Central Valley Regional Water Quality Control Board

1 April 2025

Ken Capitanich
Wastewater Plant Superintendent
City of Lodi
1331 South Ham Lane
Lodi, CA 95242

VIA EMAIL:
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CERTIFIED MAIL
7022 2410 0002 2881 5804

NOTICE OF APPLICABILITY (NOA); MUNICIPAL WASTEWATER DISCHARGERS THAT MEET OBJECTIVES/CRITERIA AT THE POINT OF DISCHARGE TO SURFACE WATER ORDER R5-2023-0025 (MUNICIPAL GENERAL ORDER), NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CAG585001; CITY OF LODI, WHITE SLOUGH WATER POLLUTION CONTROL FACILITY, SAN JOAQUIN COUNTY

Our office received a Notice of Intent (NOI) dated 22 March 2023 from the City of Lodi (Discharger), for discharges of tertiary treated domestic wastewater to surface water from the White Slough Water Pollution Control Facility (hereafter Facility) to Dredger Cut, a water of the United States, and part of the Sacramento-San Joaquin Delta. The Municipal General Order requires the submittal of an NOI to apply for regulatory coverage of a surface water discharge. Based on the NOI and subsequent information submitted by the Discharger, staff have determined that the NOI requirements have been fulfilled and the Facility is eligible for coverage under the Municipal General Order. This Facility's discharge is assigned Municipal General Order Enrollee Number R5-2023-0025-010 under NPDES Permit CAG585001. Please reference your Municipal General Order Enrollee Number, **R5-2023-0025-010**, in your correspondence and submitted documents.

Discharges to surface water from the Facility have been regulated by the Municipal General Order R5-2017-0085-02 through an NOA issued by the Executive Officer on 11 March 2019, Municipal General Order enrollee number R5-2017-0085-003 (NOA R5-2017-0085-003). This NOA, authorizing coverage under the 2023 Municipal General Order (R5-2023-0025), shall become effective on **1 April 2025**, and will supersede NOA R5-2017-0085-003, at which time the terms and conditions in NOA R5-2017-0085-003 will cease to be effective except for enforcement purposes. To meet the provisions contained in Water Code division 7 (§ 13000 et seq.) 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 2023 Municipal General Order and specified in this NOA. This action in no way prevents the Central Valley Water Board from taking enforcement action for past violations of NOA R5-2017-0085-003.

The enclosed Municipal General Order is available online on the adopted General Orders webpage (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2023-0025.pdf). You are urged to familiarize yourself with the entire contents of the enclosed document.

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

Table 1. Facility Information

WDID	5B39NP00073
CIWQS Facility Place ID	272444
Discharger	City of Lodi
Name of Facility	White Slough Water Pollution Control Facility
Facility Street Address	12751 North Thornton Road
Facility City, State, Zip Code	Lodi, CA 95242
Facility County	San Joaquin County
Facility Contact, Title and Phone	Mr. Lance Roberts, Utilities Manager (209) 333-6740
Authorized Person to Sign and Submit Reports	Mr. Ken Capitanich, Wastewater Plant Superintendent (209) 333-6832
Mailing Address	1331 South Ham Lane, Lodi, CA 95242
Billing Address	221 West Pine Street, Lodi, CA 95240
Type of Facility	Publicly Owned Treatment Works (POTW)
Major or Minor Facility	Major
Threat to Water Quality	Category 1
Complexity	Category A
Pretreatment Program	Yes
Recycling Requirements	Producer
Facility Design Average Dry Weather Flow (ADWF)	8.5 million gallons per day (MGD), average dry weather flow
Permitted ADWF	8.5 MGD, average dry weather flow
Watershed	Sacramento-San Joaquin Delta
Receiving Water	Dredger Cut
Receiving Water Type	Inland surface water
Discharge Point 001	Latitude 38º 5’ 14” N, Longitude 121º 23’ 52” W

I. FACILITY INFORMATION

The Discharger owns and operates the Facility that provides wastewater treatment service to the City of Lodi and the San Joaquin County Flag City Service Area, with a

total population of approximately 67,000. The current design average dry weather flow capacity of the Facility is 8.5 million gallons per day (MGD). The Facility is permitted to discharge 8.5 MGD of tertiary treated wastewater to Dredger Cut within the Sacramento-San Joaquin Delta.

Typically, during the summer months (mid-June through early-September), secondary treated undisinfected municipal wastewater is pumped to the Facility's 40-acres of unlined storage ponds and is used to irrigate the Discharger's agricultural fields. Additionally, secondary treated effluent and untreated industrial wastewater are used to irrigate fodder, fiber, or feed crops. The Discharger also supplies tertiary treated municipal wastewater (Recycled Water) to Northern California Power Agency (NCPA) and San Joaquin County (SJCo) Vector Control District. This NOA only regulates the discharge of tertiary treated wastewater to Dredger Cut. Separate Waste Discharge Requirements (WDR) Order R5-2007-0113-01 regulates discharges to land and reclamation activities.

The Discharger owns and operates two separate wastewater collection systems, one to collect municipal wastewater and another to collect industrial wastewater. The industrial wastewater collection system collects primarily food processing wastewater from Pacific Coast Producers cannery and is not treated through the Facility described below. The wastewater from the industrial collection system is either held in the Facility's storage ponds (40-acres) or sent directly to the agricultural fields for irrigation under WDR Order R5-2007-0113-01. The municipal wastewater collection system has 23,000 service laterals and consists of 178 miles of collection mains, 2,880 manholes, 7 lift stations, and 5 miles of trunk line delivering wastewater to the Facility for treatment and disposal. Dischargers to the domestic trunk line include a present population of approximately 67,000, businesses, and some industries within the City of Lodi. Flows from the San Joaquin Flag City Service Area are included in the City's municipal flows.

The Facility provides full nitrification and denitrification for nitrogen removal and uses tertiary filtration followed by ultraviolet light (UV) for disinfection. The components of the treatment system at the Facility include:

- headworks with influent screens;
- mechanical grit removal;
- primary sedimentation;
- biological treatment by activated sludge, including nitrification and denitrification;
- secondary sedimentation;
- tertiary treatment with cloth media filtration; and
- UV disinfection.

Sludge is thickened with a dissolved air floatation thickener. Thickened solids are anaerobically digested and stored in two lined sludge stabilization ponds. The stabilized solids are dewatered by either a rotary or screw press and applied to the agricultural fields between cropping cycles per WDR Order R5-2007-0113-01.

II. RECEIVING WATER BENEFICIAL USES

The Facility discharges from Discharge Point 001 to Dredger Cut, a water of the United States, and part of the Sacramento-San Joaquin Delta. According to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basin

(Basin Plan) and the Tributary Rule, the following beneficial uses apply to Dredger Cut and Sacramento-San Joaquin Delta:

- Municipal and domestic supply (MUN);
- Agricultural supply, including irrigation and stock watering (AGR);
- Industrial process supply (PROC);
- Industrial service supply (IND);
- Water contact recreation, including canoeing and rafting (REC-1);
- Non-contact water recreation (REC-2);
- Warm freshwater habitat (WARM); cold freshwater habitat (COLD);
- Migration of aquatic organisms, warm and cold (MIGR);
- Spawning, reproduction, and/or early development, warm and cold (SPWN);
- Wildlife habitat (WILD);
- Navigation (NAV); and
- Commercial and sport fishing (COMM).

III. RECEIVING WATER TOTAL MAXIMUM DAILY LOADS (TMDLS)

Table 2, below, identifies the 303(d) listings and any applicable TMDLs.

This permit includes water quality-based effluent limitations (WQBELs) that are consistent with the assumptions and considerations of the applicable WLAs in the Sacramento-San Joaquin Delta chlorpyrifos and diazinon, and methylmercury TMDLs.

The receiving water is listed for Dichlorodiphenyltrichloroethane (DDT), Group A pesticides, invasive species, and unknown toxicity on the Clean Water Act 303(d) List of impaired water bodies. A Total Maximum Daily Load (TMDL) has not yet been established for the receiving water. Therefore, no additional 303(d) based effluent limitations or monitoring requirements are included in this NOA.

The 303(d) listings and TMDLs have been considered in the development of this NOA.

Table 2. 303(d) List for the Sacramento-San Joaquin Delta Waterways, Central Portion

Pollutant	TMDL Status
Chlorpyrifos	Approved 10 October 2007
DDT (Dichlorodiphenyltrichloroethane)	To be determined (see table note)
Diazinon	Approved 10 October 2007
Organo-chlorine Group A Pesticides	To be determined (see table note)
Mercury	Approved 20 October 2011

Table 2 Note:

1. This impairment is not currently prioritized for TMDL development during the

permit period. The date of completion for a TMDL will be updated in future permit revisions should the prioritization of this impairment change.

IV. DISCHARGE PROHIBITIONS

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

A. The discharge of wastes, other than those described in section I.A and meeting the eligibility criteria in section I.B of the Municipal General Order, is prohibited unless the Discharger obtains coverage under another general or individual Order that regulates the discharge of such wastes. (see Municipal General Order section IV.A)

B. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Federal Standard Provisions sections I.G. and I.H in Attachment D, Standard Provisions, of the Municipal General Order. (see Municipal General Order section IV.B)

C. Neither the discharge nor its treatment shall create a nuisance as defined in section 13050 of the Water Code. (See Municipal General Order section IV.C)

D. Discharge of waste classified as 'hazardous', as defined in California Code of Regulations, title 22, section 66261.1 et seq., is prohibited.

E. **Average Dry Weather Flow.** Discharges exceeding an average dry weather flow of 8.5 MGD are prohibited. (see Municipal General Order section IV.D)

V. EFFLUENT LIMITATIONS

A. Final Effluent Limitations

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001. Effluent limitations are provided in the Municipal General Order. Only the effluent limitations listed below in Table 3 and items 1-6 are applicable to this Facility. Unless otherwise specified in this NOA, compliance shall be measured at Monitoring Location EFF-001, as described in the Monitoring and Reporting Program, Appendix D of this NOA.

The Discharger shall maintain compliance with the effluent limitations specified in Table 3 and items 1-6 below.

