



# Central Valley Regional Water Quality Control Board

5 March 2021

Susan Wages General Manager Mariposa Public Utility District P.O. Box 494 Mariposa, CA 95338 VIA EMAIL: mpudoffice@sti.net CERTIFIED MAIL 7019 2970 0001 5201 5434

NOTICE OF APPLICABILITY (NOA); MUNICIPAL GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2017-0085, NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CAG585001; MARIPOSA PUBLIC UTILITY DISTRICT, MARIPOSA WASTEWATER TREATMENT FACILITY, MARIPOSA COUNTY

Our office received a Report of Waste Discharge (ROWD) dated 29 October 2018 from Mariposa Public Utility District (hereinafter Discharger) for discharge of tertiary treated domestic wastewater to surface water from the Mariposa Wastewater Treatment Facility (hereafter Facility) to Mariposa Creek. The General Order for Municipal Wastewater Dischargers That Meet Objectives/Criteria at the Point of Discharge to Surface Water Order R5-2017-0085-01 (Municipal General Order) requires the submittal of an NOI to apply for regulatory coverage of a surface water discharge. The Discharger did not submit a NOI for coverage under the Municipal General Order. However, the Discharger did submit a ROWD in accordance with its existing individual NPDES permit. Based on the ROWD and subsequent information submitted by the Discharger, staff has determined that the NOI requirements have been fulfilled and the Facility is eligible for coverage under the Municipal General Order. This Facility's discharge is assigned Municipal General Order enrollee number R5-2017-0085-017 and National Pollutant Discharge Elimination System (NPDES) Permit CAG585001. Please reference your Municipal General Order enrollee number, R5-2017 0085-017, in your correspondence and submitted documents.

Discharges to surface water from the Facility are currently regulated by an individual NPDES permit, Order R5-2014-0042-01 (NPDES CA0079430) adopted by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) on 28 March 2014 and amended on 20 October 2017. The current individual NPDES permit expired on 30 April 2019 and was administratively extended by the Executive Office on 22 April 2019. This NOA, authorizing coverage under the Municipal General Order, shall become effective on **1 April 2021**, at which time the terms and conditions in Order R5-2014-0042-01 will cease to be effective except for enforcement purposes. To meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements contained in the Municipal General Order and as specified in this NOA.

KARL E. LONGLEY ScD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

This action in no way prevents the Central Valley Water Board from taking enforcement action for past violations of Order R5-2014-0042-01.

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

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

**Table 1. Facility Information** 

WDID	5C221012001			
CIWQS Facility Place ID	273207			
Discharger	Mariposa Public Utility District			
Name of Facility	Mariposa Wastewater Treatment Facility			
Facility Street Address	4956 Miller Road			
Facility City, State, Zip Code	Mariposa, CA 95338			
Facility County	Mariposa County			
Facility Contact, Title and	Susan Wages, General Manager, (209) 966-2515			
Phone				
Authorized Person to Sign	Susan Wages, General Manager, (209) 966-2515			
and Submit Reports	Curt Farrell, Operations Supervisor, (209) 966-3983			
Mailing Address	P.O. Box 494			
Mailing Address	Mariposa, CA 95338			
Billing Address	Same as mailing address			
Type of Facility	Publicly Owned Treatment Works (POTW)			
Major or Minor Facility	Minor			
Threat to Water Quality	2			
Complexity	В			
Pretreatment Program	No			
Recycling Requirements	No			
Facility Permitted Flow	0.61 Million Gallons Per Day (MGD)			
Facility Design Flow	0.61 Million Gallons Per Day (MGD)			
Watershed	Mariposa Hydrologic Unit No. 538			
Receiving Water	Mariposa Creek			
Receiving Water Type	Inland Surface Water			
Discharge Point 001	37° 28' 45.11" N, 119° 57' 32.76" W			

#### I. FACILITY INFORMATION

The Discharger provides sewerage service for the community of Mariposa and serves a population of approximately 2,000. The design average dry weather flow capacity of the Facility is 0.61 million gallons per day (MGD).

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

- Headworks with bar screen comminutor
- Anoxic basin
- Oxidation ditch
- Recycle pump station
- Two secondary clarifiers
- Return and waste sludge pumps
- Cooling tower
- Multi-media filter
- UV disinfection system
- Chemical feed systems for calcium polysulfide and polyaluminum chloride

Sludge is dewatered by a belt filter press and stored in a concrete sludge containment structure. Water runoff, including rainfall from the containment structure floor and filtrate from the belt filter press, is pumped to the oxidation ditch and treated. Dewatered biosolids are stored onsite at the location(s) identified in Appendix C and are hauled to Mariposa County Landfill for disposal. Transportation and disposal/reuse of the biosolids is regulated by the United States Environmental Protection Agency (U.S. EPA) under 40 Code of Federal Regulations (CFR) part 503.

#### II. RECEIVING WATER BENEFICIAL USES

The Facility discharges from Discharge Point 001 to Mariposa Creek, which is tributary to Duck Slough which flows to the San Joaquin River, within the Mariposa Hydrologic Unit. According to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins Plan (Basin Plan), the Tributary Rule, and State Water Resources Control Board Resolution No. 88-63, Mariposa Creek is designated with the following existing and potential beneficial uses (San Joaquin River from Sack Dam to mouth of Merced River):

- Agricultural Supply (AGR)
- Industrial Process Supply (PRO)
- Water Contact Recreation (REC-1)
- Non-contact Water Recreation (REC-2)
- Warm Freshwater Habitat (WARM)
- Wildlife Habitat (WILD)
- Migration of Aquatic Organisms (MIGR)
- Spawning, Reproduction, and/or Early Development (warm) (SPWN)
- Municipal and Domestic Supply (MUN)
- Spawning, Reproduction, and/or Early Development (cold) (SPWN)

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

- Municipal and domestic supply (MUN);
- Agricultural supply, including irrigation and stock watering (AGR);
- Industrial service supply (IND);
- Industrial process supply (PRO);

#### III. PROVISIONS AND REQUIREMENTS IMPLEMENTING STATE LAW

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

- Groundwater Limitations section VII.2
- Filtration System Operating Specifications section IX.C.iv.1
- Ultraviolet (UV) Disinfection Operating Specifications section IX.C.iv.2
- Other Provisions section IX.C.vi

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

# IV. RECEIVING WATER TOTAL MAXIMUM DAILY LOAD (TMDL)

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

Mariposa Creek is not listed for constituent(s) on the Clean Water Act 303(d) List of impaired water bodies. Therefore, no additional 303(d) based effluent limitations or monitoring requirements are included in this NOA.

#### V. DISCHARGE PROHIBITIONS

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

- A. The discharge of wastes, other than those described in section I.A and meeting the eligibility criteria in section I.B of the Municipal General Order, is prohibited unless the Discharger obtains coverage under another general or individual Order that regulates the discharge of such wastes. (see Municipal General Order section IV.A)
- B. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Federal Standard Provisions sections I.G. and I.H in Attachment D, Standard Provisions, of the Municipal General Order. (see Municipal General Order section IV.B)
- C. Neither the discharge nor its treatment shall create a nuisance as defined in section 13050 of the Water Code. (see Municipal General Order section IV.C)

D. **Average Dry Weather Flow.** Discharges exceeding an average dry weather flow of 0.61 million gallons per day (MGD) are prohibited. Compliance shall be measured at Monitoring Location EFF-001.

#### VI. EFFLUENT LIMITATIONS

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001. Effluent limitations are provided in the Municipal General Order. Only the effluent limitations listed below in items 1-6 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.

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

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Municipal General Order Section Reference
Biochemical Oxygen Demand (5-day @ 20°Celcius) (BOD <sub>5</sub> )	milligrams per liter (mg/L)	10	15		V.A.1.a.ii.(a)
Total Suspended Solids (TSS)	mg/L	10	15		V.A.1.a.ii.(a)
Ammonia Nitrogen, Total (as N)	mg/L	1.7	5.6		V.A.1.c.v.
Nitrate plus Nitrite, Total (as N)	mg/L	10	20		V.A.1.c.vi
Copper, Total Recoverable	micrograms per liter (µg/L)	9.7		18	V.A.1.b.iii
Zinc, Total Recoverable	μg/L	81		150	V.A.1.b.iii

**Table 2. Effluent Limitations** 

- 2. pH (Municipal General Order section V.A.1.c.iv.(a)). The pH shall at all times be within the range of 6.5 and 8.5.
- **3.** Percent Removal (Municipal General Order section V.A.1.a.ii.(b)). The average monthly percent removal of BOD<sub>5</sub> and TSS shall not be less than 90 percent.
- **4.** Total Coliform Organisms (Municipal General Order section V.A.1.a.ii.(c)). (Measured at EFF-001). Effluent total coliform organisms shall not exceed:
  - 2.2 most probable number per 100 milliliters (MPN/100 mL), as a 7-day median;
  - ii. 23 MPN/100 mL, more than once in any 30-day period; and

- iii. 240 MPN/100 mL, at any time.
- 5. Whole Effluent Toxicity, Acute (Municipal General Order section V.A.1.c.i). Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:
  - i. 70%, minimum for any one bioassay; and
  - ii. 90%, median for any three consecutive bioassays.
- 6. Electrical Conductivity (Municipal General Order section V.A.1.c.viii). The effluent electrical conductivity concentration shall not exceed the annual average effluent limitation of 875 micromhos per centimeter (µmhos/cm).

