December	1 February of following year

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

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

   a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

   b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

      For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

   c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

   d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

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

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

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

6. The Discharger shall submit SMRs in accordance with the following requirements:

a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; discuss corrective actions taken or planned; explain all unusual results, and/or events which affect interpretation of the results; and discuss the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation. The cover letter must be uploaded directly into CIWQS and violations must be entered into CIWQS under the Violations tab for the reporting period in which the violation occurred in addition to them being identified in the cover letter.

c. The Discharger shall attach final laboratory reports for all contracted commercial laboratories, including quality assurance/quality control information, with all its SMRs for which sample analyses were performed. This requirement only applies to Effluent and Receiving Water Characterization monitoring per section IX.F of Appendix D. Bench sheets are not required but should be available upon request by Regional Board staff.

7. The Discharger shall submit in the SMRs calculations and reports in accordance with the following requirements.

a. **Calendar Annual Average Limitations.** The Discharger shall report the calendar year annual average electrical conductivity in the December SMR. The annual average shall be calculated as the average of the samples gathered for the calendar year.

b. **Mass Loading Limitations – Not Applicable.**

c. **Removal Efficiency (BOD_5 and TSS).** The Discharger shall calculate and report the percent removal of BOD_5 and TSS in the SMRs. The percent removal shall be calculated as specified in section VIII.A of the Waste Discharge Requirements in the Municipal General Order.

d. **Total Coliform Organisms Effluent Limitations.** The Discharger shall calculate and report the 7-day median of total coliform organisms for the effluent. The 7-day median of total coliform organisms shall be calculated as specified in section VIII.F of the Waste Discharge Requirements in Municipal General Order.

e. **Total Calendar Annual Mass Loading Mercury Effluent Limitations. – Not Applicable**

f. **Temperature Effluent Limitation. – Not Applicable**

g. **Chlorpyrifos and Diazinon Effluent Limitations – Not Applicable.**

h. **Dissolved Oxygen Receiving Water Limitations.** The Discharger shall report quarterly 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 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 (DMRs)

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

D. Other Reports

1. **Special Study Reports – Not Applicable**
2. **Analytical Methods Report.** The Discharger shall complete and submit an Analytical Methods Report, electronically via CIWQS submittal, by the due date specified in Table D-9 below. The Analytical Methods Report shall include the following for each constituent listed in tables D-3, D-4, D-6 and D-7 of this NOA R5-2023-0025-013: 1) applicable water quality objective, 2) reporting level (RL), 3) method detection limit (MDL), and 4) analytical method. The analytical methods shall be sufficiently sensitive with RLs consistent with the SSM Rule (see also General Monitoring Provision F in the MRP, Attachment E of the Municipal General Order), and with the Minimum Levels (MLs) in the SIP, Appendix 4. The “Reporting Level or RL” is synonymous with the “Method Minimum Level” described in the SSM Rule. If an RL is greater than the applicable water quality objective for a constituent, the Discharger shall explain how the proposed analytical method complies with the SSM Rule. Central Valley Water Board staff will provide a tool with this NOA R5-2023-0025-013 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-9, Technical Reports, a written report containing the following:

   a. The names, certificate grades, and general responsibilities of all persons employed at the Facility.
   b. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.
   c. A statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration.

d. A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.

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

4. **Annual Pretreatment Reporting Requirements – Not Applicable**

5. **Recycled Water Policy Annual Reports.** In accordance with section 3 of the Water Quality Control Policy for Recycled Water (Recycled Water Policy) and as specified in this NOA R5-2023-0025-013, the Discharger shall electronically submit an annual report of monthly data to the State Water Board by 30 April each year covering the previous calendar year. The report shall be submitted using the State Water Board's GeoTracker website (https://geotracker.waterboards.ca.gov/). Information for setting up and using the GeoTracker system can be found in the ESI Guide for Responsible Parties document on the State Water Board's website for Electronic Submittal of Information (https://www.waterboards.ca.gov/ust/electronic_submittal/index.html).

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

6. **Technical Report Submittals.** The Municipal General Order, as specified in this NOA R5-2023-0025-013, includes requirements to submit various reports and documents that may include a Notice of Intent, special study technical reports, progress reports, and other reports identified in the MRP (hereafter referred to collectively as "technical reports"). Table D-9 below summarizes the technical reports that are applicable to this discharge and required by this NOA R5-2023-0025-013, 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-9. Technical Reports

Report #	Technical Report	Due Date	CIWQS Report Name
1	Notice of Intent	31 December 2030	NOI
2	Analytical Methods Report	1 April 2026	MRP IX.D.3
3	Analytical Methods Report Certification	1 October 2026	MRP IX.F.3
4	Annual Operations Report #1	1 November 2026	MRP X.D.3

Report #	Technical Report	Due Date	CIWQS Report Name
5	Annual Operations Report #2	1 November 2027	MRP X.D.3
6	Annual Operations Report #3	1 November 2028	MRP X.D.3
7	Annual Operations Report #4	1 November 2029	MRP X.D.3
8	Annual Operations Report #5	1 November 2030	MRP X.D.3
9	Recycled Water Policy Annual Reports #1	30 November 2026	MRP X.D.4
10	Recycled Water Policy Annual Reports #2	30 November 2027	MRP X.D.4
11	Recycled Water Policy Annual Reports #3	30 November 2028	MRP X.D.4
12	Recycled Water Policy Annual Reports #4	30 November 2029	MRP X.D.4
13	Recycled Water Policy Annual Reports #5	30 November 2030	MRP X.D.4

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

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

Abbreviations and Notes for Table E-1:

1. CV = Coefficient of Variation (established in accordance with section 1.4 of the SIP)
2. MDEL = Maximum Daily Effluent Limitation
3. AMEL = Average Monthly Effluent Limitation
4. MDEL = Maximum Daily Effluent Limitation
5. AWEL = Average Weekly Effluent Limitation
6. CMC = Criterion Maximum Concentration
7. CCC = Criterion Continuous Concentration
8. Coefficient of Variation (CV) calculated using effluent sample data for the parameter listed.
9. Effluent Limit Table as indicated and contained in section 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 WQBELs Calculations

Parameter	Units	Criteria	CV	Effluent Limit Table in Municipal General Order	AMEL	AWEL
Nitrate Plus Nitrite (as N)	mg/L	10	0.2	Table 20B	10	13

Table E-2. Aquatic Life WQBELs Calculations

Parameter	Units	CMC	CCC	CV	Effluent Limit Table in Municipal General Order	AMEL	AWEL
Ammonia, Total (as N)	mg/L	7.5	1.4	4.0	Table 18C	0.83	2.7