Central Valley Regional Water Quality Control Board

XX June 2020

Chad McBride
Wastewater Plant Operations Supervisor
Nevada County Sanitation District No. 1
950 Maidu Avenue
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VIA EMAIL:
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CERTIFIED MAIL
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TENTATIVE DRAFT NOTICE OF APPLICABILITY (NOA); MUNICIPAL GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2017-0085-011 (NPDES CAG585001); NEVADA COUNTY SANITATION DISTRICT NO. 1, LAKE OF THE PINES WASTEWATER TREATMENT PLANT, NEVADA COUNTY

Our office received a Notice of Intent (NOI) dated 22 November 2019 from the Nevada County Sanitation District No. 1 (Discharger), for discharge of tertiary treated domestic wastewater to surface water from the Lake of the Pines Wastewater Treatment Plant (Facility) to Magnolia Creek. The General Order for Municipal Wastewater Dischargers That Meet Objectives/Criteria at the Point of Discharge to Surface Water Order R5-2017-0085-01 (Municipal General Order) requires the submittal of an NOI to apply for regulatory coverage of a surface water discharge. Based on the NOI and subsequent information submitted by the Discharger, staff has determined that the NOI requirements have been fulfilled and the Facility is eligible for coverage under the Municipal General Order. This Facility's discharge is assigned Municipal General Order enrollee number **R5-2017-0085-011** and National Pollutant Discharge Elimination System (NPDES) Permit CAG585001. Please reference your Municipal General Order enrollee number, **R5-2017-0085-011**, in your correspondence and submitted documents.

Discharges to surface water from the Facility are currently regulated by an individual NPDES permit, Order R5-2015-0028 (NPDES CA0081612) issued by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) on 17 April 2015. The current individual NPDES permit expired on 31 May 2020 and was administratively extended by the Executive Officer on 18 May 2020. This NOA, authorizing coverage under the Municipal General Order, shall become effective on **1 August 2020**, after which the current individual NPDES permit has been rescinded by the Central Valley Water Board. At which time the terms and conditions in Order R5-2015-0028 will cease to be effective except for enforcement purposes. To meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements contained in the Municipal General Order and as specified in this NOA. This action in no way prevents the Central Valley Water Board from taking enforcement action for past violations of Order R5-2015-0028.

The enclosed Municipal General Order is not currently available online but can be requested by email or phone from the NPDES Permitting Contacts webpage (https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/contacts/). You are urged to familiarize yourself with the entire contents of the enclosed document.

The Monitoring and Reporting Program, Attachment E to the Municipal General Order, contains the general monitoring and reporting requirements. The Discharger specific monitoring and reporting requirements are included within this NOA as Appendix D. Only the monitoring and reporting requirements specifically listed in Appendix D of this NOA are applicable to this Facility. Additionally, please note the new requirement in Attachment E, Section X.B.6.c to the Municipal General Order, to attach all final laboratory reports from all contracted commercial laboratories with your Self-Monitoring Reports (SMRs).

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

Table 1. Facility Information

WDID	5A290104003
CIWQS Facility Place ID	236236
Discharger	Nevada County Sanitation District No. 1
Name of Facility	Lake of the Pines Wastewater Treatment Plant
Facility Street Address	10803 Riata Way
Facility City, State, Zip Code	Auburn, CA 95602
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
Facility Design Average Dry Weather Flow (ADWF)	0.72 Million Gallons Per Day (MGD)
Permitted ADWF	0.72 MGD
Watershed	Bear River
Receiving Water	Magnolia Creek
Receiving Water Type	Inland surface water
Discharge Point 001	39° 02’ 10” N, 121° 04’ 54” W

I. FACILITY INFORMATION

The Facility provides sewerage service for the communities of Lake of the Pines, Darkhorse, and the Cascade Crossing subdivision and serves approximately 6,900 individuals. The Discharger has plans for limited expansion in their sphere of influence. The expansion may include, but is not limited to, adding connections from the Rincon Del Rio subdivision, the Higgins Village Shopping Center, and the Higgins Market Place. This expansion may require the Discharger to increase the capacity of the facility to handle the additional flow. The design average dry weather flow capacity of the Facility is 0.72 MGD.

The Microfiltration Membrane Bioreactor (MBR) treatment system at the Facility consists of the following:

- influent headworks with course screening followed by fine screening;
- biological nutrient removal processes where BOD reduction, nitrogen removal, and phosphorus removal occurs;
- a series of permeate pumps that pull the wastestream through the membranes by vacuum provides solids separation; and
- disinfection includes two parallel ultraviolet light (UV) systems.

The biological treatment system is configured in two identical parallel treatment trains so that a single train can be taken off-line for maintenance during the dry months of the year. Scum and waste activated sludge produced from waste material in the MBR tanks is digested in aerobic sludge digesters followed by centrifuge dewatering. The dewatered sludge is taken off-site for disposal in a landfill.

II. RECEIVING WATER BENEFICIAL USES

The Facility discharges from Discharge Point 001 to Magnolia Creek, a tributary to the Bear River, within the Upper Bear River 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 Magnolia Creek:

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

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

- Municipal and Domestic Supply (MUN);

- Agricultural Supply, including irrigation and stock watering (AGR);
- Industrial Service Supply (IND);
- Industrial Process Supply (PRO);

III. RECEIVING WATER TOTAL MAXIMUM DAILY LOADS (TMDLs)

Magnolia 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 (R5-2017-0085-011).

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.

1. The discharge of wastes, other than those described in section I.A and meeting the eligibility criteria in section I.B of the Municipal General Order, is prohibited unless the Discharger obtains coverage under another general or individual Order that regulates the discharge of such wastes. (see Municipal General Order section IV.A)
2. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Federal Standard Provisions sections I.G. and I.H in Attachment D, Standard Provisions, of the Municipal General Order. (see Municipal General Order section IV.B)
3. Neither the discharge nor its treatment shall create a nuisance as defined in section 13050 of the Water Code. (see Municipal General Order section IV.C)
4. **Average Dry Weather Flow.** Discharges exceeding an average dry weather flow of 0.72 MGD are prohibited. (see Municipal General Order section IV.D)

V. EFFLUENT LIMITATIONS

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001. Effluent limitations are provided in the Municipal General Order. Only the effluent limitations listed below on Table 2 and items 1-5 are applicable to this Facility. Unless otherwise specified in this NOA, compliance shall be measured at Monitoring Location EFF-001, as described in the Monitoring and Reporting Program, Appendix D of this NOA.

The Discharger shall maintain compliance with the effluent limitations specified in Table 2.