#### VII. RECEIVING WATER LIMITATIONS

- Surface Water Limitations (Municipal General Order section VI.A).
   The Municipal General Order includes receiving surface water limitations in Section VI.A. Only the following receiving surface water limitations listed in Municipal General Order Section VI.A are applicable to the Facility.
  - Biostimulatory Substances (VI.A.3);
  - Chemical Constituents (VI.A.4);
  - Color (VI.A.5);
  - Dissolved Oxygen (VI.A.6.a.i, ii, and iv);
  - Floating Material (VI.A.7);
  - Oil and Grease (VI.A.8);
  - pH (VI.A.9.a);
  - Pesticides (VI.A.10);
  - Radioactivity (VI.A.11);
  - Suspended Sediments (VI.A.12);
  - Settleable Substances (VI.A.13);
  - Suspended Material (VI.A.14);
  - Taste and Odors (VI.A.15);
  - Temperature (VI.A.16.a);
  - Toxicity (VI.A.17); and
  - Turbidity (VI.A.18.a).

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

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

#### VIII.MONITORING AND REPORTING

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

#### IX. PROVISIONS

- **1.** Provisions are contained in section VII of the Municipal General Order, and the applicable provisions are referenced below:
  - A. Standard Provisions. Section VII.A
    - i. Applicable to all dischargers
  - B. Monitoring and Reporting Program (MRP) Requirements. Section VII.B
    - The MRP applicable to this Facility is contained in Appendix D of this NOA.
  - **C. Special Provisions.** Special Provisions are contained in section VII.C of the Municipal General Order. Only the following Special Provisions sections from the Municipal General Order apply to this Facility:
    - i. Reopener Provisions section VII.C.1.a, c, d, e, f, and g
    - ii. <u>Special Studies, Technical Reports and Additional Monitoring</u> Requirements.
      - 1. Toxicity Reduction Evaluation Requirements. section VII.C.2.a.iii-iv
    - iii. Best Management Practices and Pollution Prevention
      - Salinity Evaluation and Minimization Plan section VII.C.3.c Submittal of a Salinity Evaluation and Minimization Plan
    - iv. Construction, Operation and Maintenance Specifications
      - 1. *Filtration System Operating Specifications* section VII.C.4.a.i and VII.C.4.a.iii
      - 2. **UV Disinfection System Operating Specifications** section VII.C.4.b.iii-vi and the following:
        - a. UV Dose section VII.C.4.b.i.(a)
        - b. <u>UV Transmittance</u> section VII.C.4.b.ii.(a)
    - v. Special Provisions for Municipal Facilities
      - Sludge/Biosolids Treatment or Discharge Specifications Section VII.C.5.b
      - 2. Anaerobically Digestible Material Section VII.C.5.d
    - vi. Other Special Provisions Section VII.C.6.a
    - vii. Compliance Schedules Section VII.C.7.a Not Applicable

#### X. COMPLIANCE DETERMINATION

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

- BOD5 and TSS Effluent Limitations (VIII.A);
- Average Dry Weather Flow Prohibition (VIII.D);
- Total Coliform Organisms Effluent Limitations (VIII.E);
- Priority Pollutant Effluent Limitations (VIII.H);
- Dissolved Oxygen Receiving Water Limitation (VIII.I);
- Chronic Whole Effluent Toxicity Trigger (VIII.J)
- Period Average, Calendar Month Average, and Annual Average (VIII.N);
- Turbidity Receiving Water Limitation (VIII.O);
- Temperature Receiving Water Limitation (NOA, Appendix D, section X.B.7.j); and
- Reporting Requirements (NOA, Appendix D, section X).

#### XI. ANTI-BACKSLIDING REQUIREMENTS

Anti-backsliding requirements are specified in the Municipal General Order, section V.D.3, Attachment F (Fact Sheet). According to the Clean Water Act section 402(o)(2)(B)(i), the removal or relaxation of effluent limitations for total recoverable copper, total recoverable zinc, electrical conductivity, chlorodibromomethane, dichlorobromomethane, and total trihalomethanes is allowed because the updated effluent and receiving water monitoring data collected indicates 1) the discharge no longer exhibits reasonable potential to cause or contribute to an exceedance of water quality objectives/criteria, or 2) less stringent water quality criteria are applicable.

A more detailed anti-backsliding analysis is provided in Appendix C to this NOA in section II.A Satisfaction of Anti-Backsliding Requirements.

#### XII. ANTIDEGRADATION REQUIREMENTS

Antidegradation requirements are specified in the Municipal General Order, section V.D.4, Attachment F (Fact Sheet). This NOA does not allow an increase in flow or mass of pollutants to the receiving water. Thus, the relaxation of effluent limitations is consistent with the antidegradation provisions of Code of Federal Regulations (C.F.R.), 40 C.F.R. 131.12 and State Water Board Resolution 68-16, and no further antidegradation analysis is required.

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

#### XIII.RATIONALE FOR LIMITATIONS AND MONITORING REQUIREMENTS

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

#### XIV.ENFORCEMENT

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

subject to enforcement actions.

#### XV.COMMUNICATION

Until this NOA becomes effective on 1 April 2021, you will need to comply with the effluent limitations and requirements contained in your existing permit, Order R5-2014-0042-01. For your March/April 2021 monthly self-monitoring reports, you will need to demonstrate compliance with existing Order R5-2014-0042-01 through 31 March 2021, and compliance with this NOA beginning 1 April 2021.

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

All other documents not required to be submitted via CIWQS shall be converted to a searchable PDF and submitted by email to <a href="mailto:centralvalleyfresno@waterboards.ca.gov">centralvalleyfresno@waterboards.ca.gov</a>. Please include the following information in the body of the email:

- Attention: NPDES Compliance and Enforcement Section
- Discharger: Mariposa Public Utility District
- Facility: Mariposa Wastewater Treatment Facility
- County: Mariposa CountyCIWQS Place ID: 273207

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

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

(http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality) may be found on the Internet or will be provided upon request.

Now that your NOA has been issued, the Central Valley Water Board's Compliance and Enforcement Section will take over management of your case. Hossein Aghazeynali of the Compliance and Enforcement section is your point of contact for any questions

# MARIPOSA PUBLIC UTILITY DISTRICT MARIPOSA WASTEWATER TREATMENT FACILITY

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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 Hossein Aghazeynali at (559) 445-6194 or at Hossein.Aghazeynali@waterboards.ca.gov.

Original Signed by Scott Hatton for: Patrick Pulupa Executive Officer

Appendices:

Appendix A – Location Map

Appendix B – Flow Schematic

Appendix C – Rationale for Limitations and Monitoring Requirements

Appendix D – Monitoring and Reporting Program

Appendix E – Determination of WQBEL's

#### Enclosure:

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

#### CC:

Elizabeth Sablad, U.S. EPA, Region IX, San Francisco (email only)

Peter Kozelka, U.S. EPA, Region IX, San Francisco (email only)

Afrooz Farsimadan, Division of Water Quality, State Water Board (email only)

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Bill Jennings, California Sportfishing Protection Alliance (email only)

Richard McHenry, California Sportfishing Protection Alliance (email only)

Debbie Webster, Central Valley Clean Water Association (email only)