Table 3. Effluent Limitations

Parameter	Units	Average Monthly	Average Weekly
Biochemical Oxygen Demand (5-day @ 20°Celcius) (BOD_5)	milligrams per liter (mg/L)	10	15
Total Suspended Solids (TSS)	mg/L	10	15
Ammonia Nitrogen, Total (as N)	mg/L	1.7	5.5
Nitrate plus Nitrite, Total (as N)	mg/L	10	19

1. **pH.** The pH shall at all times be within the range of 6.5 and 8.5.
2. **Percent Removal.** The average monthly percent removal of BOD_5 and TSS shall not be less than 85 percent.
3. **Total Coliform Organisms**. Effluent total coliform organisms shall not exceed:
    a. 2.2 most probable number per 100 milliliters (MPN/100 mL), as a 7-day median;
    b. 23 MPN/100 mL, more than once in any 30-day period; and
    c. 240 MPN/100 mL, at any time.
4. **Diazinon and Chlorpyrifos (Municipal General Order section V.A.1.c.xii).** Effluent diazinon and chlorpyrifos concentrations shall not exceed the sum of one (1.0) as identified below:

    (a) **Average Monthly Effluent Limitation**

    $$\text{SAMEL} = \frac{C_{D\,M-avg}}{0.079} + \frac{C_{C\,M-avg}}{0.012} \leq 1.0$$

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

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

    (b) **Average Weekly Effluent Limitation**

    $$\text{SAWEL} = \frac{C_{D\,W-avg}}{0.14} + \frac{C_{C\,W-avg}}{0.021} \leq 1.0$$

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

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

5. **Methylmercury (Municipal General Order section V.A.1.c.x.(a)).** Effective 31 December 2030, the effluent calendar year annual methylmercury load shall not exceed 0.94 grams, in accordance with the Delta Mercury Control Program.

B. Interim Effluent Limitations

1. **Mercury, Total.** Effective immediately, and until 31 December 2030, the effluent calendar annual total mercury mass discharge shall not exceed 23 grams. These interim effluent limitations shall apply in lieu of the final effluent limits for methylmercury (MGO Section V.A.2.a.i)

VI. RECEIVING WATER LIMITATIONS

1. **Surface Water Limitations (Municipal General Order section VI.A).** The Municipal General Order includes receiving surface water limitations in Section VI.A. Based on the information provided in the NOI, only the following receiving surface water limitations listed in Municipal General Order Section VI.A are applicable to the Facility.

    - Biostimulatory Substances (VI.A.3);

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

2. Groundwater Limitations – Not Applicable

Groundwater Limitations regulating the release of waste constituents from any portion of the Facility and the agricultural fields can be found in Section V.A.1 of WDR Order RS-2007-0113-01.

VII. MONITORING AND REPORTING

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

VIII. PROVISIONS

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

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

Applicable to all Dischargers.

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

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

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

Table 3: Summary of Applicable Special Provisions

Special Provision	Section Reference
1. Reopener Provisions	a. Major Modification of Treatment Works b. Delta Mercury Control Program c. Water Effect Ratios (WERs) and Metal Translators

Special Provision	Section Reference
2. Special Studies, Technical Reports and Additional Monitoring Requirements	a. Phase 2 Methylmercury Control Study
3. Best Management Practices and Pollution Prevention	a. Pollution Prevention Plan (PPP) for Mercury b. Salinity Evaluation and Minimization Plan (SEMP) for the Alternative Salinity Permitting Approach c. Pyrethroid Management Plan
4. Construction, Operation and Maintenance Specifications	a. Filtration System Operating Specifications b. UV Disinfection System Operating Specifications i. UV Dose, subpart (a) only; and ii. UV Transmittance, subpart (a) only; and iii-vi. UV Disinfection System – General
5. Special Provisions for Municipal Facilities	a. Pretreatment Requirements b. Sludge/Biosolids Treatment or Discharge Specifications c. Collection System d. Anaerobically Digested Material
6. Other Special Provisions	a. Title 22, or Equivalent, Disinfection Requirements
7. Compliance Schedules	a. Methylmercury

IX. COMPLIANCE DETERMINATION

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

- BOD_5 and TSS Effluent Limitations (VIII.A);
- Total Mercury Mass Loading Effluent Limitations (VIII.D);
- Average Dry Weather Flow Effluent Prohibition (VIII.E);
- Total Coliform Organisms Effluent Limitations (VIII.F);
- Priority & Non-Priority Pollutant Effluent Limitations (VIII.I);
- Dissolved Oxygen Receiving Water Limitation (VIII.J);
- Chronic Whole Effluent Toxicity Effluent Trigger (VIII.K);
- Chlorpyrifos and Diazinon Effluent Limitations (VIII.L);
- Period Average, Calendar Month Average, and Annual Average (VIII.O);
- Turbidity Receiving Water Limitation (VIII.P); and
- Reporting Requirements **(NOA, Appendix D, Section X).**

X. ANTI-BACKSLIDING REQUIREMENTS

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

as those in the previous permit, with some exceptions in which limitations may be relaxed.

Effluent limitations for Nitrate plus Nitrite, Total (as N) and acute whole effluent toxicity are less stringent than prescribed in previous NOA R5-2017-0085-003, and mass-based effluent limitations for ammonia have been removed. A more detailed anti-backsliding analysis is provided in Appendix C to this NOA in section II.A Satisfaction of Anti-Backsliding Requirements, the relaxation of effluent limitations meets the exceptions proved in the federal anti-backsliding regulations.

XI. ANTIDEGRADATION REQUIREMENTS

Antidegradation requirements are specified in the Municipal General Order, Attachment F (Fact Sheet), Section V.D.4. This NOA does not allow an increase in flow or mass of pollutants to the receiving water. The relaxation of effluent limitations for Nitrate plus Nitrite, Total (as N), and removal acute whole effluent toxicity limitations and mass-based effluent limitations for ammonia, are consistent with the antidegradation provisions of 40 C.F.R. part 131.12 and State Water Resources Control Board (State Water Board) Resolution 68-16.

A more detailed discussion of antidegradation is provided in Appendix C to this NOA, in Section II.B Antidegradation Policies.

XII. RATIONALE FOR LIMITATIONS AND MONITORING REQUIREMENTS

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

XIII. ENFORCEMENT

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

XIV. COMMUNICATION

Until this NOA R5-2023-0025-010 becomes effective on 1 April 2025, the Discharger shall continue to comply with the effluent limitations and monitoring and reporting requirements specified in NOA R5-2017-0085-003. For monthly SMRs, the Discharger must demonstrate compliance with NOA R5-2017-0085-003 through 31 March 2025 and, beginning 1 April 2025, with this NOA R5-2023-0025-010.

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 Lodi
- Facility: White Slough Water Pollution Control Facility
- County: San Joaquin County
- CIWQS Place ID: 272444

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 this 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 by phone at (916) 464-4822 or email at jon.rohrbough@waterboards.ca.gov.

Date: 2025.04.01 11:12:59 -07'00'

Water Boards

Patrick Pulupa
Executive Officer

Appendices:
Appendix A – Location Map
Appendix B – Flow Schematic
Appendix C – Supplemental Fact Sheet
Appendix D – Monitoring and Reporting Program

Appendix E – Determination of WQBELs

Enclosures:
Municipal General Order R5-2017-0085-02 (Discharger Only)

