30 June 2021

Aaron Palmer
City Manager
City of Live Oak
9955 Live Oak Boulevard
Live Oak, CA, 95953

VIA EMAIL:
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CERTIFIED MAIL
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NOTICE OF APPLICABILITY (NOA); MUNICIPAL GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2017-0085 (NPDES CAG585001); CITY OF LIVE OAK, WASTEWATER TREATMENT PLANT, SUTTER COUNTY

Our office received a Notice of Intent (NOI) dated 29 January 2021 from the City of Live Oak (hereinafter Discharger), for discharge of tertiary treated domestic wastewater to surface water from the Wastewater Treatment Plant (hereafter Facility) to Reclamation District 777 Lateral Drain No. 2 (Lateral Drain), which is hydrologically connected to the Sutter Bypass via East Interceptor Canal and Wadsworth Canal. 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 **R5-2017-0085-018** and National Pollutant Discharge Elimination System (NPDES) Permit CAG585001. Please reference your Municipal General Order enrollee number, **R5-2017-0085-018**, in your correspondence and submitted documents.

Discharges to surface water from the Facility are currently regulated by an individual NPDES permit, Order R5-2016-0039 (NPDES No. CA0079022) adopted by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) on 23 June 2016 and became effective on 1 August 2016. This NOA, authorizing coverage under the Municipal General Order, shall become effective on 1 September 2021, at which time the terms and conditions in Order R5-2016-0039 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 R5-2016-0039.

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 Attachment D. Only the monitoring and reporting requirements specifically listed in Attachment D of this NOA are applicable to this Facility.

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

Table 1. Facility Information

WDID	5A510100001
CIWQS Facility Place ID	214647
Discharger	City of Live Oak
Name of Facility	City of Live Oak Wastewater Treatment Plant
Facility Street Address	3450 Treatment Road
Facility City, State, Zip Code	Live Oak, CA 95953
Facility County	Sutter County
Facility Contact, Title and Phone	Aaron Palmer, City Manager, (530) 695-2112 Ronald Walker, Jr., Public Works Director, (530) 604-3829 Tony Wright, Chief Plant Operator, (530) 251-7447
Authorized Person to Sign and Submit Reports	Aaron Palmer, City Manager, (530) 695-2112
Mailing Address	9955 Live Oak Boulevard Live Oak, CA 95953
Billing Address	Same as Mailing Address
Type of Facility	Publicly Owned Treatment Works (POTW)
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	B
Pretreatment Program	No
Recycling Requirements	No
Facility Permitted Flow	1.4 Million Gallons Per Day (MGD), average dry weather flow (ADWF)
Facility Design Flow	1.4 MGD
Watershed	Sacramento
Receiving Water	Reclamation District 777 Lateral Drain No. 2 (Lateral Drain)
Receiving Water Type	Inland Surface Water
Discharge Point 001	39º 15’ 35” North, 121º 40’ 40” West

I. FACILITY INFORMATION

The Discharger provides sewerage service for the City of Live Oak and serves a population of approximately 8,500. The design average dry weather flow capacity of the Facility is 1.4 million gallons per day (MGD).

The tertiary treatment system at the Facility consists of headworks with odor control,

secondary feed pump station, selector basin, two oxidation ditches, two secondary clarifiers, two cloth media filters, and a single ultraviolet light (UV) disinfection channel with five banks of lights. The Facility provides nitrification and includes a lined equalization basin, three unlined emergency storage basins a storm water detention basin, and a partially concrete lined storage pond for Vactor truck offloading that is no longer utilized. The unlined emergency storage basins have a gravity drain system that connects to the treatment plant. The north and south basins can drain to the center basin via interconnected piping and valves. A portable pump can also be used if necessary.

The Discharger has decommissioned the use of the Vactor truck offloading basin located at the north end of the Facility. The Discharger now uses an abandoned concrete chlorine contact basin to replace the Vactor truck offloading basin. The old chlorine contact basin was abandoned in 2011 when the Facility upgraded to UV disinfection. The old chlorine contact chamber is not hydraulically connected to the treatment system. Supernatant is pumped out of the basin and returned to the headworks on an as needed basis.

The Discharger also installed a rotary drum thickener to supplement the existing solids drying beds. Sludge is pumped from the existing solids holding pond to the rotary drum thickener. Supernatant is pumped to the solids drying beds.

Dewatered biosolids are stored onsite at the location identified in Attachment B and are hauled to Recology Ostrom Road Landfill for disposal. Transportation and disposal/reuse of the biosolids is regulated by U.S. EPA under 40 Code of Federal Regulations (C.F.R.) part 503.

II. RECEIVING WATER BENEFICIAL USES

The Facility discharges from Discharge Point 001 to the Lateral Drain (at a point 39° 15’ 35” N latitude and 121° 40’ 40” W longitude), which is hydrologically connected to Sutter Bypass via the East Interceptor Canal and Wadsworth Canal. According to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basin (Basin Plan) and findings in previous permits for this Facility, the applicable beneficial uses of the Lateral Drain and/or the Sutter Bypass, for which discharges to the Lateral Drain must be protective of, are as follows:

- Agricultural Supply (AGR)
- Ground Water Recharge (GWR)
- Freshwater Replenishment (FRSH)
- Water Contact Recreation (REC-1)
- Warm Freshwater Habitat (WARM)
- Wildlife Habitat (WILD)
- Migration of Aquatic Organisms (MIGR)
- Spawning, Reproduction, and/or Early Development (SPWN)

III. PROVISIONS AND REQUIREMENTS IMPLEMENTING STATE LAW

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

- Groundwater Limitations – section VII.2

- Filtration System Operating Specifications – section IX.1.C.iv.1
- UV Disinfection Operating Specifications – section IX.1.C.iv.2
- Pond Operating Specifications – section IX.1.C.iv.3
- Other Special Provisions – section IX.1.C.vi

These provisions and requirements and their inclusion in this NOA are not required or authorized under the federal Clean Water Act; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

IV. RECEIVING WATER TOTAL MAXIMUM DAILY LOADS (TMDLS)

In accordance with section 303(d) of the Clean Water Act, the Central Valley Water Board is required to develop TMDLs for each 303(d) listed pollutant and water body combination.

The Lateral Drain 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 0085-018**).

V. DISCHARGE PROHIBITIONS

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

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 1.4 million gallons per day (MGD) are prohibited. Compliance shall be measured at Monitoring Location EFF-001.