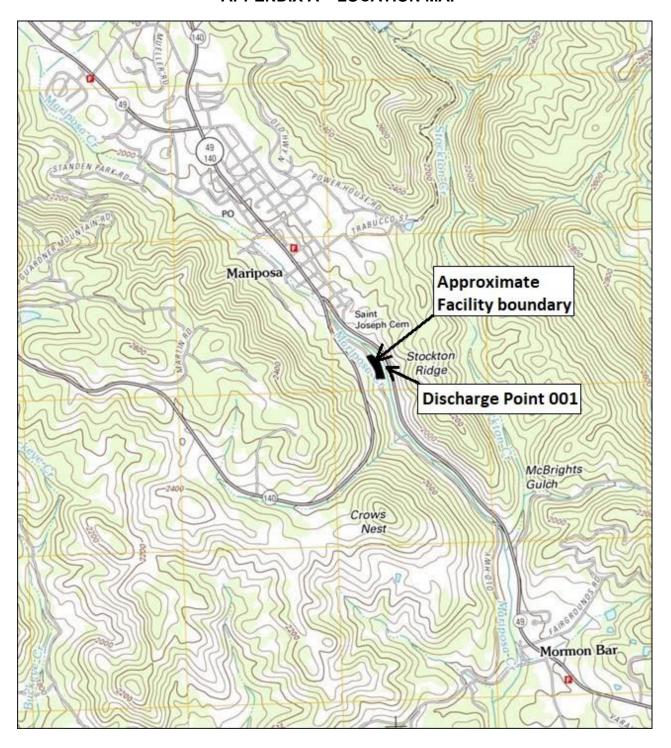
Roberta Larson, Somach Simmons & Dunn (email only)

Michael Garabedian, Friends of the North Fork, 3437 Myrtle Avenue #400, North Highlands, CA 95660

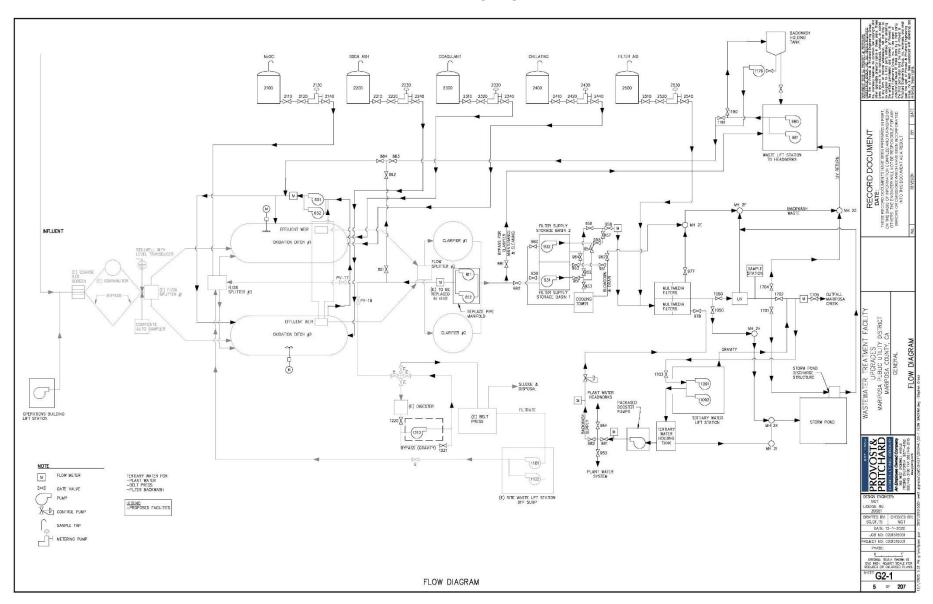
Curt Farrell, Mariposa Public Utility District, Mariposa (email only)

Sarah Windsor, Friends of Mariposa Creek, Mariposa

# **APPENDIX A – LOCATION MAP**



#### **APPENDIX B - FLOW SCHEMATIC**



#### APPENDIX C - SUPPLEMENTAL FACT SHEET

#### I. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

#### **II. FINAL EFFLUENT LIMITATION CONSIDERATIONS**

#### A. Satisfaction of Anti-Backsliding Requirements

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

The effluent limitations in this NOA are at least as stringent as the effluent limitations in the Facility's previous Order R5-2014-0042-01 with the exception of effluent limitations for biochemical oxygen demand (BOD), total suspended solids (TSS), ammonia nitrogen, total recoverable copper, total recoverable zinc, dichlorobromomethane, chlorodibromomethane, total trihalomethanes, and electrical conductivity (EC). The effluent limitations for these pollutants are less stringent than those in R5-2014-0042-01. The removal or relaxation 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 (WQBEL's) "except in compliance with Section 303(d)(4)." CWA section 303(d)(4) has two parts: paragraph (A) which applies to nonattainment waters and paragraph (B) which applies to attainment waters.
  - a. For waters where standards are not attained, CWA section 303(d)(4)(A) specifies that any effluent limit based on a TMDL or other waste load allocation (WLA) may be revised only if the cumulative effect of all such revised effluent limits based on such TMDL's or WLA's will assure the attainment of such water quality standards.
  - b. For attainment waters, CWA section 303(d)(4)(B) specifies that a limitation based on a water quality standard may be relaxed where the action is consistent with the antidegradation policy.

Mariposa Creek is considered an attainment water for BOD, TSS, ammonia nitrogen, total recoverable copper, total recoverable zinc, dichlorobromomethane, chlorodibromomethane, total trihalomethanes, and EC because the receiving water is not listed as impaired on the 303(d) list for these constituents. The exceptions in Section 303(d)(4) address both waters in attainment with water quality standards and those not in attainment, i.e. waters on the section 303(d) impaired waters list (State Water Board Order WQ-2008-0006, Berry Petroleum Company, Poso Creek/McVan Facility). As discussed below, removal or relaxation of the effluent limits complies with federal and state antidegradation requirements. Thus, relaxation

- of concentration-based effluent limitations for total recoverable copper, total recoverable zinc, and EC; removal of maximum daily concentration-based effluent limitations for BOD, TSS, and ammonia nitrogen; removal of mass-based effluent limitations for BOD, TSS, and ammonia nitrogen; and the removal of concentration-based effluent limitations for dichlorobromomethane, chlorodibromomethane, and total trihalomethanes for this NOA meets the exception in CWA section 303(d)(4)(B).
- 2. **CWA section 402(o)(2).** CWA section 402(o)(2) provides several exceptions to the anti-backsliding regulations. CWA 402(o)(2)(B)(i) allows a renewed, reissued, or modified permit to contain a less stringent effluent limitation for a pollutant if information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.
  - Updated information that was not available at the time Order R5-2014-0042-01 was issued indicates that dichlorobromomethane, chlorodibromomethane, and total trihalomethanes do not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water. Additionally, updated information that was not available at the time Order R5-2014-0042-01 was issued indicates that less stringent effluent limitations for total recoverable copper and total recoverable zinc, based on available data, satisfy requirements in CWA section 402(o)(2). The updated information that supports the relaxation of effluent limitations for these constituents includes the following:
  - a. Dichlorobromomethane, chlorodibromomethane, and total trihalomethanes. Since Order R5-2014-0042-01 was adopted, the Facility switched from chlorine disinfection to UV disinfection. Monitoring data while the UV disinfection system has been operating indicates that dichlorobromomethane, chlorodibromomethane, and total trihalomethanes in the discharge do not exhibit reasonable potential to cause or contribute to an exceedance of their respective water quality objectives/criteria.
  - b. Total Recoverable Copper. Total recoverable copper is a hardness-dependent metal. Based on updated effluent and receiving water hardness data from May 2017 through April 2020, this NOA includes less stringent effluent limitations for copper.
  - c. Total Recoverable Zinc. Total recoverable zinc is a hardness-dependent metal. Based on updated effluent and receiving water hardness data from May 2017 through April 2020, this NOA includes less stringent effluent limitations for zinc.
  - Thus, removal of the effluent limitations for dichlorobromomethane, chlorodibromomethane, and total trihalomethanes and relaxation of the effluent limitations for total recoverable copper and total recoverable zinc in this NOA is in accordance with CWA section 402(o)(2)(B)(i), which allows for the removal or relaxation of effluent limitations based on information that was not available at the time previous Order R5-2014-0042-01 was adopted.
- 3. **Flow.** Order R5-2014-0042-01 included average dry weather flow as an effluent limitation at Discharge Point 001 based on the Facility design flow. Compliance with the effluent limits for flow in Order R5-2014-0042-01 was calculated using an annual

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

### **B.** Antidegradation Policies

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

This NOA removes effluent limitations for dichlorobromomethane, chlorodibromomethane, and total trihalomethanes based on updated monitoring data demonstrating that the effluent does not cause or contribute to an exceedance of the applicable water quality criteria or objectives in the receiving water. This NOA relaxes effluent limitations for total recoverable copper and total recoverable zinc based on recalculation of hardness-dependent criteria. The removal and relaxation of WQBEL's for these parameters will not result in an increase in pollutants concentration or loading, a decrease in the level of treatment or control, or a reduction of water quality. Therefore, the Central Valley Water Board finds that the removal and relaxation of the effluent limitations does not result in an increase in pollutants or any additional degradation of the receiving water. Thus, the removal and relaxation of effluent limitations is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16.