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

APPENDIX A – LOCATION MAP

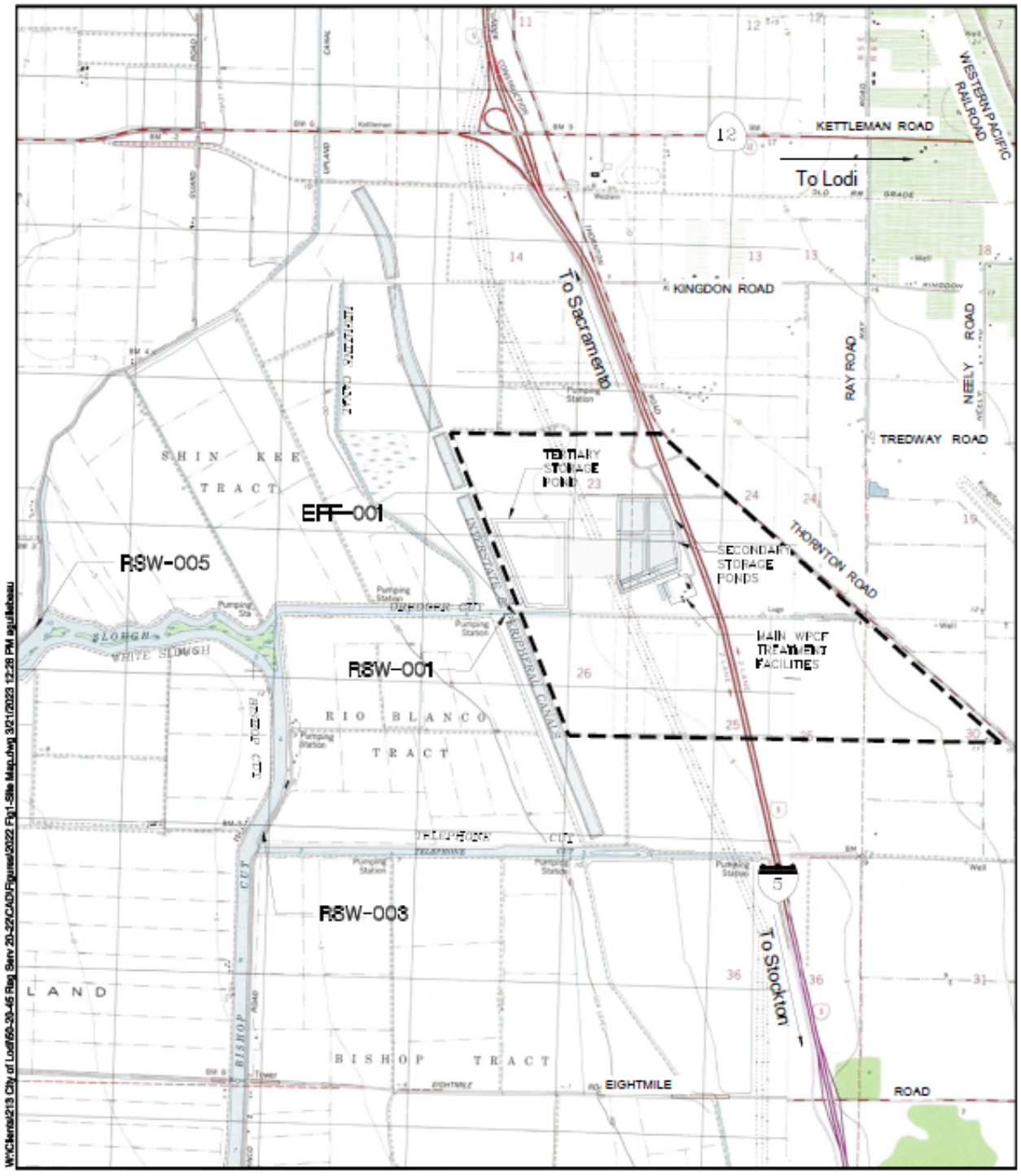
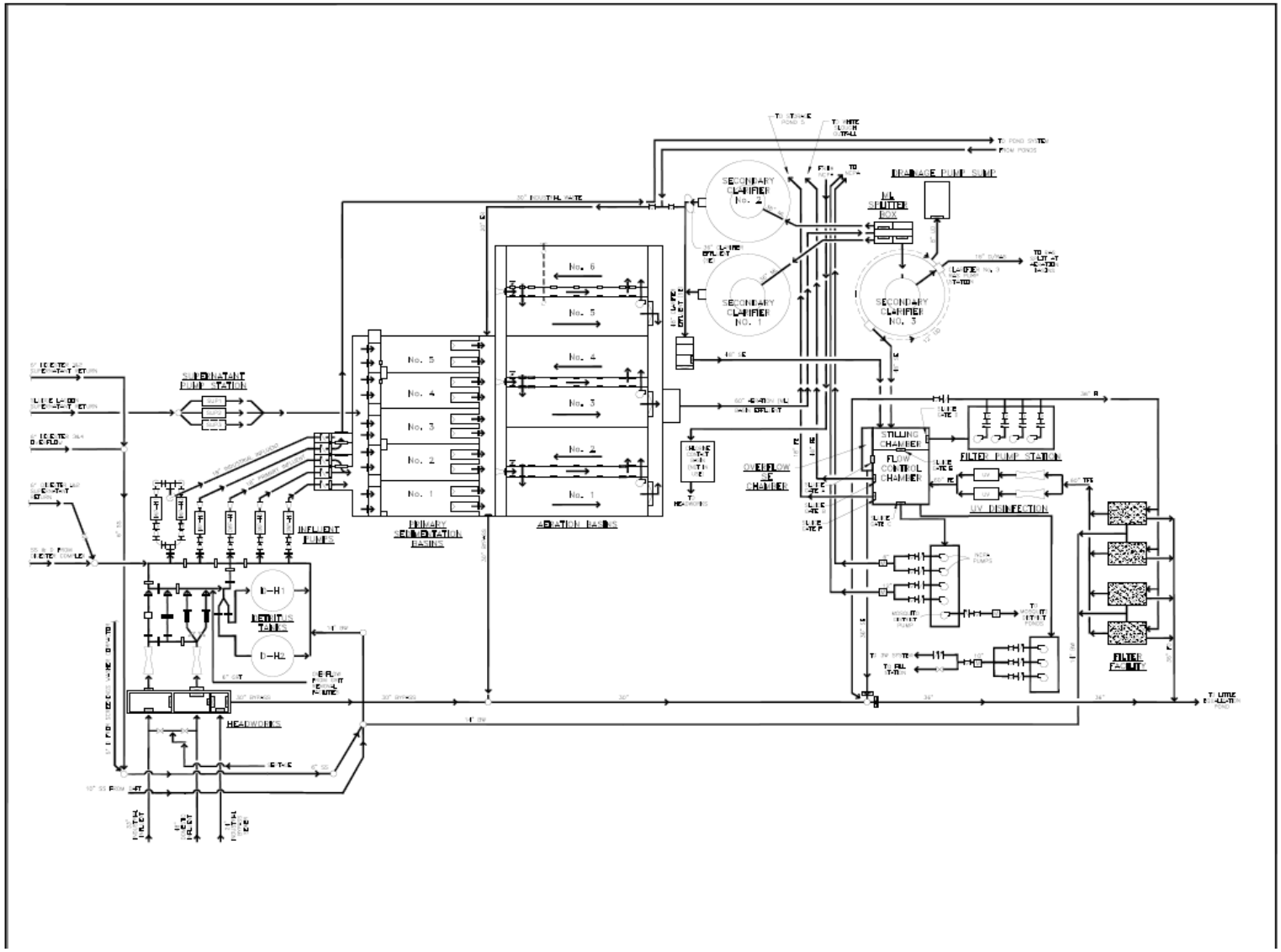


Figure 1

Site Map

City of Lodi
White Slough WPCF
Notice of Intent/
Application for Continued
Municipal General Order Coverage

APPENDIX B – FLOW SCHEMATIC



APPENDIX 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 IV, 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 LIMITATION CONSIDERATIONS

A. Satisfaction of Anti-Backsliding Requirements

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

The effluent limitations in this NOA are at least as stringent as the effluent limitations in the Facility's previous NOA R5-2017-0085-003, with the exception of effluent limitations for Nitrite Plus Nitrate (as N) and acute whole effluent toxicity. This relaxation and/or removal of these effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

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

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

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

Dredger Cut is considered an attainment water for Nitrate plus Nitrite and acute whole effluent toxicity because the receiving water is not listed as impaired on the 303(d) list for these constituents. The exceptions in section 303(d)(4) address both waters in attainment with water quality standards and those not in attainment, i.e., waters on the section 303(d) impaired waters list (State Water Resources Control Board Order WQ-2008-0006, Berry Petroleum Company, Poso Creek/McVan Facility). As discussed below, removal of the effluent limits complies with federal and state antidegradation requirements. Thus, removal of the effluent limitations for acute whole effluent toxicity and the relaxation of the effluent limitations for Nitrate plus Nitrite, Total (as N) 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.

   a. Acute Whole Effluent Toxicity. The State Policy for Water Quality Control: Toxicity Provisions (Statewide Toxicity Provisions) were not in effect at the time previous Municipal General Order R5-2017-0085 and NOA R5-2017-0085-02 were issued. The current Municipal General Order R5-2023-0025 implements the Statewide Toxicity Provisions, which state that a chronic aquatic toxicity test is generally protective of both chronic and acute aquatic toxicity. The Statewide Toxicity Provisions do not require routine acute whole effluent toxicity testing or effluent limitations for this reason. This NOA prescribes chronic whole effluent toxicity targets and associated chronic toxicity monitoring that is protective of acute aquatic toxicity. Therefore, this NOA does not retain the acute whole effluent toxicity limitations from NOA R5-2017-0085-003.

   b. Nitrate plus Nitrite. Updated information indicates that less stringent effluent limitations for Nitrate plus Nitrite, Total (as N), based on available monitoring data, satisfy requirements in CWA section 402(o)(2). The updated information supports the relaxation of effluent limitations for Nitrate plus Nitrite, Total (as N). Thus, relaxation of effluent limitations for Nitrate plus Nitrite, Total (as N) in this NOA is in accordance with CWA section 402(o)(2)(B)(i), which allows for the relaxation or removal of effluent limitations based on information that was not available at the time the previous NOA R5-2017-0085-003 was issued.

   c. Ammonia. This NOA removes the mass-based effluent limitations for ammonia based on 40 CFR part 122.45(d) and (f). The removal of the 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.

   d. **Flow**. NOA R5-2017-0085-003 included flow as an effluent limit at Discharge Point 001 based on the Facility design flow. Compliance with the flow limit was calculated using the average daily flow over three consecutive dry weather months. Flow is not a pollutant; therefore, flow has been changed from an effluent limit to a discharge prohibition in this NOA R5-2023-0025-010, which is an equivalent level of regulation. This NOA R5-2023-0025-010 is not less stringent because compliance with flow as a discharge prohibition will be calculated the same way as the previous NOA R5-2017-0085-003. 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 R5-2023-0025-010 does not allow for an increase in flow or mass of pollutants to the receiving water. Therefore, a complete antidegradation analysis is not

necessary. This NOA R5-2023-0025-010 requires compliance with applicable federal technology-based standards and with WQBELs where the discharge could have the reasonable potential to cause or contribute to an exceedance of water quality standards. The permitted discharge is consistent with the antidegradation provisions of 40 C.F.R. part 131.12 and the State Antidegradation 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 relaxes effluent limitations for Nitrate plus Nitrite, Total (as N) and acute whole effluent toxicity. Based on evaluation of past Facility performance, the relaxation or removal of these effluent limitations is not expected to result in an increase in pollutant concentrations or loading, a decrease in the level of treatment or control, or a reduction of water quality. Implementation of this NOA R5-2023-0025-010 will result in the best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not occur and the highest water quality consistent with the maximum benefit to the people of the State will be maintained. Thus, the relaxation of effluent limitations for these constituents is consistent with the antidegradation provisions of 40 C.F.R. part 131.12 and State Water Resources Control Board (State Water Board) Resolution No. 68-16.

This NOA also removes mass-based effluent limitations for ammonia based on 40 CFR Part 122.45 (d) and (f). The removal of mass-based effluent limits for ammonia will not result in a decrease in the level of treatment or control or a reduction in water quality. Furthermore, both a concentration-based AMEL and AWEL remain for ammonia, as well as an average dry weather flow prohibition that limits the amount of flow that can be discharged to the receiving water during dry weather months. The combination of concentration-based effluent limits and a flow prohibition in this NOA are equivalent to mass-based effluent limitations, which were redundant limits contained in the previous NOA. The Central Valley Water Board finds that the removal of mass-based effluent limits for ammonia does not result in an allowed increase in pollutants or any additional degradation of the receiving water. Thus, the removal of mass-based effluent limits for ammonia is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and the State Antidegradation Policy.

C. Salinity (Electrical Conductivity or EC)

Based on effluent electrical conductivity data collected from January 2020 through December 2023, the maximum calendar annual average electrical conductivity of the effluent was 599 µmhos/cm. The Municipal General Order includes a screening level for electrical conductivity of 1600 µmhos/cm based on the Secondary Maximum Contaminant Level (MCL) to protect the municipal and domestic supply beneficial use. The Facility discharge does not exceed the electrical conductivity screening level; therefore, the discharge does not have reasonable potential to cause or contribute to an in-stream excursion of water quality objectives for salinity.

In accordance with the Basin Plan's Salt Control Program, the Discharger submitted a Notice of Intent on 2 March 2021 indicating participation in the Alternative Salinity Permitting Approach. Accordingly, the Municipal General Order includes a calendar annual average performance-based effluent trigger for electrical conductivity of 880

µmhos/cm that is applicable to this Facility (see Municipal General Order, § V.A.1, Table 23).