Table 2. Effluent Limitations

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

Parameter	Units	Average Monthly	Average Weekly	Municipal General Order Section Reference
Ammonia Nitrogen, Total as Nitrogen (as N)	mg/L	1.3	4.1	V.A.1.c.v.(b) Table 17D
Nitrate plus Nitrite, Total (as N)	mg/L	10	20	V.A.1.c.vi Table 19B

1. **pH (Municipal General Order section V.A.1.c.iv.(a).Table 15).** The pH shall at all times be within the range of 6.5 and 8.5.
2. **Percent Removal (Municipal General Order section V.A.1.a.ii.(b)(1)).** The average monthly percent removal of BOD_5 and TSS shall not be less than 85 percent.
3. **Total Coliform Organisms (Municipal General Order section V.A.1.a.ii.(c)).** (Measured at UVS-001). Effluent total coliform organisms shall not exceed:
   i. 2.2 most probable number per 100 milliliters (MPN/100 mL), as a 7-day median;
   ii. 23 MPN/100 mL, more than once in any 30-day period; and
   iii. 240 MPN/100 mL, at any time.
4. **Whole Effluent Toxicity, Acute (Municipal General Order section V.A.1.c.i).** Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:
   i. 70%, minimum for any one bioassay; and
   ii. 90%, median for any three consecutive bioassays.
5. **Electrical Conductivity (Municipal General Order section V.A.1.c.viii).** The effluent electrical conductivity shall not exceed the calendar annual average of 625 µmhos/cm.

VI. RECEIVING WATER LIMITATIONS

1. **Surface Water Limitations (Municipal General Order section VI.A).**

   The Municipal General Order includes receiving surface water limitations in Section VI.A. Based on the information provided in the NOI, only the following receiving surface water limitations listed in Municipal General Order Section VI.A are applicable to the Facility.

   - Bacteria (VI.A.2);
   - Biostimulatory Substances (VI.A.3);
   - Chemical Constituents (VI.A.4);
   - Color (VI.A.5);
   - Dissolved Oxygen (VI.A.6.a.i-iv);
   - Floating Material (VI.A.7);
   - Oil and Grease (VI.A.8);
   - pH (VI.A.9.a);
   - Pesticides (VI.A.10);

- Radioactivity (VI.A.11);
- Suspended Sediments (VI.A.12);
- Settleable Substances (VI.A.13);
- Suspended Material (VI.A.14);
- Taste and Odors (VI.A.15);
- Temperature (VI.A.16.a).
- Toxicity (VI.A.17); and
- Turbidity (VI.A.18.a).

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

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

VII. MONITORING AND REPORTING

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

VIII. PROVISIONS

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

A. Standard Provisions. Section VII.A

Applicable to all Dischargers.

B. Monitoring and Reporting Program (MRP) Requirements. Section VII.B

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

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

Table 3: Summary of Applicable Special Provisions

Special Provision	Section Reference
1. Reopener Provisions	a. Major Modification of Treatment Works c. Whole Effluent Toxicity d. Water Effect Ratios (WERs) and Metal Translators
2. Special Studies, Technical Reports and Additional Monitoring Requirements	a.iii-iv. Toxicity Reduction Evaluation Requirements
4. Construction, Operation and Maintenance Specifications	a.ii.(a)-(b). Filtration System Operating Specifications b.i.(b). UV Disinfection System – Dose b.ii.(b). UV Disinfection System – Transmittance b.iii-vi. UV Disinfection System – General c.i-x. Pond Operating Specifications

Special Provision	Section Reference
5. Special Provisions for Municipal Facilities	b. Sludge/Biosolids Treatment or Discharge Specifications
6. Other Special Provisions	a. Title 22, or Equivalent, Disinfection Requirements

IX. COMPLIANCE DETERMINATION

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

- BOD_5 and TSS Effluent Limitations (VIII.A);
- Average Dry Weather Flow Prohibition (VIII.D);
- Total Coliform Organisms Effluent Limitations (VIII.E);
- Dissolved Oxygen Receiving Water Limitation (VIII.I);
- Chronic Whole Effluent Toxicity Trigger (VIII.J);
- Period Average, Calendar Month Average, and Annual Average (VIII.N);
- Turbidity Receiving Water Limitation (VIII.O); and
- Reporting Requirements **(NOA, Appendix D, section X).**

X. ANTI-BACKSLIDING REQUIREMENTS

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

Effluent limitations for copper, pH, BOD_5, TSS, and ammonia are less stringent than prescribed in previous Order R5-2015-0028. As described in more detailed in Appendix C to this NOA, section I.A, Satisfaction of Anti-Backsliding Requirements, the relaxation of effluent limitations meets the exceptions proved in the federal anti-backsliding regulations.

XI. ANTIDEGRADATION REQUIREMENTS

Antidegradation requirements are specified in the Municipal General Order, section V.D.4, Attachment F (Fact Sheet). This NOA does not allow an increase in flow or mass of pollutants to the receiving water and the relaxation of effluent limitations for copper, pH, BOD_5, TSS, and ammonia is consistent with the antidegradation provisions of 40 C.F.R. 131.12 and State Water Board Resolution No. 68-16.

A more detailed discussion of the antidegradation analysis is provided in Appendix C to this NOA, section I.B Antidegradation Policies.

XII. RATIONALE FOR LIMITATIONS AND MONITORING REQUIREMENTS

Additional rationale for limitations and monitoring requirements is included in Appendix C of this NOA.

XIII. ENFORCEMENT

Failure to comply with the applicable requirements of the Municipal General Order, as specified in this NOA, may result in enforcement actions, which could include civil liability (penalties). Effluent limitation violations may be subject to a Mandatory Minimum Penalty (MMP) of $3,000 per violation. In addition, late monitoring reports may be subject to 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 becomes effective on 1 August 2020, you will need to comply with the effluent limitations and requirements contained in your existing permit, Order R5-2015-0028. For your June and July 2020 monthly self-monitoring reports, you will need to demonstrate compliance with existing Order R5-2015-0028 through 31 July 2020. For your August 2020 self-monitoring report, you will need to demonstrate compliance with this NOA beginning 1 August 2020.

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

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

- Attention: NPDES Compliance and Enforcement Section
- Discharger: Nevada County Sanitation District No. 1
- Facility: Lake of the Pines WWTP
- County: Nevada County
- CIWQS Place ID: 236236

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

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days

after the date this NOA is issued, except that if the thirtieth day following the date this NOA is issued falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Links to the laws and regulations applicable to filing petitions (http://www.waterboards.ca.gov/public_notices/petitions/water_quality) may be found on the Internet or will be provided upon request.

If you have any questions now that your NOA has been issued, the Central Valley Water Board's Compliance and Enforcement Section will take over management of your case, Paul Wadding of the Compliance and Enforcement section is your point of contact for any questions regarding this NOA. If you find it necessary to make a change to your permitted operations, you will be directed to the appropriate Permitting staff. You may contact Paul Wadding at (916) 464-4826 or at Paul.Wadding@waterboards.ca.gov.