This NOA relaxes effluent limitations for EC. As explained in Attachment F (Fact Sheet), section I.A.1.d of the Municipal General Order, the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative included a 2018 Basin Plan amendment approved by the Central Valley Water Board that addresses ongoing salt and nitrate accumulation in the Central Valley. The Basin Plan amendment, in part, revised the effluent limitations for EC. Consequently, the 2020 Municipal General Order amendment removed the Basin Plan-based EC effluent limitation, but required a performance-based effluent limitation for EC based on the maximum observed calendar year annual average of the effluent. Consistent with this requirement, this NOA specifies an annual average EC effluent limitation of 875 µmhos/cm. Implementation of this effluent limitation will result in the best practicable treatment or control of the discharge necessary to assure that a pollution or nuisance will not occur and the highest water quality consistent with the maximum benefit to the people of the State will be maintained. Thus, the relaxation of the EC effluent is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16.

This NOA also removes maximum daily concentration-based and all mass-based effluent limitations for BOD, TSS, and ammonia nitrogen based on 40 CFR parts 122.45 (d) and (f). The removal of maximum daily and mass-based effluent limitations for BOD, TSS, and ammonia will not result in a decrease in the level of treatment or control or a reduction in water quality.

Furthermore, concentration-based average monthly effluent limitations (AMELs) and average weekly effluent limitations (AWELs) are included in this NOA for BOD, TSS, and ammonia nitrogen, as well as a prohibition (section V.E of this NOA) on discharging flows greater than the average dry weather flow that limits the amount of flow that can be discharged to the receiving water during dry weather months. The combination of flow and concentration-based effluent limitations in this NOA are equivalent to mass-based effluent limitations, which were redundant limitations contained in previous Orders by multiplying the concentration-based effluent limitations and permitted average dry weather flow by a conversion factor to determine the mass-based effluent limitations. The removal of maximum daily and mass-based effluent limitations for BOD, TSS, and ammonia nitrogen will not result in an allowed increased in pollutants or any additional degradation of the receiving water. Thus, the removal of maximum daily concentration-based and mass-based effluent limitations for BOD, TSS, and ammonia nitrogen is consistent with the antidegradation provisions of 40 CFR part 131.12 and the State Antidegradation Policy.

#### **III. RATIONALE FOR MONITORING REQUIREMENTS**

CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Central Valley Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program, Attachment E of the Municipal General Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring requirements contained in Monitoring and Reporting Program, 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<sub>5</sub> and TSS reduction requirements). The monitoring frequencies for BOD<sub>5</sub> (weekly), TSS (weekly), and flow (continuous) have been retained from Order R5-2014-0042-01. These frequencies will provide sufficient information to determine compliance with percent removal requirements and monitor the performance of the Facility.

#### **B. Effluent Monitoring**

- 1. Pursuant to the requirements of 40 C.F.R. section 122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations, assess the effectiveness of the treatment process, and to assess the impacts of the discharge on the receiving stream and groundwater.
- 2. Effluent monitoring frequencies and sample types for total coliform organisms (3/week), BOD<sub>5</sub> (weekly), pH (weekly), TSS (weekly), ammonia nitrogen (weekly),

nitrate plus nitrite (monthly), acute toxicity (yearly), chronic toxicity (yearly), total recoverable copper (monthly), and total recoverable zinc (monthly) have been retained from Order R5-2014-0042-01 to determine compliance with effluent limitations for these parameters.

- 3. Monitoring data collected over the previous permit term for settleable solids, standard minerals, chlorodibromomethane, dichlorobromomethane, total trihalomethanes, methyl bromide, total recoverable aluminum, and total residual chlorine did not demonstrate reasonable potential to exceed water quality objectives/criteria. Thus, specific monitoring requirements for these parameters have not been retained from Order R5-2014-0042-01.
- 4. Order R5-2014-0042-01 required weekly effluent monitoring for electrical conductivity. Electrical conductivity in the discharge has been relatively stable and within the effluent limitation. This NOA reduces the monitoring for electrical conductivity to monthly.
- Order R5-2014-0042-01 did not include effluent monitoring for dissolved organic carbon. This NOA includes quarterly monitoring for dissolved organic carbon in order to assess aluminum water quality criteria that is dependent on dissolved organic carbon concentrations.
- 6. Order R5-2014-0042-01 required effluent monitoring for priority pollutants and other pollutants of concern quarterly during the fourth year of the permit term. This NOA revises that schedule to monitoring twice during the permit term (see MRP, Appendix D, section IX.F and Table D-9). The Central Valley Water Board finds that this frequency is sufficient to characterize the discharge.

#### C. Whole Effluent Toxicity Testing Requirements

- Acute Toxicity. Effluent monitoring frequency for acute toxicity 96-hour bioassay (yearly) has been retained from previous Order R5-2014-0042-01 to demonstrate compliance with the effluent limitation for acute toxicity. The Central Valley Water Board finds that this frequency will provide sufficient information to determine if the Facility is contributing acute toxicity to Mariposa Creek.
- 2. **Chronic Toxicity.** Effluent monitoring frequency for chronic toxicity bioassay testing (yearly) has been retained from previous Order R5-2014-0042-01. Chronic whole effluent toxicity testing is required when discharging to Mariposa Creek in order to demonstrate compliance with the Basin Plan's narrative toxicity objective.

#### D. Receiving Water Monitoring

#### 1. Mariposa Creek

- a. Receiving water monitoring is necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge to Mariposa Creek.
- b. Monitoring data collected during the term of Order R5-2014-0042 indicates that the discharge has not caused significant impacts to Mariposa Creek. Therefore, this NOA retains the monitoring frequency for pH, dissolved oxygen, temperature, and turbidity (weekly). The Central Valley Water Board finds that the weekly frequency for these constituents is sufficient to assess compliance

- with receiving water limitations and to assess the impacts of the discharge to Mariposa Creek.
- c. Order R5-2014-0042-01 required receiving water monitoring for hardness (monthly) and electrical conductivity (weekly). Monitoring data collected during the term of Order R5-2014-0042-01 indicates that the discharge has not caused significant impacts to Mariposa Creek. Therefore, this NOA decreases the monitoring frequency for hardness (quarterly) and electrical conductivity (quarterly). The Central Valley Water Board finds that these frequencies are sufficient to assess compliance with receiving water limitations and to assess the impacts of the discharge to Mariposa Creek.
- d. Order R5-2014-0042-01 did not include receiving water monitoring for dissolved organic carbon. This NOA includes quarterly monitoring for dissolved organic carbon in order to assess aluminum water quality criteria that is dependent on dissolved organic carbon concentrations.
- e. Order R5-2014-0042-01 required upstream receiving water monitoring for priority pollutants and other pollutants of concern concurrently with effluent monitoring for one year with samples taken quarterly during the fourth year of the permit term. This NOA reduces upstream receiving water characterization monitoring to once per permit term. The sample shall be collected no earlier than three years after adoption of the NOA and no later than six months before expiration of this NOA. (see MRP, Appendix D, Table D-9). The Central Valley Water Board finds that this frequency is sufficient to assess the impacts of the discharge to Mariposa Creek.
- 2. Groundwater Not Applicable
- E. Biosolids Monitoring Not Applicable
- F. Pond Monitoring Not Applicable
- **G. Filtration System Monitoring** 
  - 1. Filtration system monitoring for turbidity is required for Dischargers of tertiary treated wastewater that meet the eligibility criteria in section I.B.4 of the Municipal General Order to determine compliance with the filtration system operating specifications in section VII.C.4.a of the Municipal General Order.
  - Continuous monitoring for turbidity is included under the UV Disinfection System monitoring requirements in previous Order R5-2014-0042-01. Continuous monitoring for turbidity is retained in this NOA as specified in section IX.D.a of the MRP, Appendix D.

#### H. UV Disinfection System Monitoring

1. Continuous monitoring for flow, number of UV banks in operation, UV transmittance, and UV dose has been retained from previous Order R5-2014-0042-01.

#### I. Effluent and Receiving Water Characterization Monitoring

1. Order R5-2014-0042-01 included effluent and receiving water characterization monitoring requirements (referred to in Order R5-2014-0042-01 as priority pollutants and other constituents of concern); monitoring of the effluent quarterly in the fourth

year of the permit term and monitoring of the receiving water quarterly in the fourth year of the permit term. This NOA requires characterization monitoring of the effluent twice during the permit term, which must be conducted during the second year after the effective date of the NOA. This NOA requires the characterization monitoring of the receiving water once during the permit term, beginning no earlier than three years into the permit and concluding prior to six months before the expiration of the Order, concurrent with one of the effluent characterization monitoring events. The Central Valley Water Board finds that the above-mentioned frequency of characterization monitoring will be sufficient to characterize the discharge from the Facility.