VI. EFFLUENT LIMITATIONS

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001. Effluent limitations are provided in the Municipal General Order. Only the effluent limitations listed below in items 1-7 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, Attachment D of this NOA.

1. 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 degrees Celsius) (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)
Ammonia Nitrogen, Total as Nitrogen (as N)	mg/L	0.83	2.0	V.A.1.c.v.(a)

2. **pH (Municipal General Order section V.A.1.c.iv.(a).** The pH shall at all times be within the range of 6.5 and 8.5.
3. **Percent Removal (Municipal General Order section V.A.1.a.ii.(b)).** The average monthly percent removal of BOD_5 and TSS shall not be less than 85 percent.
4. **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.
5. **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**.**
6. **Electrical Conductivity (Municipal General Order section V.A.1.c.viii).** The effluent electrical conductivity concentration shall not exceed the annual average effluent limitation of 1,125 micromhos per centimeter (µmhos/cm).
7. **Diazinon and Chlorpyrifos (Municipal General Order section V.A.1.c.ix**). Effluent diazinon and chlorpyrifos concentrations shall not exceed the sum of one (1.0) as identified below:
   i. **Average Monthly Effluent Limitation**

$$S_{AMEL} = ((C_{D\ M-avg}) / 0.079) + ((C_{C\ M-avg}) / 0.012) \leq 1.0$$

$C_{D\ M-avg}$ = average monthly diazinon effluent concentration in µg/L.
$C_{C\ M-avg}$ = average monthly chlorpyrifos effluent concentration in µg/L.

ii. **Average Weekly Effluent Limitation**

$S_{AWEL} = ((C_{D\ W-avg}) / 0.14) + ((C_{C\ W-avg}) / 0.021) \leq 1.0$

$C_{D\ W-avg}$ = average weekly diazinon effluent concentration in µg/L.
$C_{C\ W-avg}$ = average weekly chlorpyrifos effluent concentration in µg/L.

VII. 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. Only the following receiving surface water limitations listed in Municipal General Order Section VI.A are applicable to the Facility.

   - Biostimulatory Substances (VI.A.3);
   - Chemical Constituents (VI.A.4);
   - Color (VI.A.5);
   - Dissolved Oxygen (VI.A.6.a.i, ii, 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);
   - 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.

VIII. MONITORING AND REPORTING

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

IX. PROVISIONS

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

   A. Standard Provisions. Section VII.A

   i. Applicable to all dischargers

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

   i. The MRP applicable to this Facility is contained in Attachment 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 apply to this Facility:

i. Reopener Provisions - section VII.C.1.a, c, d, f, and g

ii. Special Studies, Technical Reports and Additional Monitoring Requirements

1. **Toxicity Reduction Evaluation Requirements**. section VII.C.2.a.ii, iii and iv

iii. Best Management Practices and Pollution Prevention.

1. **Salinity Evaluation and Minimization Plan** - section VII.C.3.c – Submittal of a Salinity Evaluation and Minimization Plan

iv. Construction, Operation and Maintenance Specifications

1. **Filtration System Operating Specifications** – section VII.C.4.a.i
2. **UV Disinfection System Operating Specifications** - section VII.C.4.b.iii – vi and the following:
   a. UV Dose - section VII.C.4.b.i.(a)
   b. UV Transmittance - section VII.C.4.b.ii.(a)
3. **Pond Operating Specifications** - section VII.C.4.c. ii. – x.

v. Special Provisions for Municipal Facilities

1. **Sludge/Biosolids Treatment or Discharge Specifications** – section VII.C.5.b
2. **Anaerobically Digestible Material** – section VII.C.5.d

vi. Other Special Provisions - Title 22, or equivalent, Disinfection Requirements Section VII.C.6

X. 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 Effluent Limitation (VIII.D);
- Total Coliform Organisms Effluent Limitations (VIII.E);
- Dissolved Oxygen Receiving Water Limitation (VIII.I);
- Chronic Whole Effluent Toxicity Trigger (VIII.J);
- Chlorpyrifos and Diazinon Effluent Limitations (VIII.K);
- Period Average, Calendar Month Average, and Annual Average (VIII.N);
- Turbidity Receiving Water Limitation (VIII.O); and
- Reporting Requirements (NOA, Attachment D, section X).

XI. ANTI-BACKSLIDING REQUIREMENTS

Anti-backsliding requirements are specified in the Municipal General Order, section V.D.3, Attachment F (Fact Sheet). The removal or relaxation of effluent limitations for BOD_5, TSS, mercury, pH, and mass based effluent limits for BOD_5, TSS, and ammonia is allowed as detailed in the anti-backsliding analysis provided in Attachment C to this NOA in section I.A Satisfaction of Anti-Backsliding Requirements.

XII. 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. Thus, the relaxation of effluent limitations is consistent with the antidegradation provisions of Code of Federal Regulations (C.F.R.), 40 C.F.R. 131.12 and State Water Board Resolution 68-16, and no further antidegradation analysis is required.

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

XIII. RATIONALE FOR LIMITATIONS AND MONITORING REQUIREMENTS

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

XIV. 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.

XV. COMMUNICATION

Until this NOA becomes effective on 1 September 2021, you will need to comply with the effluent limitations and requirements contained in your existing permit, Order R5-2016-0039. For your July 2021 and August 2021 monthly self-monitoring reports, you will need to demonstrate compliance with existing Order R5-2016-0039, and compliance with this NOA beginning 1 September 2021.

The Central Valley Water Board is implementing a Paperless Office system to reduce our paper use, increase efficiency, and provide a more effective way for our staff, the public, and interested parties to view documents in electronic form. Therefore, the Discharger is required to submit all self-monitoring, technical, and progress reports required by this NOA via California Integrated Water Quality System (CIWQS) submittal. In general, if any monitoring data for a monitoring location can be submitted using a computable document format (CDF) file upload, then it should be submitted as a CDF file upload, such as characterization monitoring data. However, certain parameters that cannot be uploaded to the

CIWQS data tables, such as Annual Operations Reports, should be uploaded as a Portable Document Format (PDF), Microsoft Word, or Microsoft Excel file attachment. Also, please upload or enter a cover letter summarizing the content of the report to the submittal tab of the CIWQS module for each submittal.

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

- Attention: NPDES Compliance and Enforcement Section
- Discharger: City of Live Oak
- Facility: Wastewater Treatment Plant
- County: Sutter County
- CIWQS Place ID: 214647

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

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

Now that your NOA has been issued, the Central Valley Water Board’s Compliance and Enforcement Section will take over management of your case. Jon Rohrbough 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 Jon Rohrbough at (916) 464-4822 or at Jon.Rohrbough@waterboards.ca.gov.