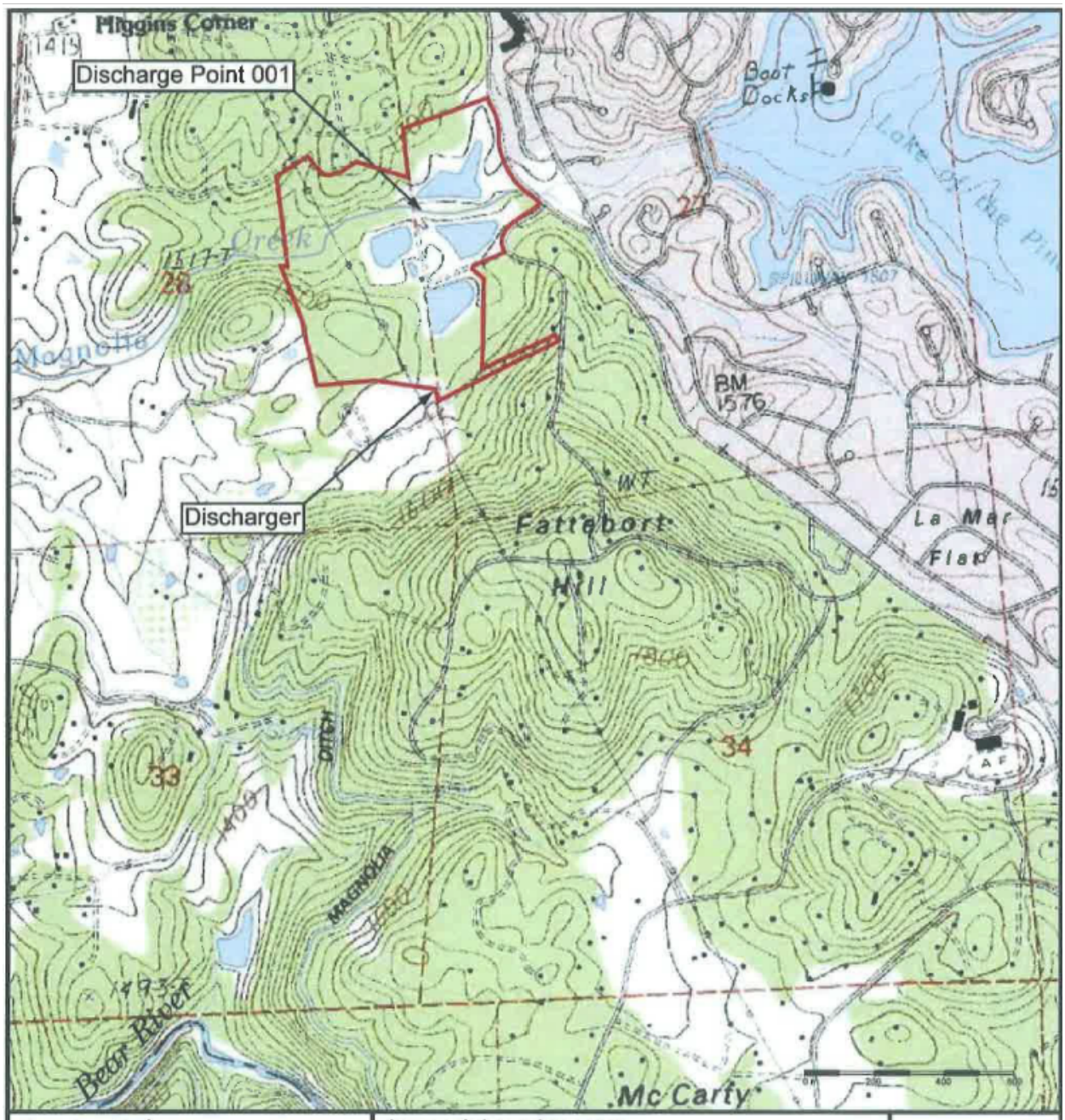
Patrick Pulupa
Executive Officer

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

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

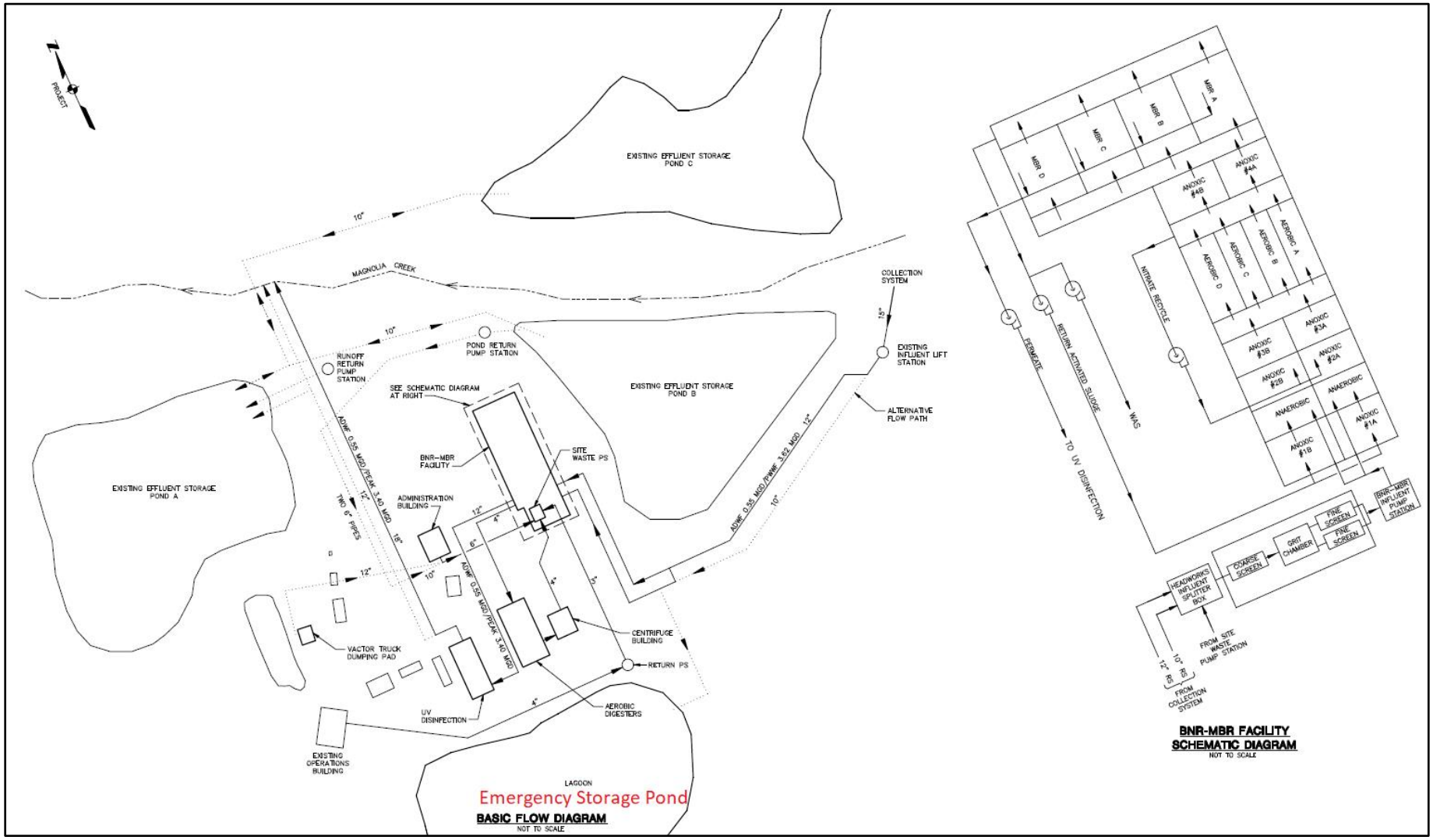
cc:
Elizabeth Sablad, U.S. EPA, Region IX, San Francisco (email only)
Peter Kozelka, U.S. EPA, Region IX, San Francisco (email only)
Afrooz Farsimadan, California State Water Resources Control Board (email only)
Renan Jauregui, California State Water Resources Control Board (email only)
Jarma Bennett, California State Water Resources Control Board (email only)
ICIS NPDES (Sarah Torres), PG Environmental, (email only)