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

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

#### IV. SUMMARY OF REASONABLE POTENTIAL ANALYSIS

#### Abbreviations used in Table C-1:

MEC = Maximum Effluent Concentration

B = Maximum Receiving Water Concentration or lowest detection level, if non-detect

C = Criterion used for Reasonable Potential Analysis
CMC = Criterion Maximum Concentration (CTR or NTR)
CCC = Criterion Continuous Concentration (CTR or NTR)

Water & Org = Human Health Criterion for Consumption of Water & Organisms (CTR or NTR)
Org Only = Human Health Criterion for Consumption of Organisms Only (CTR or NTR)

Basin Plan = Numeric Site-Specific Basin Plan Water Quality Objective MCL = Drinking Water Standards Maximum Contaminant Level

NA = Not Available ND = Non-detect

Table C-1: SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Parameter	Units	MEC	В	С	СМС	ccc	Water & Org	Org. Only	Basin Plan	MCL	Reasonable Potential
Ammonia	mg/L	5.7	NA	2.69	9.64	2.69	NA	NA	NA	NA	Yes
Cyanide	μg/L	ND	ND	5.2	22	5.2	700	220,000	NA	150	No
Dichlorobromomethane	μg/L	ND	ND	0.56	NA	NA	0.56	46	NA	80	No
Chlorodibromomethane	μg/L	ND	ND	0.41	NA	NA	0.41	34	NA	80	No
Total trihalomethanes	μg/L	ND	ND	80	NA	NA	NA	NA	NA	80	No
Copper, Total Recoverable	μg/L	9.3	2.7	12	18	12	1,300	NA	NA	1,000	Yes
Zinc, Total Recoverable	μg/L	73	19	150	150	150	NA	NA	NA	5,000	Yes
Electrical Conductivity	µmhos/cm	633	380	900	NA	NA	NA	NA	NA	900	No
Nitrate plus Nitrite (as N)	mg/L	12.4	NA	10	NA	NA	NA	NA	NA	10	Yes

#### 1. Table C-1 Notes:

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

- ii. **CMC.** For ammonia, CMC is based on U.S. EPA National Recommended Ambient Water Quality Criteria Freshwater Aquatic Life Protection, 1-hour average. For copper, cyanide, and zinc, the CMC is based on the California Toxics Rule, short-term average criterion.
- iii. **CCC.** For ammonia, the CCC is based on U.S. EPA National Recommended Ambient Water Quality Criteria Freshwater Aquatic Life Protection, 30-day average. For copper, cyanide, and zinc, the CCC is based on the California Toxics Rule, 4-day average criterion.
- iv. **Ammonia and Nitrate + Nitrite.** RP 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).
- v. **Electrical Conductivity.** Represents the maximum observed calendar year annual average for calculation of effluent limits in section VI.5 of this NOA.
- vi. **Cyanide, Chlorodibromomethane, Dichlorobromomethane, and Total Trihalomethanes.** Post-upgrade data was used for RP analysis, since the old chlorine disinfection system contributed or likely contributed to lab results indicating detections in the past.
- vii. **Total Recoverable Copper and Zinc.** RP is based Trigger 3 of the of section I in Attachment C, Screening Levels, of the Municipal General Order. The Discharger uses calcium polysulfide and polyaluminum chloride to actively treat for copper and zinc. If this treatment is discontinued, copper and zinc concentrations may exceed criteria. Additional information in this trigger includes the potential for inadequate treatment of copper and zinc removal.

# **APPENDIX D - MONITORING AND REPORTING PROGRAM**

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#### APPENDIX D - MONITORING AND REPORTING PROGRAM (MRP)

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

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

#### I. GENERAL MONITORING PROVISIONS

- **A.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of the Central Valley Water Board.
- **B.** Final effluent samples shall be taken downstream of the last addition of wastes to the treatment or discharge works where a representative sample may be obtained prior to mixing with the receiving waters. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.
- C. Chemical, bacteriological, and bioassay analyses of any material required by this Order shall be conducted by a laboratory accredited for such analyses by the State Water Resources Control Board (State Water Board), Division of Drinking Water (DDW), in accordance with the provision of Water Code section 13176. Laboratories that perform sample analyses must be identified in all monitoring reports submitted to the Central Valley Water Board. Data generated from field measurements such as pH, dissolved oxygen, electrical conductivity (EC), turbidity, temperature, and residual chlorine are exempt pursuant to Water Code Section 13176. A manual containing the steps followed in this program for any field measurements such as pH, dissolved oxygen, EC, turbidity, temperature, and residual chlorine must be kept onsite in the treatment facility laboratory and shall be available for inspection by Central Valley Water Board staff. The Discharger must demonstrate sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform these field measurements. The Quality Assurance-Quality Control Program must conform to U.S. EPA guidelines or to procedures approved by the Central Valley Water Board.
- D. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary, at least yearly, to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.
- E. Monitoring results, including noncompliance, shall be reported at intervals and in a

manner specified in this MRP.

- **F.** Laboratory analytical methods shall be sufficiently sensitive in accordance with the Sufficiently Sensitive Methods Rule (SSM Rule) specified under 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv). A U.S. EPA-approved analytical method is sufficiently sensitive for pollutant/parameter where:
  - The method minimum level (ML) is at or below the applicable water quality objective for the receiving water, or;
  - The method ML is above the applicable water quality objective for the receiving water but the amount of the pollutant/parameter in the discharge is high enough that the method detects and quantifies the level of the pollutant/parameter, or;
  - The method ML is above the applicable water quality objective for the receiving water, but the ML is the lowest of the 40 C.F.R. 136 U.S. EPA-approved analytical methods for the pollutant/parameter.
- **G.** Dischargers shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Resources Control Board at the following address:

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

- **H.** The Discharger shall file with the Central Valley Water Board technical reports on self-monitoring performed according to the detailed specifications contained in this MRP.
- I. The results of all monitoring required by this MRP shall be reported to the Central Valley Water Board and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of the NOA. Unless otherwise specified, discharge flows shall be reported in terms of the monthly average and the daily maximum discharge flows.
- J. Some facilities may have multiple discharge points, ponds, receiving waters, or other monitoring locations. Site-specific monitoring requirements will be included in the Notice of Applicability.

#### **II. MONITORING LOCATIONS**

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

**Table D-1. Monitoring Station Locations** 

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
	INF-001	A location where a representative sample of the influent into the Facility can be collected prior to any additives, treatment processes, and plant return flows.
001	EFF-001	A location where a representative sample of the effluent can be collected downstream from the last connection through which wastes can be admitted to the outfall.
	RSW-001	Approximately 100 feet upstream from Discharge Point 001 in Mariposa Creek.
	RSW-002	Approximately 300 feet downstream from Discharge Point 001 in Mariposa Creek.
	SPL-001	Location(s) where a representative sample of the municipal water supply can be collected.
	FIL-001	A location where a representative sample of the influent to the filtration system can be obtained.
	FIL-002	A location where a representative sample of the effluent from the filtration system can be obtained and prior to the disinfection system.
	UVS-001	A location where a representative sample of wastewater can be collected immediately upstream of the ultraviolet light (UV) disinfection system.

#### III. INFLUENT MONITORING REQUIREMENTS

# A. Monitoring Location INF-001

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

**Table D-2. Influent Monitoring** 

Parameter	Units	Sample Type	Sampling Frequency
Flow	MGD	Meter	Continuous
Biochemical Oxygen Demand (5- day @ 20 degrees 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. All composite samples shall be collected from a 24-hour flow proportional composite.