Original Signed by Scott J. Hatton for:
Patrick Pulupa
Executive Officer

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

Enclosure:
Municipal General Order R5-2017-0085-01 (email only)

Cc's:

Elizabeth Sablad, U.S. EPA, Region IX, San Francisco (email only)
Peter Kozelka, U.S. EPA, Region IX, San Francisco (email only)
Afrooz Farsimadan, Division of Water Quality, State Water Board (email only)
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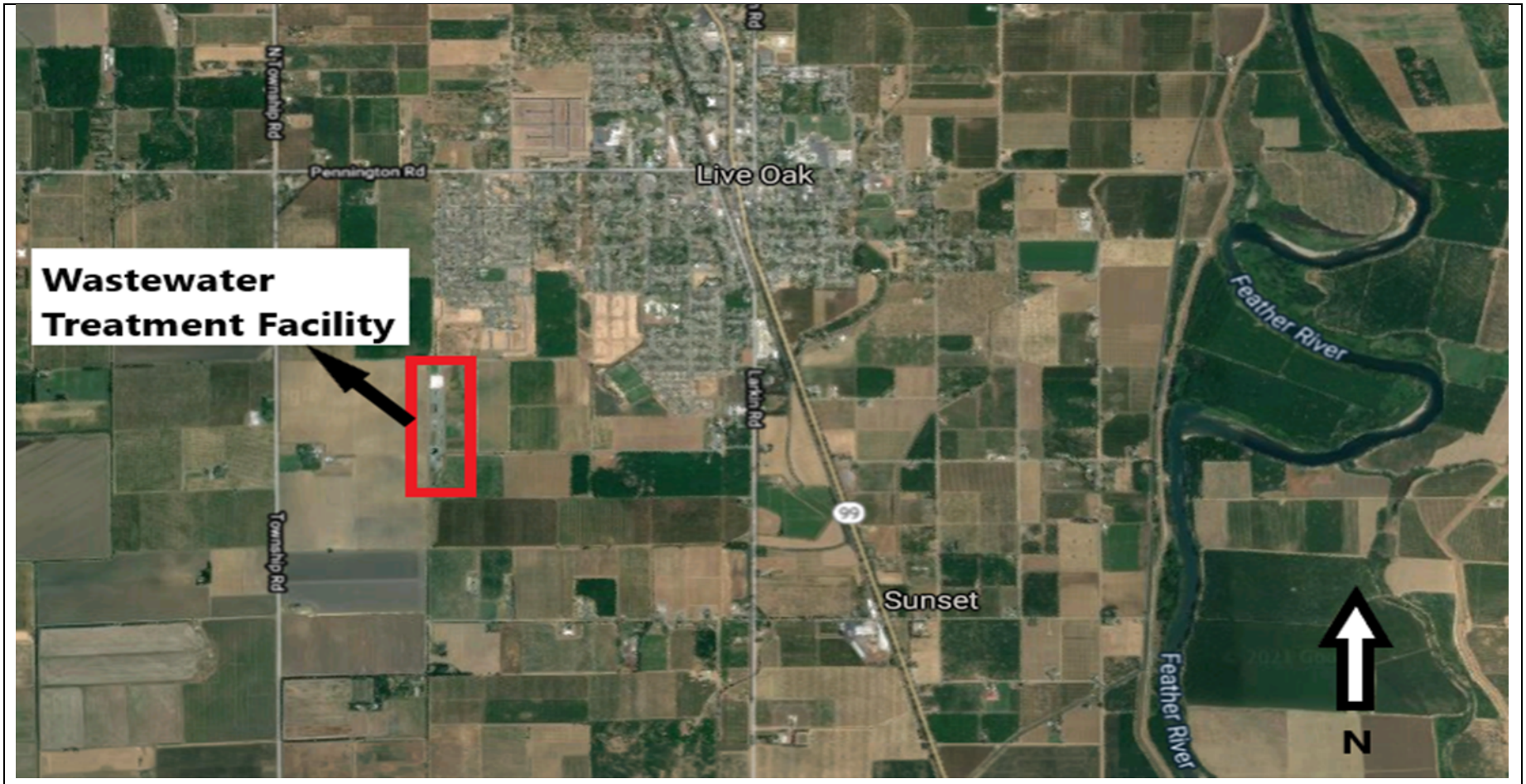
ICIS NPDES, icis-npdes@pgenv.com
Bill Jennings, California Sportfishing Protection Alliance (email only)
Richard McHenry, California Sportfishing Protection Alliance (email only)
Debbie Webster, Central Valley Clean Water Association (email only)
Roberta Larson, Somach Simmons & Dunn (email only)
Michael Garabedian, Friends of the North Fork, 3437 Myrtle Avenue #400, North Highlands, CA 95660 (email only)
Ronald Walker, City of Live Oak, Public Works Director, (email only)
Tony Wright, City of Live Oak, Chief Plant Operator, (email only)