APPENDIX A – LOCATION MAP



Drawing Reference:	SITE LOCATION MAP	
LAKE OF THE PINES U.S.G.S TOPOGRAPHIC MAP 7.5 MINUTE QUADRANGLE *Topographic Map* *Dated 7/1/1995*	NEVADA COUNTY SANITATION DISTRICT NO. 1 LAKE OF THE PINES WASTEWATER TREATMENT PLANT NEVADA COUNTY	N W E S

APPENDIX B – FLOW SCHEMATIC



APPENDIX C – RATIONALE FOR LIMITATIONS AND MONITORING REQUIREMENTS

I. FINAL EFFLUENT LIMITATION CONSIDERATIONS

A. Satisfaction of Anti-Backsliding Requirements

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

The effluent limitations in this NOA are at least as stringent as the effluent limitations in the Facility's previous Order R5-2015-0028, with the exception of effluent limitations for copper, pH, mass-based effluent limitations for ammonia, BOD_5, and TSS and maximum daily effluent limitations for BOD_5 and TSS. This relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

1. **CWA section 402(o)(1) and 303(d)(4).** CWA section 402(o)(1) prohibits the establishment of less stringent water quality-based effluent limits "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.

   Magnolia Creek is considered an attainment water for copper, pH, ammonia, BOD_5, and TSS 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, removal of these effluent limits complies with federal and state antidegradation requirements. Thus, removal of the effluent limitations for copper, pH, mass-based effluent limitations for ammonia, BOD_5, and TSS, and maximum daily effluent limitations for BOD_5 and TSS for this NOA meets the exception in CWA section 303(d)(4)(B).

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

Updated information that was not available at the time Order R5-2015-0028 was issued indicates that copper does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water. Additionally, updated information that was not available at the time Order R5-2015-0028 was issued indicates that less stringent effluent limitations for copper based on available data, satisfy requirements in CWA section 402(o)(2). The updated information that supports the relaxation of copper effluent limitations includes the following:

a. **Copper.** Monitoring data collected over the permit term for Order R5-2015-0028 indicates that copper in the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of their respective water quality objectives/criteria.

Thus, removal of the effluent limitations for copper from this NOA is in accordance with CWA section 402(o)(2)(B)(i), which allows for the removal or relaxation of effluent limitations based on information that was not available at the time previous Order R5-2015-0028 was issued.

B. Antidegradation Policies

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

This NOA removes effluent limitations for copper based on updated monitoring data demonstrating that the effluent does not cause or contribute to an exceedance of the applicable water quality criteria or objectives in the receiving water. The removal of effluent limitations is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Resources Control Board (State Water Board) Resolution No. 68-16.

This NOA also relaxes the maximum pH effluent limitation, and removes mass-based effluent limitations for ammonia, BOD_5, and TSS, and maximum daily effluent limitations for BOD_5 and TSS based on 40 C.F.R. part 122.45 (d) and (f). These changes in effluent limitations will not result in a decrease in the level of treatment or control, or a reduction in water quality. Furthermore, concentration-based average monthly effluent limitations (AMELs) and average weekly effluent limitations (AWELs) are included for ammonia, BOD_5, and TSS, as well as a dry weather flow prohibition (section V.4 of this NOA) that limits the amount of flow that can be discharged to the receiving water during dry weather months. The combination of flow and concentration-based effluent limits in this NOA are equivalent to mass-based effluent limitations, which were redundant limits contained in previous individual Orders by multiplying the concentration based effluent limits and permitted average dry weather flow by a conversion factor to determine the mass-based effluent limitations. These effluent limitation changes do not result in an

allowed increase in pollutants or any additional degradation of the receiving water, therefore, are consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and the State Antidegradation Policy.

C. Salinity (Electrical Conductivity or EC)

Based on effluent and upstream receiving water EC data collected from January 2017 to December 2019, the maximum calendar annual average EC of the effluent was 377 µmhos/cm and the upstream receiving water was 214 µmhos/cm. The Municipal General Order includes a screening level for EC of 1600 µmhos/cm based on the Secondary Maximum Contaminant Level (MCL) to protect the municipal and domestic supply beneficial use.

When only considering the numeric water quality standards for salinity, the discharge does not have reasonable potential to cause or contribute to an in-stream excursion of water quality objectives for salinity. However, due to the Region-wide concerns regarding salinity and to ensure implementation of the Basin Plan's Salinity Control Program the Municipal General Order includes performance-based effluent limitations for EC that are applicable to this Facility. The EC concentration of the effluent is greater than the background concentration observed in Magnolia 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).

II. RATIONALE FOR MONITORING REQUIREMENTS

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

A. Influent Monitoring

1. Influent monitoring is required to collect data on the characteristics of the wastewater and to assess compliance with effluent limitations (e.g., BOD_5 and TSS reduction requirements). The monitoring frequencies for flow, BOD_5, and TSS are retained from Order R5-2015-0028.

B. Effluent Monitoring

1. Pursuant to the requirements of 40 C.F.R. section 122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations, assess the effectiveness of the

treatment process, and to assess the impacts of the discharge on the receiving stream and groundwater.

2. Effluent monitoring frequencies and sample types for flow, BOD_5, TSS, ammonia (as N), nitrate (as N), nitrite (as N), peracetic acid, electrical conductivity, hardness, and acute/chronic toxicity testing have been retained from Order R5-2015-0028 to evaluate compliance with this NOA and the Municipal General Order and are shown on Table D-3 (Effluent Monitoring).
3. Monitoring data collected over the previous permit term for cyanide, copper, chlorine (total residual) did not demonstrate reasonable potential to exceed water quality objectives/criteria. Thus, specific monitoring requirements for these parameters have not been retained from Order R5-2015-0028.
4. This NOA includes a new effluent monitoring requirement for dissolved oxygen (once per month). Receiving water data taken during the last permit term indicates seasonal drops below the Basin Plan objective of 7 mg/L for dissolved oxygen in Magnolia Creek. Monitoring of the effluent will provide information of the Facility's influence on dissolved oxygen concentrations at the downstream receiving water monitoring location, RSW-002, and will be used to assess compliance with dissolved oxygen receiving water limitations.
5. This NOA includes effluent monitoring for dissolved organic carbon (once per quarter) to calculate site-specific freshwater aluminum criteria in accordance with the 2018 United State Environmental Protection Agency (U.S. EPA) National Ambient Water Quality Criteria (NAWQC) for aluminum in freshwater for the next permit renewal.
6. The effluent monitoring for pH and temperature was reduced from twice per week to once per week. This monitoring frequency is sufficient to evaluate compliance with this NOA and the MGO.