#### IV. EFFLUENT MONITORING REQUIREMENTS

#### A. Monitoring Location EFF-001

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

**Table D-3. Effluent Monitoring** 

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	MGD	Meter	Continuous
Biochemical Oxygen Demand (5-day @ 20 degrees C)	mg/L	24-hr Composite	1/Week
Biochemical Oxygen Demand (5-day @ 20 degrees C)	% removal	Calculate	1/Week
рН	standard units	Grab	1/Week
Total Suspended Solids	mg/L	24-hr Composite	1/Week
Total Suspended Solids	% removal	Calculate	1/Week
Copper, Total Recoverable	μg/L	24-hr Composite	1/Month
Zinc, Total Recoverable	μg/L	24-hr Composite	1/Month
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Week
Dissolved Oxygen	mg/L	Grab	2/Month
Electrical Conductivity @ 25 degrees C	µmhos/cm	Grab or 24-hr Composite	1/Month
Hardness, Total (as CaCO <sub>3</sub> )	mg/L	Grab	1/Quarter

Parameter	Units	Sample Type	Minimum Sampling Frequency
Dissolved Organic Carbon (DOC)	mg/L	Grab	1/Quarter
Nitrate Plus Nitrite (as N)	mg/L	Grab	1/Month
Nitrate Nitrogen, Total (as N)	mg/L	Grab	1/Month
Nitrite Nitrogen, Total (as N)	mg/L	Grab	1/Month
Temperature	degrees C	Grab	1/Week
Chlorine, Total Residual	mg/L	Grab	1/Day
Total Coliform Organisms	MPN/100 mL	Grab	3/Week
Priority Pollutants and Other Constituents of Concern (see Section IX.F below	See Section IX.F below	See Section IX.F below	See Section IX.F below
Whole Effluent Toxicity (see Section V below)	See Section V below	See Section V below	See Section V below

- 2. Table D-3 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-3:
  - a. All composite samples shall be collected from a 24-hour flow proportional composite.
  - b. **Applicable to all parameters.** Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
  - c. A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.
  - d. **Ammonia.** Samples for pH and temperature shall be recorded at the time of ammonia sample collection.

- e. A hand-held field meter may be used for pH, electrical conductivity, temperature, and dissolved oxygen, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.
- f. **Priority pollutant constituents.** The reporting level(s) for total recoverable copper and total recoverable zinc shall be consistent with Sections 2.4.2 and 2.4.3 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* and the SSM Rule specified under 40 C.F.R. sections 122.21(e)(3) and 122.4(i)(1)(iv).
- g. **Whole Effluent Toxicity**. Ammonia nitrogen, Total (as N) shall be sampled concurrent with whole effluent toxicity monitoring.
- h. **Total Residual Chlorine**. Total residual chlorine shall be monitored using an analytical method that is sufficiently sensitive to measure at the permitted level of 0.01 mg/L. Chlorine residual monitoring is only required during maintenance events where chlorine is used, as described more fully in Footnote 14 of Table E-3 of the Municipal General Order.
- i. **Hardness-Dependent Metals**. Hardness, total (as CaCO<sub>3</sub>) samples shall be collected concurrently with copper and zinc samples.
- j. **Total Coliform Organisms**. Total coliform organisms samples may be collected at any point following disinfection.
- k. **Dissolved Organic Carbon.** Hardness, total (as CaCO<sub>3</sub>) and pH samples shall be taken concurrent with dissolved organic carbon samples.

# V. WHOLE EFFLUENT TOXICITY (WET)TESTING REQUIREMENTS

#### A. Acute Toxicity Testing.

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

- Monitoring Frequency The Discharger shall perform annual acute toxicity testing
  while the Facility is discharging to Mariposa Creek and concurrent with effluent
  ammonia sampling. The Discharger may use chronic toxicity tests conducted during
  the same period to derive acute toxicity results if the acute toxicity testing
  requirements are satisfied with the chronic toxicity test.
- Sample Types The Discharger may use flow-through or static renewal testing. For static renewal testing, the samples shall be flow proportional 24-hour composite samples, and shall be representative of the volume and quality of the discharge. The effluent samples shall be taken at Monitoring Location EFF-001.s
- 3. <u>Test Species</u> The test species shall be fathead minnows (*Pimephales promelas*).
- 4. Test Duration Test duration shall be 96 hours.
- 5. <u>Methods</u> The acute toxicity testing samples shall be analyzed using EPA-821-R-02-012, Fifth Edition. Temperature and pH shall be recorded at the time of sample

- collection. No pH adjustment may be made unless approved by the Executive Officer.
- 6. <u>Test Failure</u> If an acute toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger must re-sample and re-test as soon as possible, not to exceed 7 days following notification of test failure.

#### **B.** Chronic Toxicity Testing.

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

- 1. <u>Monitoring Frequency</u> The Discharger shall perform annual chronic toxicity testing when discharging to Mariposa Creek. If the result of the routine chronic toxicity testing event exhibits toxicity, demonstrated by a result greater than 1.3 TUc (as 100/EC25) AND a percent effect greater than 25 percent at 100 percent effluent, the Discharger has the option of conducting two additional compliance monitoring chronic toxicity testing events in order to calculate a median. The optional compliance monitoring events shall occur at least one week apart, and the final monitoring event shall be initiated no later than 6 weeks from the routine monitoring event that exhibited toxicity. See Compliance Determination Section VIII.J of the Municipal General Order for procedures for calculating the 6-week median.
- Sample Types Effluent samples shall be flow proportional 24-hour composite samples and shall be representative of the volume and quality of the discharge. The effluent samples shall be taken at Monitoring Location EFF-001. The receiving water control shall be a grab sample obtained from Monitoring Location RSW-001.
- 3. <u>Sample Volumes</u> Adequate sample volumes shall be collected to provide renewal water to complete the test in the event that the discharge is intermittent.
- 4. <u>Test Species</u> Chronic toxicity testing measures sublethal (e.g., reduced growth, reproduction) and/or lethal effects to test organisms exposed to an effluent compared to that of the control organisms. The Discharger shall conduct chronic toxicity tests with the following three species until a most sensitive species has been approved for the remainder of the NOA:
  - a. The cladoceran, water flea, *Ceriodaphnia dubia* (survival and reproduction test);
  - b. The fathead minnow, Pimephales promelas (larval survival and growth test); and
  - c. The green alga, Selenastrum capricornutum (growth test).
- 5. <u>Most Sensitive Species Determination</u> The Discharger shall determine the most sensitive species by examining at least the four most recent three species chronic toxicity tests. The tests shall be performed using 100 percent effluent and one control. If a single test in the species sensitivity screening testing exceeds 1 TUc (as 100/NOEC), then the species used in that test shall be established as the most sensitive species. If there is more than a single test that exceeds 1 TUc (as 100/NOEC), then of the species exceeding 1 TUc (as 100/NOEC), 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 exceeds 1 TUc (as 100/NOEC), but at least one of the species exhibits a percent effect greater than

25 percent, then the single species that exhibits the highest percent effect shall be established as the most sensitive species. In all other circumstances, including where documented issues with the sample analysis or related to the sample analysis prevent a clear selection of the most sensitive species, the Executive Officer shall have discretion to determine which single species is the most sensitive considering the test results from the species sensitivity screening.

The most sensitive species shall be used for chronic toxicity testing for the remainder of the permit term. The Discharger shall request Executive Officer approval of the most sensitive species determination after conducting its first three annual chronic toxicity monitoring events. If the Executive Officer approval has not been received, all three species must be tested as described in section V.B.1 Monitoring Frequency above until Executive Officer approval is granted.

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

Table D-4. Chronic Toxicity Testing Dilution Series

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

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

exceed the monitoring trigger specified in the Special Provision at section VII.C.2.a.iii of the Municipal General Order.)

#### C. WET Testing Notification Requirements.

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

#### D. WET Testing Reporting Requirements.

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

- Chronic WET Reporting. Chronic toxicity monitoring results shall be reported to the Central Valley Water Board with the annual WET self-monitoring report (SMR) within 30 day following completion of the test, and shall contain, at minimum:
  - a. The results expressed in TUc, measured as 100/NOEC, and also measured as 100/LC50, 100/EC25, 100/IC25, and 100/IC50, as appropriate.
  - b. The percent effect at the instream waste concentration;
  - c. The statistical methods used to calculate endpoints;
  - d. The statistical output page, which includes the calculation of the percent minimum significant difference (PMSD);
  - e. The dates of sample collection and initiation of each toxicity test; and
  - f. The results compared to the numeric toxicity monitoring trigger or effluent limitation.

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

- 2. **Acute WET Reporting.** Acute toxicity test results shall be submitted with the annual WET SMR **within 30 days** following completion of the test and reported as percent survival.
- 3. **TRE or Toxicity Evaluation Study Reporting**. Reports for TREs or a Toxicity Evaluation Study shall be submitted in accordance with the schedule contained in the Discharger's approved TRE Workplan, or as amended by the Discharger's TRE Action Plan.
- 4. **Quality Assurance (QA).** The Discharger must provide the following information for QA purposes:
  - Results of the applicable reference toxicant data with the statistical output page giving the species, NOEC, LOEC, type of toxicant, dilution water used, concentrations used, PMSD, and dates tested.
  - b. The reference toxicant control charts for each endpoint, which include summaries of reference toxicant tests performed by the contracting laboratory.