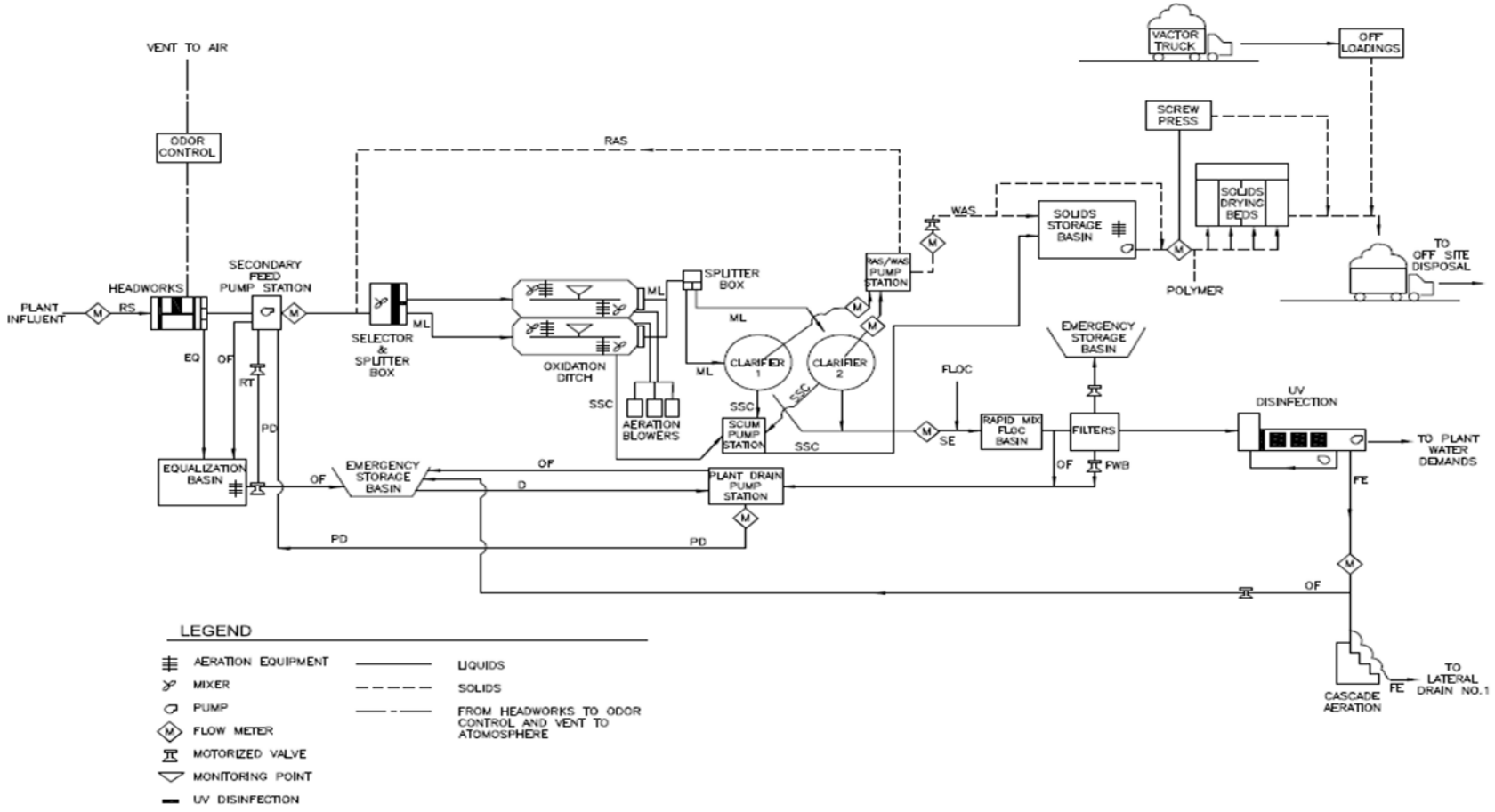
ATTACHMENT A – LOCATION MAP



SITE LOCATION MAP

CITY OF LIVE OAK
WASTEWATER TREATMENT PLANT
SUTTER COUNTY

ATTACHMENT B – FLOW SCHEMATIC



FLOW SCHEMATIC

CITY OF LIVE OAK
WASTEWATER TREATMENT PLANT
SUTTER COUNTY

ATTACHMENT C – SUPPLEMENTAL FACT SHEET

I. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

II. FINAL EFFLUENT LIMITATIONS 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 R5-2016-0039, with the exception of effluent limitations for BOD_5/TSS maximum daily, mercury, pH, and mass based effluent limits for BOD_5, TSS, and ammonia. The effluent limitations for these pollutants are less stringent than those in Order R5-2016-0039. 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.

   The Reclamation District 777 Lateral Drain No. 2 (Lateral Drain) is considered an attainment water for BOD_5, TSS, mercury, pH, and ammonia because the receiving water is not listed as impaired on the 303(d) list for these constituents. The exceptions in Section 303(d)(4) address both waters in attainment with water quality standards and those not in attainment, i.e., waters on the section 303(d) impaired waters list (State Water Board Order WQ-2008-0006, Berry Petroleum Company, Poso Creek/McVan Facility). As discussed below, removal or relaxation of the effluent limits complies with federal and state antidegradation requirements. Thus, removal or relaxation of the effluent limitations for BOD_5, TSS, mercury, pH, and ammonia 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 R5-2016-0039 was issued indicates that mercury does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water. The updated information that supports the removal of effluent limitation for the constituent includes the following:

   a. **Mercury.** The mass-based mercury effluent limitation in Order R5-2016-0039 was retained from Order R5-2011-0034 and is based on maintaining the mercury loading at the current level to protect against bioaccumulative effects until a Total Maximum Daily Load (TMDL) is established for the Sutter Bypass and USEPA develops mercury standards that are protective of human health and/or aquatic life. The Sutter Bypass TMDL has not been established; however, on May 2, 2017, the State Water Resources Control Board adopted Resolution 2017-0027, which established bioaccumulative-based water quality objectives. These objectives, which were approved by USEPA, are incorporated into the Municipal General Order screening levels.

      The Municipal General Order states, if the discharger discharges to a receiving water that is listed as impaired for mercury on the CWA 303(d) list of impaired water bodies an effluent limit shall be specified in the NOA. The Lateral Drain is not listed on the CWA 303(d) list; only Sutter Bypass (to which Lateral Drain is connected to via East Interceptor Canal and Wadsworth Canal) is listed for mercury.

      Monitoring data collected over the permit term for Order R5-2016-0039 indicates mercury in the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of their respective water quality objectives/criteria.

   Thus, removal of the effluent limitations for mercury from this NOA is in accordance with CWA section 402(o)(2)(B)(i), which allows for the removal or relaxation of effluent limitations based on information that was not available at the time previous Order R5-2016-0039 was adopted.

3. **Flow.** Order R5-2016-0039 included average dry weather flow as an effluent limitation at Discharge Point 001 based on the Facility design flow. Compliance with the effluent limit for flow in Order R5-2016-0039 was calculated using an annual determination based on the average daily flow over three consecutive dry weather months (e.g., July, August, and September). Flow is not a pollutant and therefore has been changed from an effluent limit to a discharge prohibition in this NOA, which is an equivalent level of regulation. This NOA is not less stringent because compliance with flow as a discharge prohibition will be calculated the same way as the previous Order. Flow as a discharge prohibition adequately regulates the Facility, does not allow for an increase in the discharge of pollutants, and does not constitute backsliding.

B. Antidegradation Policies

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 the effluent limitation for mercury based on updated information as explained in the previous section. The removal is not expected to cause or contribute to an exceedance of the applicable water quality criteria or objectives in the receiving water. Thus, removal of the mercury effluent limitation is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16.