C. Whole Effluent Toxicity Testing Requirements

1. **Acute Toxicity**. Effluent monitoring frequency for acute toxicity 96-hour bioassay (once per year) has been retained from previous Order R5-2015-0028 to demonstrate compliance with the effluent limitation for acute toxicity.
2. **Chronic Toxicity.** Effluent monitoring frequency for chronic toxicity bioassay testing (once per year) has been retained from previous Order R5-2015-0028. Chronic whole effluent toxicity testing is required when discharging to Magnolia Creek in order to demonstrate compliance with the Basin Plan's narrative toxicity objective.

D. Receiving Water Monitoring

1. Magnolia Creek

a. Receiving water monitoring is necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge to Magnolia Creek
b. This NOA retains the monitoring frequencies for dissolved oxygen (once per month), electrical conductivity @ 25°C (once per month), turbidity (once per month), hardness (once per quarter), and temperature (once per week).

c. This NOA increases the monitoring frequency for pH from monthly to weekly so samples can be taken concurrently with temperature samples in order to calculate ammonia criteria for the next permit renewal.

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

2. Groundwater – Not Applicable

E. Biosolids Monitoring – Not Applicable

F. Water Supply Monitoring

1. Once per year municipal water supply EC monitoring has not been carried forward from previous Order R5-2015-0028. This NOA includes an annual average effluent limitation and effluent monitoring for EC, which is adequately regulating the discharge of salinity from the Facility.

G. Filtration System Monitoring

1. Filtration system monitoring for turbidity is required for dischargers of tertiary treated wastewater that meet the eligibility criteria in section I.B.4 of the Municipal General Order to determine compliance with the filtration system operating specifications in section VII.C.4.a of the Municipal General Order.
2. Continuous monitoring for turbidity has been retained from previous Order R5-2015-0028. Continuous monitoring for turbidity is specified in section IX.D of the Monitoring and Reporting Program in the Municipal General Order, Attachment D.

H. UV Disinfection System Monitoring

1. Continuous monitoring for flow and UV transmittance at UVS-001 has been retained from previous Order R5-2015-0028.
2. Monitoring for total coliform organisms has been moved from FIL-001 to UVS-001. The monitoring frequency of twice per week has been retained from previous Order R5-2015-0028.
3. This NOA includes continuous monitoring for the number of UV banks in operation and the UV dose as described in section IX.E of the Monitoring and Reporting Program in the Municipal General Order.

I. Pond Monitoring

1. Per section VIII.E.5 in the Fact Sheet in the Municipal General Order, pond monitoring is required to ensure proper operation of the storage ponds.
2. When any type of wastewater is directed to the ponds, this NOA requires the Discharger to keep a log related to the use of the ponds per section IX.B.1.a of Appendix D of this NOA.
3. Section IX.B.1.b in the Monitoring and Reporting Program in the Municipal General Order requires monitoring for unlined ponds when wastewater is stored for over 7 days. This NOA contains site specific pond monitoring requirements of dissolved oxygen (once per month), electrical conductivity @ 25°C (once per week), odors,

(once per month), and pH (once per month) for the Emergency Storage Pond, Pond A, Pond B, and Pond C when wastewater is stored for over 7 days.

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

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

K. Effluent and Receiving Water Characterization Monitoring

1. Order R5-2015-0028 included semiannual effluent monitoring for one year when discharging to Magnolia Creek. This NOA retains the semiannual effluent for one year characterization monitoring of the effluent.
2. Order R5-2015-0028 did not include characterization monitoring of the receiving water. In order to have sufficient data to conduct a reasonable potential analysis for the next permit renewal, this NOA adds characterization monitoring of the upstream receiving water at the same frequency and concurrent with the effluent characterization monitoring in Section II.K.1 above.

III. 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
Copper, Total Recoverable	µg/L	1.5	--	7.0	10.3	7.0	--	--	--	--	No
Ammonia (as N)	mg/L	1.6	--	1.52	14.4	1.52	--	--	--	--	Yes
Nitrate Plus Nitrite (as N)	mg/L	6.4	--	10	--	--	--	--	--	10	Yes
Electrical Conductivity @ 25°C	µmhos/cm	513 (Annual Average)	457	1,600	--	--	--	--	--	1,600	No
Cyanide, Total Recoverable	µg/L	3.4	--	5.2	22	5.2	--	--	--	--	No

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

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APPENDIX D – MONITORING AND REPORTING PROGRAM (MRP)

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

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

I. GENERAL MONITORING PROVISIONS

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

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

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

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

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

manner specified in this MRP.

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

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

G. Dischargers shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Resources Control Board at the following address:

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

H. The Discharger shall file with the Central Valley Water Board technical reports on self-monitoring performed according to the detailed specifications contained in this MRP.

I. The results of all monitoring required by this MRP shall be reported to the Central Valley Water Board and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of the NOA. Unless otherwise specified, discharge flows shall be reported in terms of the monthly average and the daily maximum discharge flows.

J. Multiple Discharge Points – Not Applicable.

II. MONITORING LOCATIONS

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

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.
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 Magnolia Creek. Latitude: 39° 02' 10.0" N, Longitude: 121° 04' 54.0" W
--	RSW-001	In Magnolia Creek, 1,200 feet upstream of Discharge Point 001. Latitude: 39° 02’ 11” N, Longitude: 121° 04’ 40” W
--	RSW-002	In Magnolia Creek, 1,200 feet downstream of Discharge Point 001. Latitude: 39° 02’ 05” N, Longitude: 121° 05’ 07” W
--	ESP-001	Emergency storage pond. Latitude: 39° 02' 01.7" N, Longitude: 121° 04' 49.4" W
--	PND-001	Pond A (Former storage/reclamation pond A) Latitude: 39° 02' 06.5" N, Longitude: 121° 04' 56.6" W
--	PND-002	Pond B (Former storage/reclamation pond B) Latitude: 39° 02' 07.0" N, Longitude: 121° 04' 47.6" W
--	PND-003	Pond C (Former storage/reclamation pond C) Latitude: 39° 02' 12.0" N, Longitude: 121° 04' 49.4" W
--	FIL-001	Monitoring of the filter effluent to be measured 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. 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	Minimum Sampling Frequency
Flow	MGD	Meter	Continuous
Biochemical Oxygen Demand (5-day @ 20° C)	mg/L	24-hr Composite	1/Week
Biochemical Oxygen Demand (5-day @ 20° C) 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

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

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

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

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

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

   f. **Peracetic acid.** Peracetic acid residual monitoring is only required when peracetic acid is used in the disinfection process.