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

# VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE VIII.RECEIVING WATER MONITORING REQUIREMENTS

#### A. Monitoring Locations RSW-001 and RSW-002

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

Table D-5. Receiving Water Monitoring Requirements

	rable 2 of receiving tracer memoring recognition						
Parameter	Units	Sample Type	Minimum Sampling Frequency				
рН	standard units	Grab	1/Week				
Dissolved Oxygen	mg/L	Grab	1/Week				
Electrical Conductivity @ 25 degrees C	μmhos/cm	Grab	1/Quarter				
Hardness, Total (as CaCO <sub>3</sub> )	mg/L	Grab	1/Quarter				
Temperature	degrees C	Grab	1/Week				
Turbidity	NTU	Grab	1/Week				
Dissolved Organic Carbon (DOC)	mg/L	Grab	1/Quarter				
Priority Pollutants and Other Constituents of Concern	See Section IX.F below	See Section IX.F below	See Section IX.F below				

- 2. Table D-5 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-5:
  - a. A hand-held field meter may be used for pH, electrical conductivity, temperature, dissolved oxygen, and turbidity, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter

- used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.
- b. A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.
- c. **Applicable to all parameters.** Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
- d. Whole Effluent Toxicity. Ammonia nitrogen, Total (as N) shall be sampled concurrent with whole effluent toxicity monitoring.
- e. **Dissolved Organic Carbon.** Hardness, total (as CaCO3) and pH samples shall be taken concurrent with dissolved organic carbon samples.
- 3. In conducting the receiving water sampling required by section VIII.A.1 above, a log shall be kept of the receiving water conditions throughout the reach bounded by Monitoring Locations RSW-001 and RSW-002. Attention shall be given to the presence or absence of:
  - a. Floating or suspended matter;
  - b. Discoloration;
  - c. Bottom deposits;
  - d. Aquatic life;
  - e. Visible films, sheens, or coatings;
  - f. Fungi, slimes, or objectionable growths; and
  - g. Potential nuisance conditions.

Notes on receiving water conditions shall be summarized in the monitoring report.

#### IX. OTHER MONITORING REQUIREMENTS

- A. Biosolids Not Applicable
- B. Ponds Not Applicable
- C. Municipal Water Supply
  - 1. Monitoring Location SPL-001
    - The Discharger shall monitor the municipal water supply at Monitoring Location SPL-001 as specified in Table D-6 and the testing requirements in section IX.C.2.

**Table D-6. Municipal Water Supply Monitoring Requirements** 

Parameter	Units	Sample Type	Sampling Frequency
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Year
Total Dissolved Solids	mg/L	Grab	1/Year

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

- a. If the water supply is from more than one source electrical conductivity shall be reported as a weighted average and include copies of supporting calculations.
- b. A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.
- c. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
- d. A hand-held field meter may be used, provided the meter utilizes a U.S. EPAapproved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

#### D. Filtration System

# 1. Monitoring Locations FIL-001 and FIL-002

a. The Discharger shall monitor the filtration system at Monitoring Locations FIL-001 and FIL-002 as specified in Table D-7 and the testing requirements in section IX.D.2.

**Table D-7. Filtration System Monitoring Requirements** 

Parameter	Units	Sample Type	Sampling Frequency
Turbidity	NTU	Meter	Continuous

- 2. Table D-7 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-7:
  - a. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods that have been approved by the Central Valley Water Board or the State Water Board.
  - b. For continuous analyzers, the Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation. If analyzer(s) fail to provide continuous monitoring for more than two hours and influent and/or effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results.
  - c. Report daily average and maximum turbidity.

# E. Ultraviolet Light (UV) Disinfection System

#### 1. Monitoring Locations UVS-001

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

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

- 2. Table D-8 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-8:
  - a. For continuous analyzers, the Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation. If analyzer(s) fail to provide continuous monitoring for more than two hours and influent and/or effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results.
  - b. The Discharger shall not decrease power settings or reduce the number of UV lamp banks in operation while the continuous analyzers are out of service and water is being disinfected.
  - c. Report daily minimum number of UV banks in operation.
  - d. Report daily minimum hourly average UV transmittance. The minimum hourly average transmittance shall consist of lowest average transmittance recorded over an hour of a day when flow is being discharged. If the system does not operate for an entire hour interval on a given day or if effluent flow is not discharged for an entire hour, the transmittance will be averaged based on the actual operation time when discharges are occurring.
  - e. Report daily minimum hourly average UV dose. The minimum hourly average dose shall consist of lowest hourly average dose provided in any channel that had at least one bank of lamps operating during the hour interval. For channels that did not operate for the entire hour interval or when effluent flow is not discharged for the entire hour, the dose will be averaged based on the actual operation time when discharges occurred.

# F. Effluent and Receiving Water Characterization

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

1. Monitoring Frequency. Samples shall be collected from the effluent at (Monitoring Location EFF-001) twice during the permit term and once during the permit term for the upstream receiving water (Monitoring Location RSW-001) with all the sampling completed during the 2<sup>nd</sup> year after the effective date of this Notice of Applicability. One of the effluent monitoring events shall occur during the dry season and the other monitoring event shall occur during the wet season. Effluent sampling events

should occur once between 1 April 2022 and 30 September 2022 and once between 1 October 2022 and 31 March 2023. All sampling shall be analyzed for the constituents listed in Table D-9, below. Constituents shall be collected and analyzed consistent with the Discharger's Analytical Methods Report (see Section X.D.3 below) using sufficiently sensitive analytical methods and Reporting Levels per the Sufficiently Sensitive Methods (SSM) Rule (see also General Monitoring Provision F). The results of such monitoring shall be submitted to the Central Valley Water Board with the monthly SMR's. Each individual monitoring event shall provide representative sample results for the effluent and upstream receiving water.

- 2. Concurrent Sampling. Receiving water sampling shall be performed at approximately the same time and on the same date as the effluent sampling events.
- **3. Sample Type.** All receiving water samples shall be taken as grab samples. Effluent samples shall be taken as described in Table D-9, below and the testing requirements in section IX.F.5. A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.
- 4. Analytical Methods Report Certification. Prior to beginning the Effluent and Receiving Water Characterization monitoring, the Discharger shall provide a certification acknowledging the scheduled start date of the Effluent and Receiving Water Characterization monitoring and confirming that samples will be collected and analyzed as described in the previously submitted Analytical Methods Report. If there are changes to the previously submitted Analytical Methods Report, the Discharger shall outline those changes. A one-page certification form will be provided by the Central Valley Water Board staff with the Notice of Applicability that the Discharger can use to satisfy this requirement. The certification form shall be submitted electronically via CIWQS submittal by the due date in specified in the Technical Reports table (Table D-11).

Table D-9. Effluent and Receiving Water Characterization Monitoring

Parameter	Units	Effluent Sample Type
2- Chloroethyl vinyl ether	μg/L	Grab
Acrolein	μg/L	Grab
Acrylonitrile	μg/L	Grab
Benzene	μg/L	Grab
Bromoform	μg/L	Grab
Carbon Tetrachloride	μg/L	Grab
Chlorobenzene	μg/L	Grab
Chloroethane	μg/L	Grab
Chloroform	μg/L	Grab
Chloromethane	μg/L	Grab
Dibromochloromethane	μg/L	Grab
Dichlorobromomethane	μg/L	Grab
Dichloromethane	μg/L	Grab
Ethylbenzene	μg/L	Grab

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

Parameter	Units	Effluent Sample Type
4-Bromophenyl phenyl ether	μg/L	Grab
4-Chlorophenyl phenyl ether	μg/L	Grab
Acenaphthene	μg/L	Grab
Acenaphthylene	μg/L	Grab
Anthracene	μg/L	Grab
Benzidine	μg/L	Grab
Benzo(a)pyrene (3,4-Benzopyrene)	μg/L	Grab
Benzo(g,h,i)perylene	μg/L	Grab
Benzo(k)fluoranthene	μg/L	Grab
Bis(2-chloroethoxy) methane	μg/L	Grab
Bis(2-chloroethyl) ether	μg/L	Grab
Bis(2-chloroisopropyl) ether	μg/L	Grab
Bis(2-ethylhexyl) phthalate	μg/L	Grab
Butyl benzyl phthalate	μg/L	Grab
Chrysene	μg/L	Grab
Di-n-butylphthalate	μg/L	Grab
Di-n-octylphthalate	μg/L	Grab
Dibenzo(a,h)-anthracene	μg/L	Grab
Diethyl phthalate	μg/L	Grab
Dimethyl phthalate	μg/L	Grab
Fluoranthene	μg/L	Grab
Fluorene	μg/L	Grab
Hexachlorocyclopentadiene	μg/L	Grab
Indeno(1,2,3-c,d)pyrene	μg/L	Grab
Isophorone	μg/L	Grab
N-Nitrosodiphenylamine	μg/L	Grab
N-Nitrosodimethylamine	μg/L	Grab
N-Nitrosodi-n-propylamine	μg/L	Grab
Nitrobenzene	μg/L	Grab
Pentachlorophenol	μg/L	Grab
Phenanthrene	μg/L	Grab
Phenol	μg/L	Grab
Pyrene	μg/L	Grab
Aluminum	μg/L	24-hr Composite
Antimony	μg/L	24-hr Composite
Arsenic	μg/L	24-hr Composite
Asbestos	MFL	24-hr Composite
Beryllium	μg/L	24-hr Composite
Cadmium	μg/L	24-hr Composite
Chromium (Total)	μg/L	24-hr Composite