In addition, the Discharger shall continue to implement a salinity evaluation and minimization plan (SEMP) to identify and address sources of salinity discharged from the Facility. If the effluent calendar annual average EC concentration exceeds the effluent trigger of 880 µmhos/cm during the term of this NOA, the Discharger shall evaluate the effectiveness of the SEMP and provide a summary with the Notice of Intent, due on 31 March 2029.

D. Whole Effluent Toxicity

The Statewide Toxicity Provisions, as approved by USEPA on 1 May 2023, establish new Reasonable Potential Analysis (RPA) requirements for both acute and chronic whole effluent toxicity. Based on the chronic toxicity testing results from October 2017 through February 2023, the effluent did not exceed 10 percent effect at the Instream Waste Concentration of 100 percent effluent for any species and no test failed the Test of Significant Toxicity. Therefore, the reasonable potential analysis determines the discharge does not have a reasonable potential to cause or contribute to an exceedance of the Statewide Toxicity Provisions for chronic toxicity. Chronic toxicity effluent limitations are not required for the discharge. It was also not warranted to maintain the Facility's acute whole effluent toxicity limitations since, per the Statewide Toxicity Provisions, a chronic aquatic toxicity test is generally protective of both chronic and acute aquatic toxicity. However, in accordance with the Statewide Toxicity Provisions, this NOA R5-2023-0025-010 does include chronic toxicity effluent targets and associated monitoring (see Appendix D, section V.B).

III. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

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

B. Groundwater - Not Applicable

1. Groundwater Limitations regulating the release of waste constituents from any portion of the Facility and the agricultural fields can be found in Section V.A.1 of WDR Order R5-2007-0113-01.

IV. RATIONALE FOR MONITORING REQUIREMENTS

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

A. Influent Monitoring

1. Influent monitoring is required to collect data on the characteristics of the wastewater and to assess compliance with effluent limitations (e.g., BOD_5 and TSS reduction requirements). All influent monitoring frequencies from NOA R5-2017-0085-003 have been carried forward in this NOA R5-2023-0025-010, except for total dissolved solids.

B. Effluent Monitoring

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

   The following effluent monitoring frequencies have been revised from NOA R5-2017-0085-003. All other effluent sampling frequencies from NOA R5-2017-0085-003 are carried forward to this NOA R5-2023-0025-010:

Table C-1. Revised Sampling Frequencies for Effluent Monitoring

Parameter	Unit	Prior Sample Frequency	Revised Sample Frequency	Rationale for Sample Frequency Revision
Dissolved Oxygen	mg/L	3/Week	2/Month	2/Month monitoring is adequate for determining reasonable potential
Dissolved Organic Carbon	mg/L	Not Required	1/Quarter	Add monitoring to calculate site-specific freshwater aluminum criteria for the next renewal
Electrical Conductivity @ 25°C	µmhos/ cm	1/Month	1/Quarter	Quarterly monitoring is adequate for comparison to annual average EC trigger

Parameter	Unit	Prior Sample Frequency	Revised Sample Frequency	Rationale for Sample Frequency Revision
Hardness, Total (as $CaCO_3$)	mg/L	1/Month	1/Quarter	Quarterly monitoring is adequate for determining reasonable potential
Pyrethroid Pesticides	ng/L	--	1/Quarter between 1 October 2026 and 30 September 2027	As required per the Pyrethroid Pesticides Control Program.
Total Organic Carbon	mg/L	--	1/Quarter between 1 October 2026 and 30 September 2027	As required per the Pyrethroid Pesticides Control Program
Acute Toxicity	% survival	1/Year	Discontinue	A chronic aquatic toxicity test is protective of both chronic and acute aquatic toxicity
Chronic Toxicity	% survival	1/Quarter	1/Month	Required per Statewide Toxicity Provisions, section III.C.4.b.i(A)

C. Whole Effluent Toxicity Testing Requirements

1. **Acute Toxicity - Not Applicable**
2. **Chronic Toxicity.** Previous NOA R5-2017-0085-03 required quarterly chronic bioassay testing. In accordance with the Statewide Toxicity Provisions section III.C.4.b.i(A) and the Municipal General Order, this NOA increases the chronic bioassay testing frequency to monthly. Chronic whole effluent toxicity testing is required when discharging to Dredger Cut in order to demonstrate compliance with the Statewide Toxicity Provisions. The Central Valley Water Board may approve a reduction in the routine monitoring frequency if the conditions in Statewide Toxicity Provisions, section III.C.4.b.i(B) are met.

D. Receiving Water Monitoring

1. Dredger Cut

a. This NOA retains the monitoring frequency for pH (once per week) and temperature (once per week). The receiving water monitoring for pH and temperature have been retained to assess compliance with receiving water limitations and to have sufficient data to calculate ammonia water quality criteria.

b. Receiving water monitoring is necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge to Dredger Cut.

The following receiving water monitoring frequencies have been revised from NOA R5-2017-0085-003. All other receiving water sampling frequencies from NOA R5-2017-0085-003 are carried forward to this NOA R5-2023-0025-010:

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

Parameter	Unit	Prior Sample Frequency	Revised Sample Frequency	Rationale for Sample Frequency Revision
Dissolved Organic Carbon	mg/L	Not Required	1/Quarter	Add monitoring to calculate site-specific freshwater aluminum criteria for the next permit renewal.
Pyrethroid Pesticides	ng/L	Not Required	1/Quarter between 1 October 2026 and 30 September 2027	As required per the Pyrethroid Pesticides Control Program.
Total Organic Carbon	mg/L	Not Required	1/Quarter between 1 October 2026 and 30 September 2027	As required per the Pyrethroid Pesticides Control Program

2. Groundwater – Not Applicable

E. Biosolids Monitoring

1. Biosolids monitoring for compliance with 40 C.F.R. part 503 regulations administered by U.S. EPA is not included in the Municipal General Order, and therefore, is not included in this NOA R5-2023-0025-010.

   The following webpage provides information on compliance with U.S. EPA's part 503 biosolids program (https://www.epa.gov/biosolids/compliance-and-annual-reporting-guidance-about-clean-water-act-laws).

   Biosolids monitoring is required to ensure compliance with pretreatment requirements contained in 40 C.F.R. part 403, included in the Municipal General Order and as specified in the MRP, Appendix D of this NOA R5-2023-0025-010. Biosolids monitoring is required per U.S. EPA guidance to evaluate the effectiveness of the pretreatment program.

F. Water Supply Monitoring

1. NOA R5-2017-0085-003 required once-per-year monitoring of Facility water supply. This NOA removes water supply monitoring requirements because implementation of the Salt Control Program Alternative Permitting Pathway is an equivalent means of monitoring salinity sources in wastewater.

G. Filtration System Monitoring

1. Continuous monitoring for turbidity was included under the UV Disinfection System monitoring requirements in NOA R5 2017-0085-003. Continuous monitoring for turbidity is retained in this NOA as specified in section IX.D of the MRP in Appendix D.

H. UV Disinfection System Monitoring

1. Monitoring frequencies for flow (continuous), number of UV banks in operation (continuous), UV transmittance (continuous), and UV dose (continuous) have been retained from previous NOA R5-2017-0085-003 to evaluate compliance with UV disinfection system operating specifications.

I. Pond Monitoring – Not Applicable

J. Pyrethroid Pesticides Monitoring

1. A Basin Plan Amendment and TMDL for the Control of Pyrethroid Pesticide Discharges in the Sacramento and San Joaquin River basins (Pyrethroids Control Program) was approved by the Central Valley Water Board on 8 June 2017 and is now effective (see Resolution R5-2017-0057). The Pyrethroids Control Program requires baseline monitoring by domestic and municipal wastewater dischargers discharging at least 1 MGD for the concentrations of pyrethroid pesticides, total and dissolved organic carbon in the water column, and water column toxicity testing. Monitoring is required to evaluate the potential impacts of discharges of pyrethroid pesticides to receiving waters.

L. Effluent and Receiving Water Characterization Monitoring

1. NOA R5-2017-0085-003 included effluent characterization monitoring twice during the permit term. This NOA R5-2023-0025-010 retains effluent characterization monitoring twice during the permit term, as specified in Section IX.G of Appendix D.
2. NOA R5-2017-0085-003 included upstream receiving water characterization monitoring in two quarters. This NOA R5-2023-0025-010 reduces upstream receiving water characterization monitoring to once per year to be completed between 1 October 2026 and 30 September 2027 and concurrent with one of the effluent characterization sampling events, as specified in section IX.G of Appendix D.

V. PRETREATMENT PROVISION

A. Pretreatment Requirements

1. On 24 February 2017, the Central Valley Water Board approved the Discharger's Industrial Pretreatment Program in accordance with 40 C.F.R. part 403. The Industrial Pretreatment Program requires issuance of waste discharge permits to Significant Industrial Users/Categorical Industrial Users, Non-significant Industrial Users, and food service establishments (to control fats, oils, and grease). The program also regulates Significant Commercial Users and dental offices and implements best management practices.

2. CWA section 307(b) and 40 C.F.R. part 403 require POTWs to develop an acceptable industrial pretreatment program. A pretreatment program is required to prevent the introduction of pollutants which will interfere with treatment plant operations or sludge disposal and prevent pass through of pollutants that exceed water quality objectives, standards or permit limitations.
3. The Discharger shall implement and enforce its approved pretreatment program in accordance with 40 C.F.R. part 403. If the Discharger fails to perform the pretreatment functions, the Central Valley Water Board, State Water Board, or U.S. EPA may take enforcement actions against the Discharger as authorized by the CWA.

VI. DISCHARGE MONITORING REPORT-QUALITY ASSURANCE (DMR-QA) STUDY PROGRAM

A. Under the authority of CWA section 308 (33 U.S.C. § 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.

VII. RECYCLED WATER POLICY ANNUAL REPORTS

A. On 11 December 2018, the State Water Board adopted Resolution 2018-0057, which amended section 3 of the Recycled Water Policy to require discharges of wastewater and recycled water to annually report monthly volumes of influent, wastewater produced, and effluent, including treatment level and discharge type. Accordingly, the Municipal General Order requires annual reporting of wastewater and recycled water use into Geotracker and confirmation of annual reporting to Geotracker is required by this NOA R5-2023-0025-010.