This NOA relaxes maximum pH effluent limitation. The maximum effluent limitation of 8.3 is more stringent than required by the Basin Plan pH objectives. During the permitting process of Order R5-2016-0039, the Discharger requested a more stringent instantaneous maximum pH of 8.3 to allow less stringent ammonia limits. However, the Municipal General Order indicates to use maximum permitted pH, or the maximum observed effluent pH, whichever is lower. The maximum reported effluent pH was 7.9. Consistent with the Basin plan pH objective and the Municipal General Order, this NOA specifies a maximum pH effluent of 8.5. The relaxation of the effluent limitation is not expected to result in an increase in pollutants concentration or loading, a decrease in the level of treatment or control, or a reduction of water quality. Thus, the relaxation is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16.

Lastly, this NOA removes maximum daily and mass-based effluent limitations for BOD_5 and TSS as well as mass-based effluent limitations for ammonia based on 40 C.F.R. Part 122.45 (d) and (f). The removal of maximum daily and mass-based effluent limits for BOD_5 and TSS and the removal of mass-based effluent limitations for ammonia 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 BOD_5, TSS, and ammonia, 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. The removal of maximum daily and mass-based effluent limits for BOD_5 and TSS and the removal of mass-based effluent limitations for ammonia do not result in an allowed increase in pollutants or any additional degradation of the receiving water. Thus, the removal of maximum daily and mass-based effluent limits for BOD_5 and TSS and the removal of mass-based effluent limitations for ammonia are consistent

with the antidegradation provisions of 40 C.F.R. section 131.12 and the State Antidegradation Policy.

III. RATIONALE FOR MONITORING REQUIREMENTS

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

A. Influent Monitoring

1. Influent monitoring is required to collect data on the characteristics of the wastewater and to assess compliance with effluent limitations (e.g., BOD_5 and TSS reduction requirements). The monitoring frequencies for flow (continuous), BOD_5 (1/week) , and TSS (1/week) have been retained from Order R5-2016-0039. The Central Valley Water Board finds that these frequencies will provide sufficient information to determine compliance with percent removal requirements and monitor the performance of the Facility.

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 (continuous), BOD_5 (1/week), TSS (1/week), pH (1/week), electrical conductivity (1/month), total ammonia (1/week), methylmercury (2/year), total residual chlorine (1/day when used), dissolved oxygen (1/week), temperature (1/week), chronic toxicity (1/quarter) and total dissolved solids (1/quarter) have been retained from Order R5-2016-0039 to evaluate compliance with effluent or receiving water limitations for most of these parameters.
3. Monitoring data collected over the previous permit term and updated information for mercury, demonstrate mercury does not have reasonable potential to exceed water quality objectives/criteria. Thus, specific routine monitoring requirements for this parameter has not been retained from Order R5-2016-0039.
4. Order R5-2016-0039 required monthly effluent monitoring for total hardness and quarterly monitoring for acute toxicity. This NOA reduces the monitoring for total hardness to quarterly and acute toxicity to annually.
5. Order R5-2016-0039 required quarterly characterization monitoring (four consecutive quarters) beginning in quarter one of 2019. This NOA revises that schedule to require characterization monitoring twice per permit term (see MRP,

Attachment D, section F and Table D-9). The Central Valley Water Board finds that this frequency is sufficient to characterize the discharge.

C. Whole Effluent Toxicity Testing Requirements

1. **Acute Toxicity**. Order R5-2016-0039 required quarterly acute toxicity 96-hour bioassay testing. This NOA reduces the acute toxicity 96-hour bioassay testing to once a year. The Central Valley Water Board finds that this frequency will provide sufficient information to determine if the Facility is contributing acute toxicity to the Lateral Drain.
2. **Chronic Toxicity.** Effluent monitoring frequency for chronic toxicity bioassay testing (1/quarter) has been retained from previous Order R5-2016-0039. Chronic whole effluent toxicity testing is required when discharging to the Lateral Drain in order to demonstrate compliance with the Basin Plan's narrative toxicity objective.

D. Receiving Water Monitoring

1. Lateral Drain

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

b. Monitoring data collected during the term of Order R5-2016-0039 indicates that the discharge has not caused significant impacts to the Lateral Drain. Therefore, this NOA retains the monitoring frequency for dissolved oxygen (1/week), electrical conductivity (1/month), pH (1/week), and turbidity (1/week). The Central Valley Water Board finds that these frequencies are sufficient to assess compliance with receiving water limitations and to assess the impacts of the discharge to Lateral Drain.

c. Order R5-2016-0039 required receiving water monitoring for total hardness (1/month) and total dissolved solids (1/quarter). Monitoring data collected during the term of Order R5-2016-0039 indicate there is not a lot of variability in the Lateral Drain for these parameters and that the downstream results look very similar to the effluent due to the effluent dominated nature of the Later Drain. Therefore, this NOA decreases the monitoring frequency for total hardness (1/quarter) and removes total dissolved solids monitoring in the receiving water. Order R5-2016-0039 did not include receiving water temperature monitoring for the Lateral Drain. This NOA requires temperature monitoring (1/week) for the purpose of calculating appropriate ammonia criteria for future permit renewals. The Central Valley Water Board finds these frequencies are sufficient to assess compliance with receiving water limitations, to collect data for future permit renewals, and to assess the impacts of the discharge to the Lateral Drain.

d. Order R5-2016-0039 required upstream receiving water monitoring for priority pollutants and other pollutants of concern with samples taken once a year in 2019, concurrently with effluent monitoring. This NOA requires upstream receiving water characterization monitoring once a permit term (see MRP, Attachment D, Table D-9). The Central Valley Water Board finds that this frequency is sufficient to assess the impacts of the discharge to the Lateral Drain.

2. Groundwater – Not Applicable

E. Biosolids Monitoring – Not Applicable

F. Pond Monitoring

The Facility consists of a lined equalization basin (PND - 001) and three unlined emergency storage basins (PND - 002) that do not store wastewater for extended periods of time. The Discharger utilizes a portable pump to deliver waste back into the Facility for treatment. Order R5-2016-0039 required weekly monitoring for freeboard, pH, electrical conductivity, odors, and dissolved oxygen at PND - 001 and PND - 002. The Central Valley Water Board finds that monitoring for these parameters is necessary to ensure proper operation of the storage basins; therefore, this monitoring has been retained in this NOA.

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. Order R5-2016-0039 required continuous monitoring for turbidity. This NOA will retain continuous turbidity monitoring as specified in section IX.D of the MRP, Attachment D.

H. UV Disinfection System Monitoring

Continuous monitoring for flow, number of UV banks in operation, and UV transmittance have been retained from previous Order R5-2016-0039. In addition, monitoring for total coliform organisms at UVS-001 (2/week) has also been retained from previous Order R5-2016-0039.