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

   h. **Temperature, pH, Hardness, Dissolved Oxygen, and Dissolved Organic Carbon.** The effluent samples for temperature, pH, hardness, dissolved oxygen, and dissolved organic carbon shall be taken approximately the same time and on the same date with the receiving water samples for these parameters.

V. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

A. Acute Toxicity Testing.

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

1. *Monitoring Frequency* – The Discharger shall perform **annual** acute toxicity testing when discharging to Magnolia Creek and concurrent with effluent ammonia sampling.
2. *Sample Types* – The Discharger may use flow-through or static renewal testing. For static renewal testing, the samples shall be flow proportional 24-hour composite or grab samples and shall be representative of the volume and quality of the discharge. The effluent samples shall be taken at Monitoring Location EFF-001.
3. *Test Species* – The test species shall be fathead minnows (*Pimephales promelas*).
4. *Test Duration* – Test duration shall be 96 hours.
5. *Methods* – The acute toxicity testing samples shall be analyzed using EPA-821-R-02-012, Fifth Edition. Temperature and pH shall be recorded at the time of sample collection. No pH adjustment may be made unless approved by the Executive Officer.
6. *Test Failure* – If an acute toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger must re-sample and re-test as soon as possible, not to exceed 7 days following notification of test failure.

B. Chronic Toxicity Testing.

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

1. *Monitoring Frequency* – The Discharger shall perform **annual** chronic toxicity testing when discharging to Magnolia Creek. If the result of the routine chronic toxicity testing event exhibits toxicity, demonstrated by a result greater than 1.3 TUc (as $100/EC_{25}$) **AND** a percent effect greater than 25 percent at 100 percent effluent, the Discharger has the option of conducting two additional compliance monitoring chronic toxicity testing events in order to calculate a median. The optional compliance monitoring events shall occur at least one week apart, and the final monitoring event shall be initiated no later than 6 weeks from the routine monitoring event that exhibited toxicity. See Compliance Determination Section VIII.J of the Municipal General Order for procedures for calculating the 6-week median.
2. *Sample Types* – Effluent samples shall be flow proportional 24-hour composite samples and shall be representative of the volume and quality of the discharge. The effluent samples shall be taken at Monitoring Location EFF-001. The receiving water control shall be a grab sample obtained from Monitoring Location RSW-001.
3. *Sample Volumes* – Adequate sample volumes shall be collected to provide renewal water to complete the test in the event that the discharge is intermittent.

4. *Test Species* – Chronic toxicity testing measures sublethal (e.g., reduced growth, reproduction) and/or lethal effects to test organisms exposed to an effluent compared to that of the control organisms. The Discharger shall conduct chronic toxicity tests with one of the following species that is the most sensitive:
   a. The cladoceran, water flea, *Ceriodaphnia dubia* (survival and reproduction test);
   b. The fathead minnow, *Pimephales promelas* (larval survival and growth test); and
   c. The green alga, *Selenastrum capricornutum* (growth test).
5. *Most Sensitive Species Determination* – Not Applicable
6. *Methods* – The presence of chronic toxicity shall be estimated as specified in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, EPA/821-R-02-013, October 2002.
7. *Reference Toxicant* – As required by the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP), all chronic toxicity tests shall be conducted with concurrent testing with a reference toxicant and shall be reported with the chronic toxicity test results.
8. *Dilutions* – For routine and compliance chronic toxicity monitoring, chronic toxicity testing shall be performed using the dilution series identified in Table D-4, below. For TRE monitoring, chronic toxicity testing shall be performed using the dilution series identified, below, unless an alternative dilution series is detailed in the submitted TRE Action Plan. A receiving water control or laboratory water control may be used as the diluent.

Table D-4. Chronic Toxicity Testing Dilution Series

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

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

C. WET Testing Notification Requirements.

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

D. WET Testing Reporting Requirements.

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

1. **Chronic WET Reporting.** Chronic toxicity monitoring results shall be reported to the Central Valley Water Board with the annual self-monitoring report, and shall contain, at minimum:

   a. The results expressed in TUc, measured as 100/NOEC, and also measured as 100/LC50, 100/EC25, 100/IC25, and 100/IC50, as appropriate.

   b. The percent effect at the instream waste concentration;

   c. The statistical methods used to calculate endpoints;

   d. The statistical output page, which includes the calculation of the percent minimum significant difference (PMSD);

   e. The dates of sample collection and initiation of each toxicity test; and

   f. The results compared to the numeric toxicity monitoring trigger or effluent limitation.

   Additionally, the annual SMR shall contain an updated chronology of chronic toxicity test results expressed in TUc (as $100/EC_{25}$) and percent effect at the instream waste concentration, and organized by type of test (survival, growth or reproduction), and monitoring frequency, i.e., either quarterly, monthly, monthly median, or TRE.

2. **Acute WET Reporting.** Acute toxicity test results shall be submitted with the annual SMR and reported as percent survival.

3. **TRE or Toxicity Evaluation Study Reporting**. Reports for TREs or a Toxicity Evaluation Study shall be submitted in accordance with the schedule contained in the Discharger's approved TRE Workplan, or as amended by the Discharger's TRE Action Plan.

4. **Quality Assurance (QA).** The Discharger must provide the following information for QA purposes:

   a. Results of the applicable reference toxicant data with the statistical output page giving the species, NOEC, LOEC, type of toxicant, dilution water used, concentrations used, PMSD, and dates tested.

   b. The reference toxicant control charts for each endpoint, which include summaries of reference toxicant tests performed by the contracting laboratory.

   c. Any information on deviations or problems encountered and how they were dealt with.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Locations RSW-001 and RSW-002

1. The Discharger shall monitor Magnolia Creek at Monitoring Locations RSW-001 and RSW-002 as specified in Table D-5 and the testing requirements in section VIII.A.2. If there was no discharge to receiving water during the designated monitoring period, monitoring is not required during that period. If there is no upstream flow in the receiving water during the designated monitoring period, monitoring is not required at RSW-001 during that period. Whenever monitoring is not required, the Discharger shall state so in the monthly SMR.

Table D-5. Receiving Water Monitoring Requirements

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

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

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

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

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

   d. **Dissolved Organic Carbon.** Hardness, total (as $CaCO_3$) and pH samples shall be taken concurrent with dissolved organic carbon 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 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 Locations PND-001, PND-002, PND-003, ESP-001

a. For all ponds specified in this Notice of Applicability, the Discharger shall keep a log regarding the use of the ponds and submit the log with the monthly SMRs. In particular, the Discharger shall record the following when any type of wastewater is directed to the basin(s):

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

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

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

   iv. The daily freeboard in the ponds.

b. For the unlined ponds, the Discharger shall monitor the storage ponds at Monitoring Location ESP-001, PND-001, PND-002, and PND-003 for the parameters in Table D-6 and the testing requirements in section IX.B.2. When the storage ponds hold wastewater for less than seven consecutive days, monitoring shall not be required. If monitoring is not required, the Discharger shall so state in the SMR.