VI. SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Abbreviations used in Table C-3:

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

Table C-31: SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Parameter	Units	MEC	B	C	CMC	CCC	Water and Org	Org. Only	Basin Plan	MCL	RP
Ammonia, Total (as N)	mg/L	16	ND	10.8	10.8	2.0	--	--	--	--	Yes
Nitrate Plus Nitrite (as N)	mg/L	9.4	ND	10	--	--	--	--	--	10	Yes

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

APPENDIX D – MONITORING AND REPORTING PROGRAM

Tables

APPENDIX D – MONITORING AND REPORTING PROGRAM (MRP)

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

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

I. GENERAL MONITORING PROVISIONS

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

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

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

D. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. All monitoring

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

E. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.

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

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

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

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

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

J. Multiple Discharge Points – Not Applicable

II. MONITORING LOCATIONS

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

Table D-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	INF-001	Municipal Influent to Facility

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	At the filter pump station effluent box (38º 05' 22.9" N, 121º 23' 07.1" W), at which all waste tributary to the discharge outfall is present, is representative of the discharge, and at which point adequate disinfection is assured for the discharge of tertiary treated municipal effluent to Dredger Cut.
--	RSW-001	At the east side of the middle of the bridge crossing over Dredger Cut (38º 05' 13.4" N, 121º 24' 04.6" W), approximately 1000 feet west of the effluent discharge end of pipe. Note "end of pipe" is at the east end of Dredger Cut (38º 05' 14.1" N, 121º 23' 52.2" W)
--	RSW-003	At the eastside of Bishop Cut at Telephone Cut, 300 feet north of the north-end of the Telephone Cut bridge. (38º 04' 24.8" N, 121º 25' 00.2" W)
--	RSW-005	North Channel White Slough at Upland Canal, approximately 5330 feet west of the confluence of Dredger Cut, White Slough, and Bishop Cut. (38º 05' 12.30" N, 121º 26' 01.65" W)
--	UVS-001	After secondary clarifiers and before disinfection.
	BIO-001	A location where a representative sample of biosolids can be obtained prior to removal from the Facility.

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 when discharging to Dredger Cut as specified in Table D-2 and the testing requirements described in section III.A.2 below:

Table D-2. Influent Monitoring

Parameter	Units	Sample Type	Sampling Frequency
Flow	MGD	Meter	Continuous
Biochemical Oxygen Demand (5-day @ 20°Celcius)	mg/L	24-hour Composite	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. **Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

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

Table D-3. Effluent Monitoring

Parameter	Units	Sample Type	Sampling Frequency
Flow	MGD	Meter	Continuous
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	24-hr Composite	1/Week
Biochemical Oxygen Demand (5-day @ 20°C)	percent removal	Calculate	1/Month
pH	standard units	Grab	1/Week
Total Suspended Solids	mg/L	24-hr Composite	1/Week
Total Suspended Solids	percent removal	Calculate	1/Month
Ammonia, Total (as N)	mg/L	Grab	1/Week
Dissolved Oxygen	mg/L	Grab	2/Month
Dissolved Organic Carbon (DOC)	mg/L	Grab	1/Quarter

Parameter	Units	Sample Type	Sampling Frequency
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Quarter
Hardness, Total (as $CaCO_3$)	mg/L	Grab	1/Quarter
Nitrate Plus Nitrite, Total (as N)	mg/L	Calculate	1/Week
Temperature	ºF	Grab	1/Week
Total Coliform Organisms	MPN/100 mL	Grab	2/Week
Mercury, Total Recoverable	ng/L	Grab	1/Year
Chlorpyrifos	µg/L	24-hr Composite	1/Year
Diazinon	µg/L	24-hr Composite	1/Year
Methylmercury	µg/L	Grab	1/Year
Pyrethroids	Varies	See Section IX.F	See Section IX.F
Priority Pollutants and Other Constituents of Concern	Varies	See Section IX.G	See Section IX.G

2. Table D-3 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-3:
   a. **Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.
   b. **Applicable to all parameters.** Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
   c. **Grab Sample.** A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.
   d. **Ammonia.** Samples for pH and temperature shall be recorded at the time of ammonia sample collection.
   e. **Field Meter.** A hand-held field meter may be used for **temperature and pH**, 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. **Dissolved Organic Carbon.** Hardness, total (as $CaCO_3$) and pH samples shall be taken concurrently with dissolved organic carbon samples.

g. **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.

h. **Chlorpyrifos and Diazinon.** 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.

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

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

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

V. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

A. Acute Toxicity Testing – Not Applicable

B. Chronic Toxicity Testing.

The Discharger shall meet the following chronic toxicity testing requirements:

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

2. **Routine Monitoring Frequency.** The Discharger shall perform routine chronic toxicity testing **once per toxicity calendar month** when there is expected to be at least 15 days of discharge within the toxicity calendar year.

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

   a. **Toxicity Calendar Month.** The toxicity calendar month is defined as the period of time beginning on the day of the initiation of the routine toxicity monitoring to the day before the corresponding day of the next month if the corresponding day exists, or if not to the last day of the next month.

For purposes of this NOA R5-2023-0025-010, the toxicity calendar month **begins on 1st of the month** (i.e., from January 1 to January 31, from February 1 to February 28, from March 1 to March 31, etc.).

b. **Toxicity Calendar Quarter.** A toxicity calendar quarter is defined as **three consecutive toxicity calendar months.** For purposes of this NOA R5-2023-0025-010, the toxicity calendar quarters **begin on January 1, April 1, July 1, and October 1** (i.e., from January 1 to March 31, from April 1 to June 30, from July 1 to September 30, etc.).

c. **Toxicity Calendar Year.** A toxicity calendar year is defined as **twelve consecutive toxicity calendar months.** For purposes of this NOA R5-2023-0025-010, the toxicity calendar year **begins on January 1** (i.e., January 1 to December 31), in years in which there are at least 15 days of discharge in at least one calendar quarter.

4. **Chronic Toxicity Median Monthly Effluent Target (MMET) Compliance Testing.** If a routine chronic toxicity monitoring test results in a "Fail" (as defined in section V.C below) at the IWC, then a maximum of two chronic toxicity MMET tests shall be completed. The chronic toxicity MMET tests shall be initiated within the same toxicity calendar month that the routine monitoring chronic toxicity test was initiated that resulted in the "Fail" at the IWC. If the first chronic toxicity MMET test results in a "Fail" at the IWC, then the second chronic toxicity MMET test is unnecessary and is waived. When there is no effluent available to complete a MMET compliance test, the test shall not be required, and routine monitoring continues at the frequency specified in the NOA.

5. **Additional Routine Monitoring Tests for Toxicity Reduction Evaluation (TRE) Determination.** In order to determine if a TRE is necessary, an additional routine monitoring test is required when one chronic toxicity Maximum Daily Effluent Target (MDET) or MMET is not met, but not two in a single toxicity calendar month. The toxicity calendar month in which the MDET or MMET was not met and the toxicity calendar month of the additional routine monitoring shall be considered "successive toxicity calendar months" for purposes of determining whether a TRE is required. This additional routine monitoring test could result in the need to conduct MMET tests per Section V.B.4 above.

6. **Sample Volumes.** Adequate sample volumes shall be collected to provide renewal water to complete the test in the event that the discharge is intermittent.

7. **Test Species.** The testing shall be conducted using the most sensitive species. The Discharger shall conduct chronic toxicity tests with the **fathead minnow (*Pimephales promelas*)**.

   The Executive Officer shall have discretion to allow the temporary use of the

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

8. **Test Methods.** The Discharger shall conduct the chronic toxicity tests on effluent samples at the IWC for the discharge in accordance with species and test methods described in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R02/013, 2002; Table IA, 40 C.F.R. part 136).
9. **Dilution and Control Water.** Dilution water and control water shall be prepared and used as specified in the test methods manual. If dilution water and control water are different from test organism culture water, then a second control using culture water shall also be used. A receiving water control or laboratory water control may be used as the diluent.
10. **Test Failure.** If the effluent chronic toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method in EPA/821-R-02-013, the Discharger must conduct a Replacement Test as soon as possible, as specified in subsection B.11, below.
11. **Replacement Test.** When a required toxicity test for routine monitoring or a MMET test is not completed, a new toxicity test to replace the toxicity test that was not completed shall be initiated as soon as possible. The new toxicity test shall replace the routine monitoring or the MMET test, as applicable, for the toxicity calendar month in which the toxicity test that was not completed was required to be initiated, even if the new toxicity test is initiated in a subsequent toxicity calendar month. The new toxicity test for routine monitoring or for the MMET test, as applicable, and any MMET tests required to be conducted due to the results of the new toxicity test shall be used to determine compliance with the effluent targets for the toxicity calendar month in which the toxicity test that was not completed was required to be initiated. The new toxicity test and any MMET tests required to be conducted due to the results of the new toxicity test shall not be used to substitute for any other required toxicity tests.

    If it is determined that any specific monitoring event was not initiated in the required time period due to circumstances outside of the Discharger’s control that were not preventable with the reasonable exercise of care, the Discharger is not required to initiate the specific monitoring event in the

required time period if the Discharger promptly initiates or ultimately completes a replacement test.

C. Quality Assurance and Additional Requirements

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

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

   Mean discharge IWC response ≤ RMD x Mean control response, where the chronic RMD = 0.75

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

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

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

D. WET Testing Notification Requirements

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

E. WET Testing Reporting Requirements

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

1. The valid toxicity test results for the TST statistical approach, reported as "Pass" or "Fail" and "Percent Effect" at the IWC for the discharge, the dates of sample collection and initiation of each toxicity test, and all results for effluent parameters monitored concurrently with the toxicity test(s);

2. The statistical analysis used in section IV.B.1.c of the Statewide Toxicity Provisions; and
3. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.

F. Most Sensitive Species Screening

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

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

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

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

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

a. *Ceriodaphnia dubia* (survival and reproduction test) for the remainder of the toxicity calendar year this NOA R5-2023-0025-010 is issued;

b. *Pimephales promelas (larval survival and growth test)* for the entire toxicity calendar year following the toxicity calendar year this NOA R5-2023-0025-010 is issued;

c. *Pseudokirchneriella subcapitata* (growth test) for the entire toxicity calendar year of the second year following the toxicity calendar year this NOA R5-2023-0025-010 is issued; and

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

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

G. Toxicity Reduction Evaluations

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

1. **TRE Targets**

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

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

2. **TRE Implementation.** The Discharger is required to initiate a TRE when there is any combination of two or more chronic toxicity MDET or MMET that are not met within a single toxicity calendar month or within two successive toxicity calendar months (as defined in paragraph V.B.5 above). If other information indicates toxicity (e.g., results of additional monitoring, results of monitoring at a higher concentration than the IWC, fish kills, or intermittent recurring toxicity), the Central Valley Water Board may require a TRE. A TRE

may also be required when there is no effluent available to complete a routine monitoring test or MMET test.