I. Effluent and Receiving Water Characterization Monitoring

Order R5-2016-0039 included quarterly effluent characterization monitoring in 2019 while discharging to the Lateral Drain, and one upstream receiving water sampling event. This NOA requires characterization monitoring of the effluent twice in the second year of the permit term, and upstream receiving water monitoring once per permit term. The Central Valley Water Board finds that the reduced frequency of characterization monitoring will be sufficient to characterize the discharge from the Facility.

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

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.

IV. PRETREATMENT PROVISION - NOT APPLICABLE

V. SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Abbreviations used in Table C-1:

MEC = Maximum Effluent Concentration
B = Maximum Receiving Water Concentration or lowest detection level, if non-detect
C = Criterion used for Reasonable Potential Analysis
CMC = Criterion Maximum Concentration (CTR or NTR)
CCC = Criterion Continuous Concentration (CTR or NTR)
DNQ = Detected, Not Quantified

Table C-1: SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Parameter	Units	MEC	B	C	CMC	CCC	Reasonable Potential
Arsenic, Total Recoverable	µg/L	28	4.4	150	340	150	No
Total Ammonia (as N)	mg/L	0.33	0.55 (DNQ)	0.83	2.0	0.83	Yes
Copper, Total Recoverable	µg/L	2.3	3.1	16	26	16	No
Electrical Conductivity @ 25 °C	µmhos/cm	845	891	--	--	--	No
Mercury, Total Recoverable	lbs	0.004	--	0.057	--	--	No
Mercury, Total Recoverable	ng/L	1.2	--	12	--	--	No

1. Table C-1 Notes:

   i. **General Note.** All inorganic concentrations are given as a total recoverable.

   ii. **CMC.** For ammonia, the CMC is based on U.S. EPA National Recommended Ambient Water Quality Criteria Freshwater Aquatic Life Protection, 1-hour average. For arsenic and copper, the CMC is based on the California Toxics Rule, short-term average criterion.

   iii. **CCC.** For ammonia, the CCC is based on U.S. EPA National Recommended Ambient Water Quality Criteria Freshwater Aquatic Life Protection, 30-day average. For arsenic and copper, the CMC is based on the California Toxics Rule, 4-day average criterion.

   iv. **Ammonia.** RP exists due to the biological processes inherent to the treatment of domestic wastewater (see section V.C.3.b.ii in Attachment F, Fact Sheet, of the Municipal General Order).

   v. **Electrical Conductivity.** Represents the maximum observed calendar year annual average for comparison effluent limits in section VI.6 of this NOA. The background is the instantaneous maximum electrical conductivity observed.

vi. **Mercury.** Represents the total calendar year annual mass (lbs) discharge of total mercury. The State Water Resources Control Board adopted Resolution 2017-0027, which established bioaccumulative-based water quality objectives (12 ng/L).

ATTACHMENT D – MONITORING AND REPORTING PROGRAM

Tables

ATTACHMENT 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 Attachment and are listed herein.

The Code of Federal Regulations (40 C.F.R. § 122.48) requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Central Valley Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement federal and California 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. Some facilities may have multiple discharge points, ponds, receiving waters, or other monitoring locations. Site-specific monitoring requirements will be included in the Notice of Applicability. Dischargers with multiple discharge points will have additional monitoring locations and requirements that will be specified in the Notice of Applicability.

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 Facility influent can be obtained, prior to any additives, treatment processes, and plant return flows.

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	A location where a representative sample of the Facility effluent can be obtained prior to discharge to the receiving water. Latitude: 39° 15’ 35” N Longitude: 121° 40’ 40” W
--	RSW-001	In the Reclamation District 777 Lateral Drain No. 2, approximately 50 feet upstream from Discharge Point 001.
--	RSW-002	In the Reclamation District 777 Lateral Drain No. 2, approximately 50 feet downstream from Discharge Point 001.
--	UVS-001	A location where a representative sample of wastewater can be collected immediately downstream of the UV disinfection system.
--	FIL-001	A location where a representative sample of wastewater can be collected immediately downstream of the filters and prior to the ultraviolet light (UV) disinfection system.
--	PND-001	Representative sample location for equalization pond.
--	PND-002	Representative sample location for emergency storage pond.

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 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 degrees Celsius)	mg/L	24-hour Composite	1/Week
Total Suspended Solids	mg/L	24-hour Composite	1/Week

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

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

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

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	Major Discharger
Flow	MGD	Meter	Continuous
Biochemical Oxygen Demand (5-day @ 20 degrees Celsius)	mg/L	24-hr Composite	1/Week
pH	standard units	Grab	1/Week
Total Suspended Solids	mg/L	24-hr Composite	1/Week
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Week
Chlorine, Total Residual	mg/L	Grab	1/Day
Dissolved Oxygen	mg/L	Grab	1/Week
Total Dissolved Solids	mg/L	Grab	1/Quarter
Dissolved Organic Carbon (DOC)	mg/L	Grab	1/Quarter
Electrical Conductivity @ 25 degrees Celsius	µmhos/cm	Grab	1/Month
Hardness, Total (as $CaCO_3$)	mg/L	Grab	1/Quarter
Methylmercury	µg/L	Grab	2/Year
Temperature	Degrees C	Grab	1/Week
Chlorpyrifos	µg/L	Grab	1/Year
Diazinon	µg/L	Grab	1/Year
Priority Pollutants and Other Constituents of Concern	See Section IX.F Below	See Section IX.F Below	See Section IX.F Below
Whole Effluent Toxicity (See Section V Below)	See Section V Below	See Section V Below	See Section V Below

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, 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.

f. **Methylmercury.** Samples for 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.

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

h. **Total Residual Chlorine.** Total residual chlorine shall be monitored using an analytical method that is sufficiently sensitive to measure at the permitted level of 0.01 mg/L.

i. Chlorine residual monitoring is required at a minimum of once per day on each day chlorine is used to maintain treatment process equipment. In addition, the Discharger shall monitor chlorine residual for three consecutive days after each day chlorine is used to maintain treatment process equipment. Monitoring is not required for the use of chlorinated potable water for filter backwashing. When chlorine or chlorine-containing products are not used to maintain treatment process equipment, the Discharger shall so state in the monthly self-monitoring report. After a calendar year following the effective date of the permit, total chlorine residual data will be reviewed to determine if continued monitoring is warranted. The Discharger may discontinue chlorine monitoring once a calendar year of non-detects is established.

j. **Hardness-Dependent Metals**. Hardness, total (as $CaCO_3$) samples shall be collected concurrently with metals samples.