Table D-6. Pond Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
Dissolved Oxygen	mg/L	Grab	1/Month
Odors	--	Grab	1/Month
pH	standard units	Grab	1/Month

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

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

   c. **Applicable to dissolved oxygen and pH.** Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

C. 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-7 and the testing requirements in section IX.D.2.

Table D-7. Filtration System Monitoring Requirements

Parameter	Units	Sample Type	Sampling Frequency
Turbidity	NTU	Meter	Continuous

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

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

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

   c. Report daily average and maximum turbidity.

E. Ultraviolet Light (UV) Disinfection System

1. Monitoring Locations UVS-001 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-8 and the testing requirements in section IX.E.2.

Table D-8. UV Disinfection System Monitoring Requirements

Parameter	Units	Sample Type	Minimum 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-8 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-8:

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

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

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

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

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

F. Effluent and Receiving Water Characterization

The Discharger shall monitor the effluent and receiving water at Monitoring Locations EFF-001 and RSW-001, respectively, for the constituents listed in Table D-9, as described in this section.

1. **Monitoring Frequency**

   a. **Effluent Sampling.** Samples shall be collected from the effluent at (Monitoring Location EFF-001) twice, once between **1 July 2021 and 30 September 2021** and once between **1 January 2022 and 31 March 2022**.

   b. **Receiving Water Sampling.** Samples shall be collected from the upstream receiving water (Monitoring Location RSW-001) twice, once between **1 July 2021 and 30 September 2021** and once between **1 January 2022 and 31 March 2022**.

   All sampling shall be analyzed for the constituents listed in Table D-9, below. The results of such monitoring shall be submitted to the Central Valley Water Board with the quarterly SMRs. Each individual monitoring event shall provide representative sample results for the effluent and upstream receiving water.

2. **Concurrent Sampling.** Receiving water sampling shall be performed at approximately the same time and on the same date as the two effluent sampling events.

3. **Sample Type.** All receiving water samples shall be taken as grab samples. Effluent samples shall be taken as described in Table D-9, below and the testing requirements in section IX.F.5

4. **Analytical Methods Report Certification**. Prior to beginning the Effluent and Receiving Water Characterization monitoring, the Discharger shall provide a certification acknowledging the scheduled start date of the Effluent and Receiving Water Characterization monitoring and confirming that samples will be collected and analyzed as described in the previously submitted Analytical Methods Report. If there are changes to the previously submitted Analytical Methods Report, the Discharger shall outline those changes. A one-page certification form will be provided by the Central Valley Water Board staff with this Notice of Applicability that the Discharger can use to satisfy this requirement. The certification form shall be submitted electronically via CIWQS in accordance with the reporting requirements in Table D-11, Technical Reports.

Table D-9. Effluent and Receiving Water Characterization Monitoring

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

Parameter	Units	Effluent Sample Type
Chloroethane	µg/L	Grab
Chloroform	µg/L	Grab
Chloromethane	µg/L	Grab
Dibromochloromethane	µg/L	Grab
Dichlorobromomethane	µg/L	Grab
Dichloromethane	µg/L	Grab
Ethylbenzene	µg/L	Grab
Hexachlorobenzene	µg/L	Grab
Hexachlorobutadiene	µg/L	Grab
Hexachloroethane	µg/L	Grab
Methyl bromide (Bromomethane)	µg/L	Grab
Naphthalene	µg/L	Grab
3-Methyl-4-Chlorophenol	µg/L	Grab
Tetrachloroethylene	µg/L	Grab
Toluene	µg/L	Grab
trans-1,2-Dichloroethylene	µg/L	Grab
Trichloroethene	µg/L	Grab
Vinyl chloride	µg/L	Grab
Methyl-tert-butyl ether (MTBE)	µg/L	Grab
1,1,1-Trichloroethane	µg/L	Grab
1,1,2- Trichloroethane	µg/L	Grab
1,1-dichloroethane	µg/L	Grab
1,1-dichloroethylene	µg/L	Grab
1,2-dichloropropane	µg/L	Grab
1,3-dichloropropylene	µg/L	Grab
1,1,2,2-tetrachloroethane	µg/L	Grab
1,2,4-trichlorobenzene	µg/L	Grab
1,2-dichloroethane	µg/L	Grab
1,2-dichlorobenzene	µg/L	Grab
1,3-dichlorobenzene	µg/L	Grab
1,4-dichlorobenzene	µg/L	Grab
1,2-Benzanthracene	µg/L	Grab
1,2-Diphenylhydrazine	µg/L	Grab
2-Chlorophenol	µg/L	Grab
2,4-Dichlorophenol	µg/L	Grab
2,4-Dimethylphenol	µg/L	Grab
2,4-Dinitrophenol	µg/L	Grab
2,4-Dinitrotoluene	µg/L	Grab
2,4,6-Trichlorophenol	µg/L	Grab
2,6-Dinitrotoluene	µg/L	Grab

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

Parameter	Units	Effluent Sample Type
Aluminum	µg/L	24-hr Composite
Antimony	µg/L	24-hr Composite
Arsenic	µg/L	24-hr Composite
Asbestos	MFL	24-hr Composite
Beryllium	µg/L	24-hr Composite
Cadmium	µg/L	24-hr Composite
Chromium (Total)	µg/L	24-hr Composite
Copper	µg/L	24-hr Composite
Cyanide	µg/L	24-hr Composite
Iron	µg/L	24-hr Composite
Lead	µg/L	24-hr Composite
Mercury	µg/L	Grab
Manganese	µg/L	24-hr Composite
Nickel	µg/L	24-hr Composite
Selenium	µg/L	24-hr Composite
Silver	µg/L	24-hr Composite
Thallium	µg/L	24-hr Composite
Zinc	µg/L	24-hr Composite
4,4'-DDD	µg/L	Grab
4,4'-DDE	µg/L	Grab
4,4'-DDT	µg/L	Grab
alpha-Endosulfan	µg/L	Grab
alpha-Hexachlorocyclohexane (BHC)	µg/L	Grab
Aldrin	µg/L	Grab
beta-Endosulfan	µg/L	Grab
beta-Hexachlorocyclohexane	µg/L	Grab
Chlordane	µg/L	Grab
delta-Hexachlorocyclohexane	µg/L	Grab
Dieldrin	µg/L	Grab
Endosulfan sulfate	µg/L	Grab
Endrin	µg/L	Grab
Endrin Aldehyde	µg/L	Grab
Heptachlor	µg/L	Grab
Heptachlor Epoxide	µg/L	Grab
Lindane (gamma-Hexachlorocyclohexane)	µg/L	Grab
PCB-1016	µg/L	Grab
PCB-1221	µg/L	Grab
PCB-1232	µg/L	Grab
PCB-1242	µg/L	Grab

Parameter	Units	Effluent Sample Type
PCB-1248	µg/L	Grab
PCB-1254	µg/L	Grab
PCB-1260	µg/L	Grab
Toxaphene	µg/L	Grab
2,3,7,8-TCDD (Dioxin)	µg/L	24-hr Composite
Ammonia (as N)	mg/L	Grab
Boron	µg/L	24-hr Composite
Chloride	mg/L	24-hr Composite
Flow	MGD	Meter
Hardness (as $CaCO_3$)	mg/L	Grab
Foaming Agents (MBAS)	µg/L	24-hr Composite
Mercury, Methyl	ng/L	Grab
Nitrate (as N)	mg/L	Grab
Nitrite (as N)	mg/L	Grab
pH	Std Units	Grab
Phosphorus, Total (as P)	mg/L	24-hr Composite
Specific conductance (Electrical Conductivity)	µmhos/cm	Grab
Sulfate	mg/L	24-hr Composite
Sulfite (as SO_3)	mg/L	24-hr Composite
Temperature	°C	Grab
Total Dissolved Solids (TDS)	mg/L	Grab
Dissolved Organic Carbon (DOC)	mg/L	Grab

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

   a **Bis (2-ethylhexyl) phthalate.** In order to verify if bis (2-ethylhexyl) phthalate is truly present in the effluent discharge, the Discharger shall take steps to assure that sample containers, sampling apparatus, and analytical equipment are not sources of the detected contaminant.