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

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

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

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

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

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Locations RSW-001, RSW-003, and RSW-005

1. The Discharger shall monitor Dredger Cut at Monitoring Locations RSW-001, RSW 003, and RSW-005 as specified in Table D 5. If there was no discharge to the receiving water during the designated monitoring period, monitoring is not required during that period.

   The Discharger is located within the legal boundaries of the Sacramento–San Joaquin Delta and therefore, required to participate in the Delta Regional Monitoring Program. Delta Regional Monitoring Program data is not intended to be used directly to represent either upstream or downstream water quality for purposes of determining compliance with this Order. Delta Regional Monitoring Program monitoring stations are established generally as "integrator sites" to evaluate the combined impacts on water quality of multiple discharges into the Delta; Delta Regional Monitoring Program monitoring stations would not normally be able to identify the source of any specific constituent but would be used to identify water quality issues needing further evaluation. Delta Regional Monitoring Program monitoring data, along with the individual Discharger data, may be used to help establish background receiving water quality for reasonable potential analyses (RPA's) in an NPDES permit after evaluation of the applicability of the data for that purpose. Delta Regional Monitoring Program data, as with all environmental monitoring data, can provide an assessment of water quality at a specific

place and time that can be used in conjunction with other information, such as other receiving water monitoring data, spatial and temporal distribution and trends of receiving water data, effluent data from the Discharger's discharge and other point and non-point source discharges, receiving water flow volume, speed and direction, and other information to determine the likely source or sources of a constituent that resulted in the exceedance of a water quality objective.

Table D-4. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
pH	standard units	Grab	2/Month
Dissolved Organic Carbon (DOC)	mg/L	Grab	1/Quarter
Temperature	ºF	Grab	2/Month
Pyrethroids	Varies	See Section IX.F	See Section IX. F

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

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

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

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

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

   e. **Temperature, pH, and Dissolved Organic Carbon.** The receiving water samples for temperature, pH, and dissolved organic carbon shall be taken

at approximately the same time and on the same date with the effluent samples for these parameters (see Table D-3).

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

1. Monitoring Location BIO-001

a. The Discharger shall monitor biosolids at Monitoring Location BIO-001 as specified below. Biosolids monitoring is required to meet pretreatment requirements under Reporting Requirement D.5.

b. A composite sample of sludge shall be collected quarterly at Monitoring Location BIO-001 in accordance with EPA's *POTW Sludge Sampling and Analysis Guidance Document*, August 1989, and tested for priority pollutants (excluding asbestos).

c. Biosolids monitoring shall be conducted using the methods in Test Methods for Evaluating Solid Waste, Physical/Chemical methods (EPA publication SW-846), as required in 40 C.F.R. section 503.8(b)(4). All results must be reported on a 100% dry weight basis. Records of all analyses must state on each page of the laboratory report whether the results are expressed in “100% dry weight” or “as is.”

B. Ponds – Not Applicable

C. Municipal Water Supply – Not Applicable

D. Filtration System

1. Monitoring Location UVS-001

a. The Discharger shall monitor the filtration system at Monitoring Location UVS-001 as specified in Table D-6 and the testing requirements in section IX.D.2.

Table D-5. Filtration System Monitoring Requirements

Parameter	Units	Sample Type	Sampling Frequency
Turbidity	NTU	Meter	Continuous

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

   a. 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 Location UVS-001

a. The Discharger shall monitor the UV disinfection system at Monitoring Location UVS-001 as specified in Table D-6:

Table D-6. UV Disinfection System Monitoring Requirements

Parameter	Units	Sample Type	Sampling Frequency
Flow	MGD	Meter	Continuous
Number of UV banks in operation	Number	Observation	Continuous
UV Transmittance	Percent (%)	Meter	Continuous
UV Dose	mW-sec/cm	Calculated	Continuous

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

   a. **Continuous Analyzers**. If analyzers are taken out of operation for routine maintenance activities and no continuous measurements are available from a redundant meter, the Discharger shall divert flow to another filtration device or to storage to the extent feasible. If the Discharger is not able to divert away from the analyzer and the analyzer is out of operation for longer than 30 minutes, the Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation and no continuous measurements are available from a redundant meter. If analyzer(s) fail to

provide continuous monitoring for more than two hours and influent and/or effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results.

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

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

d. **UV Dose**. 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. 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. Pyrethroid Pesticides Monitoring

1. **Water Column Chemistry Monitoring Requirements.** The Discharger shall conduct effluent and receiving water baseline monitoring in accordance with Table D-7 when discharging to Dredger Cut. Quarterly samples shall be collected from the effluent (Monitoring Location EFF-001) between **1 October 2026 and 30 September 2027**. Quarterly samples shall be collected from the downstream receiving water (Monitoring Location RSW-001) between **1 October 2026 and 30 September 2027**. The downstream receiving water sampling events shall be collected concurrent (on the same date and at approximately the same time) with the effluent sampling events. **The Discharger shall conduct the Pyrethroid Pesticides Water Column Chemistry Monitoring events concurrent with the Water Column Toxicity Monitoring (see section IX.F.2 below) and within the same calendar quarters as the Effluent and Receiving Water Characterization Monitoring events (see section IX.F below).** The Discharger shall also submit a minimum of one quality assurance/quality control (QA/QC) sample during the year to be analyzed for the constituents listed in Table D-7. The monitoring results shall be submitted to the Central Valley Water Board as attachments to the quarterly SMRs.

   The Discharger shall use Environmental Laboratory Accreditation Program (ELAP)-accredited laboratories and methods validated by the Central Valley Water Board staff for pyrethroid pesticides water column chemistry monitoring. A current list of ELAP-approved laboratories and points of contact

can be found on the Central Valley Water Board's Pyrethroid Pesticides TMDL and Basin Plan Amendment Webpage (https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/central_valley_pesticides/pyrethroid_tmdl_bpa/index.html).

Monitoring can either be conducted by the Discharger or can be done as part of a group monitoring effort. If the Discharger chooses to participate in a group monitoring effort, the timing and the other study requirements of the monitoring can be modified by the Executive Officer.

Table D-7. Pyrethroid Pesticide Monitoring

Parameter	CAS Number	Sample Units	Sample Type	Analytical Method	Reporting Level
Total Bifenthrin	82657-04-3	ng/L	Grab	See table note 1	1.3
Total Cyfluthrin	68359-37-5	ng/L	Grab	See table note 1	1.3
Total Cypermethrin	52315-07-8	ng/L	Grab	See table note 1	1.7
Total Esfenvalerate	51630-58-1	ng/L	Grab	See table note 1	3.3
Total Lambda-cyhalothrin	91465-08-6	ng/L	Grab	See table note 1	1.2
Total Permethrin	52645-53-1	ng/L	Grab	See table note 1	10
Freely Dissolved Bifenthrin	82657-04-3	ng/L	Calculated	Calculated from total concentration	--
Freely Dissolved Cyfluthrin	68359-37-5	ng/L	Calculated	Calculated from total concentration	--
Freely Dissolved Cypermethrin	52315-07-8	ng/L	Calculated	Calculated from total concentration	--
Freely Dissolved Esfenvalerate	51630-58-1	ng/L	Calculated	Calculated from total concentration	--
Freely Dissolved Lambda-cyhalothrin	91465-08-6	ng/L	Calculated	Calculated from total concentration	--
Freely Dissolved Permethrin	52645-53-1	ng/L	Calculated	Calculated from total concentration	--
Dissolved Organic Carbon (DOC)	--	mg/L	Grab	--	--

Parameter	CAS Number	Sample Units	Sample Type	Analytical Method	Reporting Level
Total Organic Carbon (TOC)	--	mg/L	Grab	--	--

The freely dissolved concentration of each quantified pyrethroid pesticide in a sample may be directly measured or estimated using partition coefficients. Methods for direct measurement must be approved by the Executive Officer before they are used to determine the freely dissolved pyrethroid concentrations that are used for determining exceedances of the pyrethroid pesticides numeric triggers, which are outlined in Table 4-2 of the Basin Plan.

To estimate the freely dissolved concentration of a pyrethroid pesticide with partition coefficients, the following equation shall be used:

$$C_{dissolved} = \frac{C_{total}}{1 + (K_{OC} \times [POC]) + (K_{DOC} \times [DOC])}$$

Where:

C dissolved = concentration of an individual pyrethroid pesticide that is in the freely dissolved phase (ng/L),

C total = total concentration of an individual pyrethroid pesticide in water (ng/L),

K_{OC} = organic carbon-water partition coefficient for the individual pyrethroid pesticide (L/kg),

[POC] = concentration of particulate organic carbon in the water sample (kg/L), which can be calculated as [POC]=[TOC]-[DOC],

[TOC] = total organic carbon in the sample (kg/L),

K_{DOC} = dissolved organic carbon-water partition coefficient (L/kg), and

[DOC] = concentration of dissolved organic carbon in the sample (kg/L).

Site-specific or alternative study-based partition coefficients approved by the Executive Officer may be used for K_{OC} and K_{DOC} in the above equation. If site-specific or alternative study-based partition coefficients are not available or have not been approved, the following partition coefficients shall be used for K_{OC} and K_{DOC} in the above equation:

Table D-8. Pyrethroid Pesticide Partition Coefficients

Pyrethroid Pesticide	Receiving Water K_{OC} (L/kg)	Receiving Water K_{DOC} (L/kg)	Effluent K_{OC} (L/kg)	Effluent K_{DOC} (L/kg)
Bifenthrin	4,228,000	1,737,127	15,848,932	800,000
Cyfluthrin	3,870,000	2,432,071	3,870,000	2,432,071

Pyrethroid Pesticide	Receiving Water K_{OC} (L/kg)	Receiving Water K_{DOC} (L/kg)	Effluent K_{OC} (L/kg)	Effluent K_{DOC} (L/kg)
Cypermethrin	3,105,000	762,765	6,309,573	200,000
Esfenvalerate	7,220,000	1,733,158	7,220,000	1,733,158
Lambda-cyhalothrin	2,056,000	952,809	7,126,428	200,000
Permethrin	6,075,000	957,703	10,000,000	200,000

2. **Water Column Toxicity Monitoring Requirements.** When discharging to the receiving water, the Discharger shall monitor the acute toxicity to *Hyalella azteca* of the downstream receiving water using U.S. EPA method EPA-821-R-02-012 (Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, USEPA, October 2002, or most recent edition). Except as specified in this NOA R5-2023-0025-010, water column toxicity testing shall follow the measurement quality objectives provided in the Surface Water Ambient Monitoring Program (SWAMP) Quality Assurance Program Plan (SWRCB, 2018). When feasible, the Discharger shall use the Southern California Coastal Water Research Project (SCCWRP) guidance (Schiff and Greenstein, 2016) on test organism age and size for *Hyalella azteca*.