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

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

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

B. Chronic Toxicity Testing.

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

1. *Monitoring Frequency* – The Discharger shall perform quarterly chronic toxicity testing when discharging to the Lateral Drain. If the result of the routine chronic toxicity testing event exhibits toxicity, demonstrated by a result greater than 1.3 TUc (as 100/EC25) AND a percent effect greater than 25 percent at 100 percent effluent, the Discharger has the option of conducting two additional compliance monitoring chronic toxicity testing events in order to calculate a median. The optional compliance monitoring events shall occur at least one week apart, and the final monitoring event shall be initiated no later than 6 weeks from the routine monitoring event that exhibited toxicity. See Compliance Determination Section VIII.J of the Municipal General Order for procedures for calculating the 6-week median.
2. *Sample Types* – Effluent samples shall be grab samples or 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 the following three species until a most sensitive species has been approved for the remainder of the NOA:

   a. The cladoceran, water flea, *Ceriodaphnia dubia* (survival and reproduction test);

   b. The fathead minnow, *Pimephales promelas* (larval survival and growth test); and

   c. The green alga, *Selenastrum capricornutum* (growth test).

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

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

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 quarterly self-monitoring report, and shall contain, at minimum:

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

   b. The percent effect at the instream waste concentration;

   c. The statistical methods used to calculate endpoints;

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

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

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

Additionally, the quarterly SMR shall contain an updated chronology of chronic toxicity test results expressed in TUc 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 quarterly WET SMR used to report chronic toxicity results 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 the Lateral Drain 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	Major Discharger
pH	standard units	Grab	1/Week
Dissolved Oxygen	mg/L	Grab	1/Week
Electrical Conductivity @ 25 degrees Celsius	µmhos/cm	Grab	1/Month
Hardness, Total (as $CaCO_3$)	mg/L	Grab	1/Quarter

Parameter	Units	Sample Type	Major Discharger
Temperature	Degrees Celsius	Grab	1/Week
Turbidity	NTU	Grab	1/Week
Dissolved Organic Carbon (DOC)	mg/L	Grab	1/Quarter
Priority Pollutants and Other Pollutants of Concern	See Section IX.F Below	See Section IX.F Below	See Section IX.F Below

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, 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. **Hardness.** Monitoring is only required for upstream Monitoring Location RSW-001.
   e. **Dissolved Organic Carbon.** Hardness, total (as CaCO3) and pH samples shall be taken concurrent with dissolved organic carbon samples.
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 (Equalization Basin) and PND-002 (Emergency Storage Basin)

a. The Discharger shall keep a log regarding the use of the basins. In particular, the Discharger shall record in the log the following when any type of wastewater is directed to PND-001 and PND-002, respectively:

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

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

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

iv. The daily freeboard in the basin.

b. The Discharger shall monitor PND-001 (Equalization Basin) and PND-002 (Emergency Storage Basin) for the parameters listed in Table D-6 below. When PND-001 or PND-002 hold wastewater for less than seven consecutive days, monitoring is not required. If monitoring is not required, the Discharger shall so state in the SMR.

Table D-6. Pond Monitoring Requirements

Parameter	Units	Sample Type	Sampling Frequency
Dissolved Oxygen	mg/L	Grab	1/Month
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Week
Odors	--	Grab	1/Month
pH	standard units	Grab	1/Month

c. Table D-6 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-6:

i. **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.

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

iii. 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. 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 below.

Table D-7. Filtration System Monitoring Requirements

Parameter	Units	Sample Type	Sampling Frequency
Turbidity	NTU	Meter	Continuous

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

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

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

   c. Report daily average and maximum turbidity.

E. Ultraviolet Light (UV) Disinfection System

1. **Monitoring Locations UVS-001**

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

Table D-8. UV Disinfection System Monitoring Requirements

Parameter	Units	Sample Type	Sampling Frequency	Monitoring Location
Flow	MGD	Meter	Continuous	UVS-001
Number of UV banks in operation	Number	Observation	Continuous	N/A
UV Transmittance	Percent (%)	Meter	Continuous	UVS-001
UV Dose	mJ/cm^2	Calculated	Continuous	N/A
Total Coliform Organisms	MPN/100 mL	Grab	2/Week	UVS-001

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.** Samples shall be collected from the effluent at (Monitoring Location EFF-001) twice during the permit term and once during the permit term for the upstream receiving water (Monitoring Location RSW-001) with all the sampling completed during the 2nd year after the effective date of this Notice of Applicability. One of the effluent monitoring events shall occur during the dry season and the other monitoring event shall occur during the wet season. Effluent sampling events should occur **once between 1 August 2022 and 31 October 2022 (dry season) and once between 1 January 2023 and 31 March 2023 (wet season)**. All sampling shall be analyzed for the constituents listed in Table D-9, below. Constituents shall be collected and analyzed consistent with the Discharger's Analytical Methods Report (see Section X.D.3 below) using sufficiently sensitive analytical methods and Reporting Levels per the Sufficiently Sensitive Methods (SSM) Rule (see also General Monitoring Provision F). The results of such monitoring shall be submitted to the Central Valley Water Board with the monthly SMR's. Each individual monitoring event shall provide representative sample results for the effluent and upstream receiving water.

2. **Concurrent Sampling.** Receiving water sampling shall be performed at approximately the same time and on the same date as the 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. A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.

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

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
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

Parameter	Units	Effluent Sample Type
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
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

Parameter	Units	Effluent Sample Type
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
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
Chromium (VI)	µg/L	24-hr Composite
Copper	µg/L	24-hr Composite
Cyanide	µg/L	24-hr Composite
Fluoride	µg/L	24-hr Composite
Iron	µg/L	24-hr Composite
Lead	µg/L	24-hr Composite
Mercury	µg/L	24-hr Composite
Manganese	µg/L	24-hr Composite
Molybdenum	µg/L	24-hr Composite
Nickel	µg/L	24-hr Composite