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

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

   d. The Discharger is not required to conduct effluent monitoring for constituents that have already been sampled in a given month, as required in Table D-3, except for hardness, pH, and temperature, which shall be conducted concurrently with the effluent sampling.

   e. **Total Mercury and methylmercury.** Samples for total mercury and methylmercury shall be taken using clean hands/dirty hands procedures, as described in U.S. EPA method 1669: Sampling Ambient Water for Trace Metals

at EPA Water Quality Criteria Levels, for collection of equipment blanks (section 9.4.4.2), and shall be analyzed by U.S. EPA method 1630/1631 (Revision E) with a reporting limit of 0.05 ng/L for methylmercury and 0.5 nanograms per liter (ng/L) for total mercury.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D of the Municipal General Order) related to monitoring, reporting, and recordkeeping. Upon written request of the Central Valley Water Board, the Discharger shall submit a summary monitoring report. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year(s)
2. **Compliance Time Schedules - Not Applicable**
3. The Discharger shall report to the Central Valley Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.
4. Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if a Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

B. Self-Monitoring Reports

1. The Discharger shall electronically submit 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 begin on 1 August 2020 and be completed according to the following:

Table D-10. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period	SMR Due Date
Continuous	All	Submit with monthly SMR
1/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
3/Week	Sunday through Saturday	Submit with monthly SMR
1/Month	1st day of calendar month through last day of calendar month	First day of second calendar month following month of sampling
1/Quarter	1 January through 31 March; 1 April through 30 June; 1 July through 30 September; 1 October through 31 December	1 May; 1 August; 1 November; 1 February of following year (respectively)
1/Year	1 January through 31 December	1 February of following year

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

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

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

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

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

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

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

5. **Multiple Sample Data.** When determining compliance with an AMEL, AWEL, or 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 are required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

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

    c. The Discharger shall attach final laboratory reports for all contracted, commercial laboratories, including quality assurance/quality control information, with all its SMR's for which sample analyses were performed. Bench sheets are not required but should be available upon request by Regional Board staff.

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

    a. **Calendar Annual Average Limitations.** For Dischargers subject to effluent limitations specified as "calendar annual average" (e.g., electrical conductivity), the Discharger shall report the calendar annual average in the December SMR. The annual average shall be calculated as the average of the samples gathered for the calendar year.

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

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

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

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

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

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

h. **Dissolved Oxygen Receiving Water Limitations.** The Discharger shall report 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 section VI.A.18.a, of the Limitations and Discharge Requirements in the Municipal General Order.

j. **Temperature Receiving Water Limitations.** The Discharger shall calculate and report the temperature increase in the receiving water based on the difference in temperature at Monitoring Locations RSW-001 and RSW-002 as specified in section VI.A.16.a, of the Limitations and Discharge Requirements in the Municipal General Order.

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: (http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring/).

D. Other Reports

1. **Special Study Reports.** Special study reports required by section IX.C, Provisions, in this NOA shall be submitted in accordance with the reporting requirements in Table D-11, Technical Reports.

2. **Analytical Methods Report.** The Discharger shall complete and submit an Analytical Methods Report, electronically via CIWQS submittal, by the due date specified in Table D-11 below. The Analytical Methods Report shall include the following for each constituent listed in tables D-2, D-3, D-5, D-6, and D-9 of this NOA: 1) applicable water quality objective, 2) reporting level (RL), 3) method detection limit (MDL), and 4) analytical method. The analytical methods shall be

sufficiently sensitive with RLs consistent with the SSM Rule (see also General Monitoring Provision F in 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 Notice of Applicability to assist the Discharger in completing this requirement. The tool will include the constituents and associated applicable water quality objectives to be included in the Analytical Methods Report.

3. **Annual Operations Report.** The Discharger shall submit in accordance with the reporting requirements in Table D-11, Technical Reports, a written report containing the following:

   a. The names, certificate grades, and general responsibilities of all persons employed at the Facility.

   b. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.

   c. A statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration.

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

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

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

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

   The annual report to GeoTracker must include volumetric reporting of the items listed in Section 3.2 of the Recycled Water Policy (https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/

121118_7_final_amendment_oal.pdf). A PDF of the upload confirmation from GeoTracker for the Recycled Water Policy Annual Report shall be uploaded into CIWQS to demonstrate compliance with this reporting requirement.

5. **Technical Report Submittals.** The Municipal General Order, as specified in this NOA, includes requirements to submit various reports and documents that may include, a Notice of Intent, special study technical reports, progress reports, and other reports identified in the MRP (hereafter referred to collectively as "technical reports"). The Technical Reports, Table D-11, below summarizes the technical reports that are applicable to this discharge and required by this NOA, and the due dates for each submittal. All technical reports shall be submitted electronically via CIWQS submittal. Technical reports should be uploaded as a PDF, Microsoft Word, or Microsoft Excel file attachment.

Table D-11. Technical Reports

Report #	Technical Report	Due Date	CIWQS Report Name
1	Notice of Intent	1 August 2024	NOI
2	Analytical Methods Report	1 September 2020	MRP X.D.2
3	Analytical Methods Report Certification	1 June 2021	MRP IX.F.4
4	Annual Operations Report #1	1 February 2021	MRP X.D.3
5	Annual Operations Report #2	1 February 2022	MRP X.D.3
6	Annual Operations Report #3	1 February 2023	MRP X.D.3
7	Annual Operations Report #4	1 February 2024	MRP X.D.3
8	Annual Operations Report #5	1 February 2025	MRP X.D.3
9	Recycled Water Policy Annual Reports #1	30 April 2021	MRP X.D.4
10	Recycled Water Policy Annual Reports #2	30 April 2022	MRP X.D.4
11	Recycled Water Policy Annual Reports #3	30 April 2023	MRP X.D.4
12	Recycled Water Policy Annual Reports #4	30 April 2024	MRP X.D.4
13	Recycled Water Policy Annual Reports #5	30 April 2025	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	0.72	Table 19B	10	20

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	14.4	1.52	1.22	Table 17D	1.3	4.1