   For consistency with U.S. EPA Method EPA-821-R-02-012 and ELAP accreditation, *Hyalella azteca* water column toxicity testing for baseline monitoring must be performed at 20 degrees Celsius.

   Pyrethroid Pesticides Water Column Toxicity monitoring samples shall be collected from the downstream receiving water (Monitoring Location RSW-002) once per quarter between **1 October 2026 and 30 September 2027. The Discharger shall conduct the Pyrethroid Pesticides Water Column Toxicity Monitoring events concurrent with the Water Column Chemistry Monitoring (see section IX.F.1 above) and within the same calendar quarters as the Effluent and Receiving Water Characterization Monitoring events (see section IX.F below).** The monitoring results shall be submitted to the Central Valley Water Board as attachments to the quarterly SMRs. Monitoring can either be conducted by the Discharger or can be done as part of a group monitoring effort. If the Discharger chooses to participate in a group monitoring effort, the timing of the monitoring can be modified by the Executive Officer.

3. **Exceedance of Numeric Triggers.** If the Pyrethroid Pesticides Water Column Chemistry Monitoring at EFF-001 results in an exceedance of any prohibition numeric trigger, as outlined in Table 4-2 of the Basin Plan, the Discharger shall submit a letter notifying the Central Valley Water Board of the exceedance and the Discharger's intent to submit a Pyrethroid

Management Plan. The Pyrethroid Management Plan, as outlined in section VII.C.3 of the Municipal General Order, shall be submitted to the Central Valley Water Board within one year from the date that an exceedance is identified by either the Discharger or Central Valley Water Board staff. Pyrethroid concentrations in the effluent at EFF-001 that exceed the acute and/or chronic pyrethroid numeric triggers as outlined in Table 4-2 of the Basin Plan constitute an exceedance. In the absence of a pyrethroid numeric trigger exceedance, observed toxicity in the water column does not constitute a violation of the pyrethroid conditional prohibition.

Identification of an exceedance provides the information that the Pyrethroid Pesticides Monitoring was designed to collect, per Chapter V of the Basin Plan; therefore, once an exceedance is identified, the Discharger may cease conducting subsequent Pyrethroid Pesticides Monitoring.

G. Effluent and Receiving Water Characterization

The Discharger shall monitor the effluent at Monitoring Locations EFF-001 for the constituents listed in Table D-8, as described in this section.

1. **Monitoring Frequency**
   a. **Effluent Sampling.** Samples shall be collected from the effluent (Monitoring Location EFF-001) **twice in the permit term between 1 October 2026 and 30 September 2027**. The two effluent sampling events shall be conducted a minimum of 60 days apart.
   b. **Receiving Water Sampling.** A sample shall be collected from the upstream receiving water (Monitoring Location RSW-001) **once in the permit term between 1 October 2026 and 30 September 2027**. The upstream receiving water sample shall be collected concurrent (on the same date and at approximately the same time) with one of the effluent sampling events required in the section above.

   All sampling shall be analyzed for the constituents listed in Table D-9, below. The results of such monitoring shall be submitted to the Central Valley Water Board with the quarterly SMRs.
2. **Sample Type.** Effluent samples shall be taken as described in Table D-9, below and the testing requirements in section IX.G.5.
3. **Analytical Methods Report Certification**. Prior to beginning the Effluent Characterization monitoring, the Discharger shall provide a certification acknowledging the scheduled start date of the Effluent Characterization monitoring and confirming that samples will be collected and analyzed as described in the previously submitted Analytical Methods Report. If there are changes to the previously submitted Analytical Methods Report, the Discharger shall outline those changes. A one-page certification form will be provided by the Central Valley Water Board staff with this NOA that the Discharger can use to satisfy this requirement. The certification form shall be submitted electronically via CIWQS in accordance with the reporting requirements in Table D-9, Technical Reports.

Table D-9. Effluent 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
Trichlorofluoromethane	µg/L	Grab
1,1,1-Trichloroethane	µg/L	Grab
1,1,2- Trichloroethane	µg/L	Grab
1,1-dichloroethane	µg/L	Grab
1,1-dichloroethylene	µg/L	Grab
1,2-dichloropropane	µg/L	Grab
1,3-dichloropropylene	µg/L	Grab
1,1,2,2-tetrachloroethane	µg/L	Grab
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/L	Grab
1,2,4-trichlorobenzene	µg/L	Grab
1,2-dichloroethane	µg/L	Grab

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

Parameter	Units	Effluent Sample Type
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
Barium	µg/L	24-hr Composite
Beryllium	µg/L	24-hr Composite
Cadmium	µg/L	24-hr Composite
Chromium (Total)	µg/L	24-hr Composite
Chromium (VI)	µg/L	24-hr Composite
Copper	µg/L	24-hr Composite
Cyanide	µg/L	24-hr Composite
Fluoride	µg/L	24-hr Composite
Iron	µg/L	24-hr Composite
Lead	µg/L	24-hr Composite
Mercury	µg/L	24-hr Composite
Manganese	µg/L	24-hr Composite
Molybdenum	µg/L	24-hr Composite
Nickel	µg/L	24-hr Composite
Selenium	µg/L	24-hr Composite
Silver	µg/L	24-hr Composite
Thallium	µg/L	24-hr Composite
Tributyltin	µg/L	24-hr Composite
Zinc	µg/L	24-hr Composite
4,4'-DDD	µg/L	24-hr Composite

Parameter	Units	Effluent Sample Type
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
Alachlor	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
Atrazine	µg/L	24-hr Composite
Bentazon	µg/L	24-hr Composite
Carbofuran	µg/L	24-hr Composite
2,4-D	µg/L	24-hr Composite
Dalapon	µg/L	24-hr Composite
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	24-hr Composite
Di(2-ethylhexyl)adipate	µg/L	24-hr Composite
Dinoseb	µg/L	24-hr Composite
Diquat	µg/L	24-hr Composite
Endothal	µg/L	24-hr Composite
Ethylene Dibromide	µg/L	24-hr Composite
Methoxychlor	µg/L	24-hr Composite

Parameter	Units	Effluent Sample Type
Molinate (Ordram)	µg/L	24-hr Composite
Oxamyl	µg/L	24-hr Composite
Picloram	µg/L	24-hr Composite
Simazine (Princep)	µg/L	24-hr Composite
Thiobencarb	µg/L	24-hr Composite
2,3,7,8-TCDD (Dioxin)	µg/L	24-hr Composite
2,4,5-TP (Silvex)	µg/L	24-hr Composite
Diazinon	µg/L	24-hr Composite
Chlorpyrifos	µg/L	24-hr Composite
Ammonia (as N)	mg/L	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
Foaming Agents (MBAS)	µg/L	24-hr Composite
Mercury, Methyl	ng/L	Grab
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. **Applicable to all parameters.** Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

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

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

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

e. **Concurrent Sampling.** When effluent and receiving water samples are required during the same calendar quarter, effluent and receiving water sampling shall be conducted on the same date, at approximately the same time.

f **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.

g. **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 maximum reporting limit (RL) of 0.05 ng/L for methylmercury and 0.5 nanograms per liter (ng/L) for total mercury.

h. **TCDD-Dioxin Congener Equivalents** shall include all 17 of the 2,3,7,8 TCDD dioxin congeners as listed in section 3 of the SIP.

i. **Chlorpyrifos and Diazinon** shall be sampled using U.S. EPA Method 625M, Method 8141, or equivalent GC/MS method with a lower reporting limit (RL) than the Basin Plan Water Quality Objectives of 0.015 µg/L and 0.1 µg/L for chlorpyrifos and diazinon, respectively.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

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

2. The Discharger shall report to the Central Valley Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.

3. **Compliance Time Schedules.**

   a. **Compliance Schedule for Final Effluent Limitations for Methylmercury.** The Discharger shall comply with the final effluent

limitation for methylmercury by the due date in the Technical Reports Table. The Discharger shall also comply with the time schedule contained in MGO section VII.C.7.a and in the Technical Reports Table (Table D-11) to ensure compliance with the final effluent limitation.

4. Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if a Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

B. Self-Monitoring Reports

1. The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (www.waterboards.ca.gov/ciwqs/index.html). The CIWQS Web site will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly SMRs including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this MRP. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this MRP, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall begin on 1 April 2025 and be completed according to the following:

Table D-10. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period	SMR Due Date
Continuous	All	Submit with monthly SMR
1/Day	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly SMR
1/Week	Sunday through Saturday	Submit with monthly SMR
2/Week	Sunday through Saturday	Submit with monthly SMR
3/Week	Sunday through Saturday	Submit with monthly SMR
5/Week	Sunday through Saturday	Submit with monthly SMR
1/Month	1st day of calendar month through last day of calendar month	First day of second calendar month following month of sampling

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

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

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

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

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

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

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

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

5. **Multiple Sample Data.** When determining compliance with an AMEL, AWEL, or maximum daily effluent limitation (MDEL) for priority pollutants and more

than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of “Detected, but Not Quantified” (DNQ) or ND. In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

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

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

6. The Discharger shall submit 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 SMRs for which sample analyses were performed. Bench sheets are not required but should be available upon request by Regional Board staff.

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

   a. **Calendar Annual Average Limitations – Not Applicable.**

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.F of the Limitations and Discharge Requirements in the Municipal General Order.

e. **Total Calendar Annual Mass Loading Mercury Effluent Limitations –** Each Discharger subject to mass loading effluent limitations for total mercury in section V.A.1.c.xi or section V.B.a.i shall calculate and report the total calendar annual mercury mass loading for the effluent in the December SMR. The total calendar year annual mass loading shall be calculated as specified in section VIII.C of the Limitations and Discharge Requirements.