Parameter	Units	Effluent Sample Type
Selenium	µg/L	24-hr Composite
Silver	µg/L	24-hr Composite
Thallium	µg/L	24-hr Composite
Tributyltin	µg/L	24-hr Composite
Zinc	µg/L	24-hr Composite
4,4'-DDD	µg/L	24-hr Composite
4,4'-DDE	µg/L	24-hr Composite
4,4'-DDT	µg/L	24-hr Composite
alpha-Endosulfan	µg/L	24-hr Composite
alpha-Hexachlorocyclohexane (BHC)	µg/L	24-hr Composite
Aldrin	µg/L	24-hr Composite
beta-Endosulfan	µg/L	24-hr Composite
beta-Hexachlorocyclohexane	µg/L	24-hr Composite
Chlordane	µg/L	24-hr Composite
delta-Hexachlorocyclohexane	µg/L	24-hr Composite
Dieldrin	µg/L	24-hr Composite
Endosulfan sulfate	µg/L	24-hr Composite
Endrin	µg/L	24-hr Composite
Endrin Aldehyde	µg/L	24-hr Composite
Heptachlor	µg/L	24-hr Composite
Heptachlor Epoxide	µg/L	24-hr Composite
Lindane (gamma-Hexachlorocyclohexane)	µg/L	24-hr Composite
PCB-1016	µg/L	24-hr Composite
PCB-1221	µg/L	24-hr Composite
PCB-1232	µg/L	24-hr Composite
PCB-1242	µg/L	24-hr Composite
PCB-1248	µg/L	24-hr Composite
PCB-1254	µg/L	24-hr Composite
PCB-1260	µg/L	24-hr Composite
Toxaphene	µg/L	24-hr Composite
2,3,7,8-TCDD (Dioxin)	µg/L	24-hr Composite
Diazinon	µg/L	24-hr Composite
Chlorpyrifos	µg/L	24-hr Composite
Ammonia (as N)	mg/L	24-hr Composite
Boron	µg/L	24-hr Composite
Chloride	mg/L	24-hr Composite
Flow	MGD	Meter
Hardness (as $CaCO_3$)	mg/L	Grab

Parameter	Units	Effluent Sample Type
Foaming Agents (MBAS)	µg/L	24-hr Composite
Nitrate (as N)	mg/L	24-hr Composite
Nitrite (as N)	mg/L	24-hr Composite
pH	Std Units	Grab
Phosphorus, Total (as P)	mg/L	24-hr Composite
Specific conductance (Electrical Conductivity)	µmhos/cm	24-hr Composite
Sulfate	mg/L	24-hr Composite
Sulfide (as S)	mg/L	24-hr Composite
Sulfite (as SO_3)	mg/L	24-hr Composite
Temperature	°C	Grab
Total Dissolved Solids (TDS)	mg/L	24-hr Composite
Dissolved Organic Carbon (DOC)	mg/L	24-hr Composite

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. 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.

   d. **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 be completed according to the following schedule:

Table D-10. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Continuous	1 September 2021	All	Submit with monthly SMR
1/Day	1 September 2021	(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	1 September 2021	Sunday through Saturday	Submit with monthly SMR
2/Week	1 September 2021	Sunday through Saturday	Submit with monthly SMR
3/Week	1 September 2021	Sunday through Saturday	Submit with monthly SMR
1/Month	1 September 2021	1st day of calendar month through last day of calendar month	First day of second calendar month following month of sampling

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
1/Quarter	1 October 2021	1 January through 31 March; 1 April through 30 June; 1 July through 30 September; 1 October through 31 December	1 May; 1 August; 1 November; 1 February of following year (respectively)
2/year	1 January 2022	1 January through 30 June 1 July through 31 December	Submit with monthly SMR

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

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

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

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

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

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

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

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

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

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

6. The Discharger shall submit 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 or as otherwise specified in the Notice of Applicability. 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 –** The Discharger shall calculate and report the value of S_{AMEL} and S_{AWEL} for the effluent, using the equations in section VI.7 of this NOA, and consistent with the Compliance Determination Language in section VIII.K of the Limitations and Discharge Requirements.

h. **Dissolved Oxygen Receiving Water Limitations.** The Discharger shall report monthly in the SMR the dissolved oxygen concentrations in 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.

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. The Discharger shall report the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan specified in section IX Provisions in the NOA. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.

3. **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, D-7, D-8, 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 not less than or equal to the applicable water quality objective for a constituent, the Discharger shall explain how the proposed analytical method complies with the SSM Rule. Central Valley Water Board staff will provide a tool with the Notice of Applicability to assist the Discharger in completing this requirement. The tool will

include the constituents and associated applicable water quality objectives to be included in the Analytical Methods Report.

4. **Annual Operations Report.** By **1 February of each year**, the Discharger shall submit 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.

5. **Annual Pretreatment Reporting Requirements. Not Applicable.**

6. **Recycled Water Policy Annual Reports.** In accordance with Section 3 of the Water Quality Control Policy for Recycled Water (Recycled Water Policy) and as specified in 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.

7. **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 September 2025	NOI
2	Analytical Methods Report	28 September 2021	MRP IX.D.4
3	Analytical Methods Report Certification	1 July 2022	MRP IX.F.4
4	Investigative Toxicity Reduction Evaluation (TRE) Workplan	28 September 2021	NOA IX.1.C.ii.1
5	Most Sensitive Species Determination	1 September 2024	MRP V.B.5
6	Updated Salinity Evaluation and Minimization Plan	1 February 2022	MGO VII.C.3.c
7	Annual Operations Report #1	1 February 2022	MRP X.D.4
8	Annual Operations Report #2	1 February 2023	MRP X.D.4
9	Annual Operations Report #3	1 February 2024	MRP X.D.4
10	Annual Operations Report #4	1 February 2025	MRP X.D.4
11	Annual Operations Report #5	1 February 2026	MRP X.D.4
12	Recycled Water Annual Report	30 April 2022	MRP X.D.6
13	Recycled Water Annual Report	30 April 2023	MRP X.D.6
14	Recycled Water Annual Report	30 April 2024	MRP X.D.6
15	Recycled Water Annual Report	30 April 2025	MRP X.D.6
16	Recycled Water Annual Report	30 April 2026	MRP X.D.6

ATTACHMENT E –CALCULATION 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. AMEL = Average Monthly Effluent Limitation
3. AWEL = Average Weekly Effluent Limitation
4. CMC = Criterion Maximum Concentration (CTR or NTR) Criteria
5. CCC = Criterion Continuous Concentration (CTR or NTR) Criteria
6. Coefficient of Variation (CV) calculated using sample data for the parameter listed.
7. 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. Aquatic Life WQBELs Calculations

Parameter	Units	CMC Criteria	CCC Criteria	CV for Aquatic Life Calculations	Effluent Limit Table in Municipal General Order	AMEL	AWEL
Total Ammonia (as N)	mg/L	6.4	0.9	0.7	Table 17B	0.83	2.0