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

g. **Chlorpyrifos and Diazinon Effluent Limitations –** Each Discharger subject to effluent limitations for diazinon and chlorpyrifos in section V.A.1.c.ix of this General Order shall calculate and report the value of S_{AMEL} and S_{AWEL} for the effluent, using the equation in section V.A.1.c.xii and consistent with the Compliance Determination Language in section VIII.K of the Limitations and Discharge Requirements.

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

D. Other Reports

1. **Special Study Reports. – Not Applicable**

2. **Analytical Methods Report.** The Discharger shall complete and submit an Analytical Methods Report, electronically via CIWQS submittal, by the due date specified in Table D-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, D-9, and D-10 of this NOA: 1) applicable water quality objective, 2) reporting level (RL), 3) method detection limit (MDL), and 4) analytical method. The analytical methods shall be sufficiently sensitive with RLs consistent with the SSM Rule (see also General Monitoring Provision F in the

Municipal General Order), and with the Minimum Levels (MLs) in the SIP, Appendix 4. The “Reporting Level or RL” is synonymous with the “Method Minimum Level” described in the SSM Rule. If an RL is greater than the applicable water quality objective for a constituent, the Discharger shall explain how the proposed analytical method complies with the SSM Rule. Central Valley Water Board staff will provide a tool with this NOA to assist the Discharger in completing this requirement. The tool will include the constituents and associated applicable water quality objectives to be included in the Analytical Methods Report.

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

   a. The names, certificate grades, and general responsibilities of all persons employed at the Facility.
   b. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.
   c. A statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration.
   d. A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.
   e. The Discharger may also be requested to submit an annual report to the Central Valley Water Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

4. **Annual Pretreatment Reporting Requirements.** The Discharger shall submit annually a report to the Central Valley Water Board, with copies to U.S. EPA Region 9 and the State Water Board (submittal requirements follow this section), describing the Discharger's pretreatment activities over the previous 12 months (1 January through 31 December). In the event that the Discharger is not in compliance with any conditions or requirements of the Municipal General Order and this NOA, including noncompliance with pretreatment audit/compliance inspection requirements, then the Discharger shall also include the reasons for noncompliance and state how and when the Discharger shall comply with such conditions and requirements.

   An annual report shall be submitted by the due date shown in the Technical Reports Table D-11 and include at least the following items:

   a. A summary of analytical results from representative sampling of the POTWs influent and effluent for those pollutants U.S. EPA has identified

under section 307(a) of the CWA which are known or suspected to be discharged by nondomestic users. This will consist of an annual full priority pollutant scan. The Discharger is not required to sample and analyze for asbestos. The Discharger shall submit the results of the priority pollutant scan electronically to the Central Valley Water Board using the State Water Board's CIWQS Program Website.

Sludge shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent sampling and analysis. The sludge analyzed shall be a composite sample of a minimum of 12 discrete samples taken at equal time intervals over the 24-hour period. Wastewater and sludge sampling and analysis shall be performed as specified in this NOA. The Discharger shall also provide any influent, effluent or sludge monitoring data for other constituents of concern which may be causing or contributing to Interference, Pass-Through or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 C.F.R. part 136 and amendments thereto.

b. A discussion of Upset, Interference, or Pass-Through incidents, if any, at the treatment plant, which the Discharger knows or suspects were caused by nondomestic users of the POTW. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of, the nondomestic user(s) responsible. The discussion shall also include a review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent Pass-Through, Interference, or noncompliance with sludge disposal requirements.

c. The cumulative number of nondomestic users that the Discharger has notified regarding Baseline Monitoring Reports and the cumulative number of nondomestic user responses.

d. An updated list of the Discharger's significant industrial users (SIUs) including their names and addresses, or a list of deletions, additions and SIU name changes keyed to a previously submitted list. The Discharger shall provide a brief explanation for each change. The list shall identify the SIUs subject to federal categorical standards by specifying which set(s) of standards are applicable to each SIU. The list shall indicate which SIUs, or specific pollutants from each industry, are subject to local limitations. Local limitations that are more stringent than the federal categorical standards shall also be identified.

e. The Discharger shall characterize the compliance status through the year of record of each SIU by employing the following descriptions:

   i. complied with baseline monitoring report requirements (where applicable);
   ii. consistently achieved compliance;
   iii. inconsistently achieved compliance;

iv. significantly violated applicable pretreatment requirements as defined by 40 C.F.R. section 403.8(f)(2)(vii);
v. complied with schedule to achieve compliance (include the date final compliance is required);
vi. did not achieve compliance and not on a compliance schedule; and
vii. compliance status unknown.

f. A report describing the compliance status of each SIU characterized by the descriptions in items iii through vii above shall be submitted for each calendar quarter by the first day of the second month following the end of the quarter. The report shall identify the specific compliance status of each such SIU and shall also identify the compliance status of the Facility with regards to audit/pretreatment compliance inspection requirements. If none of the aforementioned conditions exist, at a minimum, a letter indicating that all industries are in compliance and no violations or changes to the pretreatment program have occurred during the quarter must be submitted. The information required in the fourth quarter report shall be included as part of the annual report due by the date specified in Table D-11. This quarterly reporting requirement shall commence upon issuance of this NOA.

g. A summary of the inspection and sampling activities conducted by the Discharger during the past year to gather information and data regarding the SIUs. The summary shall include:

i. The names and addresses of the SIUs subjected to surveillance and an explanation of whether they were inspected, sampled, or both and the frequency of these activities at each user; and

ii. The conclusions or results from the inspection or sampling of each industrial user.

h. The Discharger shall characterize the compliance status of each SIU by providing a list or table which includes the following information:

i. Name of SIU;
ii. Category, if subject to federal categorical standards;
iii. The type of wastewater treatment or control processes in place;
iv. The number of samples taken by the POTW during the year;
v. The number of samples taken by the SIU during the year;
vi. For a SIU subject to discharge requirements for total toxic organics, whether all required certifications were provided;
vii. A list of the standards violated during the year. Identify whether the violations were for categorical standards or local limits.
viii. Whether the facility is in significant noncompliance (SNC) as defined at 40 C.F.R. section 403.8(f)(2)(viii) at any time during the year; and
ix. A summary of enforcement or other actions taken during the year to return the SIU to compliance. Describe the type of action (e.g., warning

letters or notices of violation, administrative orders, civil actions, and criminal actions), final compliance date, and the amount of fines and penalties collected, if any. Describe any proposed actions for bringing the SIU into compliance;

x. Restriction of flow to the POTW.

xi. Disconnection from discharge to the POTW.

i. A brief description of any programs the POTW implements to reduce pollutants from nondomestic users that are not classified as SIUs;

j. A brief description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to, changes concerning: the program's administrative structure, local limits, monitoring program or monitoring frequencies, legal authority, enforcement policy, funding levels, or staffing levels;

k. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases; and

l. A summary of activities to involve and inform the public of the program including a copy of the newspaper notice, if any, required under 40 C.F.R. section 403.8(f)(2)(viii).

m. Pretreatment Program reports shall be submitted as follows:

i. Electronically to the Central Valley Water Board using the CIWQS system or emailed as a PDF file to: RB5S-NPDES-Comments@waterboards.ca.gov; and

ii. Emailed to the State Water Board as a PDF file to: NPDES_Wastewater@waterboards.ca.gov; and

iii. Emailed to the U.S. EPA to: R9Pretreatment@epa.gov.

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

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

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

Table D-11. Technical Reports

Report #	Technical Report	Due Date	CIWQS Report Name
1	Notice of Intent	31 March 2029	NOI
2	Analytical Methods Report	1 July 2025	MRP X.D.2
3	Analytical Methods Report Certification	1 January 2026	MRP IX.G.3
4	Annual Operations Report #1	1 February 2026	MRP X.D.3
5	Annual Operations Report #2	1 February 2027	MRP X.D.3
6	Annual Operations Report #3	1 February 2028	MRP X.D.3
7	Annual Operations Report #4	1 February 2029	MRP X.D.3
8	Annual Operations Report #5	1 February 2030	MRP X.D.3
9	Annual Pretreatment Report #1	1 March 2026	MRP X.D.4
10	Annual Pretreatment Report #2	1 March 2027	MRP X.D.4
11	Annual Pretreatment Report #3	1 March 2028	MRP X.D.4
12	Annual Pretreatment Report #4	1 March 2029	MRP X.D.4
13	Annual Pretreatment Report #5	1 March 2030	MRP X.D.4
14	Recycled Water Policy Annual Report Upload Confirmation Form #1	30 April 2026	MRP X.D.5
15	Recycled Water Policy Annual Report Upload Confirmation Form #2	30 April 2027	MRP X.D.5

Report #	Technical Report	Due Date	CIWQS Report Name
16	Recycled Water Policy Annual Report Upload Confirmation Form #3	30 April 2028	MRP X.D.5
17	Recycled Water Policy Annual Report Upload Confirmation Form #4	30 April 2029	MRP X.D.5
18	Recycled Water Policy Annual Report Upload Confirmation Form #5	31 March 2030	MRP X.D.5
19	Pyrethroid Management Plan (if necessary)	One year from the date an exceedance is identified	MGO VII.C.3.c
20	Mercury Pollution Prevention Plan Annual Progress Reports	30 January 2026	MGO VII.C.7.a
21	Mercury Pollution Prevention Plan Annual Progress Reports	30 January 2027	MGO VII.C.7.a
22	Mercury Pollution Prevention Plan Annual Progress Reports	30 January 2028	MGO VII.C.7.a
23	Mercury Pollution Prevention Plan Annual Progress Reports	30 January 2029	MGO VII.C.7.a
24	Mercury Pollution Prevention Plan Annual Progress Reports	30 January 2030	MGO VII.C.7.a
25	Notification of Full Compliance Signed by Legally Responsible Official (LRO)	31 December 2030	MGO VII.C.7.a

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

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

Abbreviations and Notes:

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

Table E-1. Human Health WQBELs Calculations

Parameter	Units	Criteria	CV	Effluent Limit Table in Municipal General Order	AMEL	AWEL
Nitrate Plus Nitrite (as N)	mg/L	10	0.81	20B	10	19

Table E-2. Aquatic Life WQBELs Calculations

Parameter	Units	CMC	CCC	CV	Effluent Limit Table in Municipal General Order	AMEL	AWEL
Ammonia, Total (as N)	mg/L	10.8	2.0	1.2	18B	1.7	5.5