Parameter	Units	Effluent Sample Type
Chromium (VI)	μg/L	24-hr Composite
Copper	μg/L	24-hr Composite
Cyanide	μg/L	24-hr Composite
Iron	μg/L	24-hr Composite
Lead	μg/L	24-hr Composite
Mercury	μg/L	24-hr Composite
Manganese	μg/L	24-hr Composite
Nickel	μg/L	24-hr Composite
Selenium	μg/L	24-hr Composite
Silver	μg/L	24-hr Composite
Thallium	μg/L	24-hr Composite
Zinc	μg/L	24-hr Composite
4,4'-DDD	μg/L	24-hr Composite
4,4'-DDE	μg/L	24-hr Composite
4,4'-DDT	μg/L	24-hr Composite
alpha-Endosulfan	μg/L	24-hr Composite
alpha-Hexachlorocyclohexane (BHC)	μg/L	24-hr Composite
Aldrin	μg/L	24-hr Composite
beta-Endosulfan	μg/L	24-hr Composite
beta-Hexachlorocyclohexane	μg/L	24-hr Composite
Chlordane	μg/L	24-hr Composite
delta-Hexachlorocyclohexane	μg/L	24-hr Composite
Dieldrin	μg/L	24-hr Composite
Endosulfan sulfate	μg/L	24-hr Composite
Endrin	μg/L	24-hr Composite
Endrin Aldehyde	μg/L	24-hr Composite
Heptachlor	μg/L	24-hr Composite
Heptachlor Epoxide	μg/L	24-hr Composite
Lindane (gamma-Hexachlorocyclohexane)	μg/L	24-hr Composite
PCB-1016	μg/L	24-hr Composite
PCB-1221	μg/L	24-hr Composite
PCB-1232	μg/L	24-hr Composite
PCB-1242	μg/L	24-hr Composite
PCB-1248	μg/L	24-hr Composite
PCB-1254	μg/L	24-hr Composite
PCB-1260	μg/L	24-hr Composite
Toxaphene	μg/L	24-hr Composite
2,3,7,8-TCDD (Dioxin)	μg/L	24-hr Composite

Parameter	Units	Effluent Sample Type
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 <sub>3</sub> )	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
рН	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 <sub>3</sub> )	mg/L	24-hr Composite
Temperature	degrees C	Grab
Total Dissolved Solids (TDS)	mg/L	24-hr Composite
Dissolved Organic Carbon (DOC)	mg/L	24-hr Composite

- 5. Table D-9 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-9:
  - a **Bis (2-ethylhexyl) phthalate.** In order to verify if bis (2-ethylhexyl) phthalate is truly present in the effluent discharge, the Discharger shall take steps to assure that sample containers, sampling apparatus, and analytical equipment are not sources of the detected contaminant.
  - b. All composite samples shall be collected from a 24-hour flow proportional composite.
  - c. The Discharger is not required to conduct effluent monitoring for constituents that have already been sampled in a given month, as required in Table D-3, except for hardness, pH, and temperature, which shall be conducted concurrently with the effluent sampling.
  - d. **Total Mercury and methylmercury.** Samples for total mercury and methylmercury shall be taken using clean hands/dirty hands procedures, as described in U.S. EPA method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels, for collection of equipment blanks (section 9.4.4.2), and shall be analyzed by U.S. EPA method 1630/1631 (Revision E) with a reporting limit of 0.05 ng/L for methylmercury and 0.5 nanograms per liter (ng/L) for total mercury.

#### X. REPORTING REQUIREMENTS

# A. General Monitoring and Reporting Requirements

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

# 2. Compliance Time Schedules - Not Applicable

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

# **B. Self-Monitoring Reports**

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

Table D-10. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Continuous	1 April 2021	All	Submit with monthly SMR
1/Day	1 April 2021	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly SMR

Sampling Frequency	Monitoring Period Begins On	Monitoring Period SMR Due Da		
1/Week	1 April 2021	Sunday through Saturday	Submit with monthly SMR	
3/Week	1 April 2021	Sunday through Saturday	Submit with monthly SMR	
1/Month 2/month	1 April 2021	1st day of calendar month through last day of calendar month	First day of second calendar month following month of sampling	
1/Quarter	1 April 2021	1 January through 31 March; 1 April through 30 June; 1 July through 30 September; 1 October through 31 December	1 May; 1 August; 1 November; 1 February of following year (respectively)	
1/Year	1 April 2021	1 January through 31 December	1 February of following year	

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

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

- a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.
  - For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
- d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the

Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

- 5. Multiple Sample Data. When determining compliance with an AMEL, AWEL, or maximum daily effluent limitation (MDEL) for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or ND. In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
  - a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
  - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
- 6. The Discharger shall submit SMR's in accordance with the following requirements:
  - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data are required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
  - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation. The cover letter must be uploaded directly into CIWQS and violations must be entered into CIWQS under the Violations tab for the reporting period in which the violation occurred in addition to them being identified in the cover letter.
  - c. The Discharger shall attach final laboratory reports for all contracted, commercial laboratories, including quality assurance/quality control information, with all its SMR's for which sample analyses were performed or as otherwise specified in the Notice of Applicability. Bench sheets are not required but should be available upon request by Regional Board staff.
- 7. The Discharger shall submit in the SMR's calculations and reports in accordance with the following requirements.
  - a. **Calendar Annual Average Limitations –** For Dischargers subject to effluent limitations specified as "calendar annual average" (e.g., electrical conductivity), the Discharger shall report the calendar annual average in the December SMR.

The annual average shall be calculated as the average of the samples gathered for the calendar year.

- b. Mass Loading Limitations Not Applicable.
- c. **Removal Efficiency (BOD5 and TSS).** The Discharger shall calculate and report the percent removal of BOD5 and TSS in the SMR's. The percent removal shall be calculated as specified in section VIII.A of the Limitations and Discharge Requirements in the Municipal General Order.
- d. **Total Coliform Organisms Effluent Limitations.** The Discharger shall calculate and report the 7-day median of total coliform organisms for the effluent. The 7-day median of total coliform organisms shall be calculated as specified in section VIII.E of the Limitations and Discharge Requirements in the Municipal General Order.
- e. Total Calendar Annual Mass Loading Mercury Effluent Limitations Not Applicable.
- f. Temperature Effluent Limitation Not Applicable.
- g. Chlorpyrifos and Diazinon Effluent Limitations Not Applicable.
- h. **Dissolved Oxygen Receiving Water Limitations.** The Discharger shall report monthly in the SMR the dissolved oxygen concentrations in the receiving water (Monitoring Locations RSW-001 and RSW 002).
- i. **Turbidity Receiving Water Limitations**. The Discharger shall calculate and report the turbidity increase in the receiving water applicable to the natural turbidity condition specified in section VI.A.18.a, of the Limitations and Discharge Requirements in the Municipal General Order.
- j. Temperature Receiving Water Limitations. The Discharger shall calculate and report the temperature increase in the receiving water based on the difference in temperature at Monitoring Locations RSW-001 and RSW-002.

# C. Discharge Monitoring Reports (DMR's)

1. The Discharger shall electronically submit DMR's together with SMR's using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic submittal of DMR's will be in addition to electronic submittal of SMR's. Information about electronic submittal of DMR's is provided by the <a href="Discharge Monitoring Report website">Discharge Monitoring Report website</a>: (http://www.waterboards.ca.gov/water issues/programs/discharge monitoring/).

# D. Other Reports

- Special Study Reports. Special study reports required by section IX.C, Provisions, in this NOA shall be submitted in accordance with the reporting requirements in Table D-11, Technical Reports.
- 2. The Discharger shall report the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan specified in section IX Provisions in the NOA. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.

- 3. Analytical Methods Report. The Discharger shall complete and submit an Analytical Methods Report, electronically via CIWQS submittal, by the due date specified in Table D-11 below. The Analytical Methods Report shall include the following for each constituent listed in tables D-2, D-3, D-5, D-6, D-7, and D-9 of this NOA: 1) applicable water quality objective, 2) reporting level (RL), 3) method detection limit (MDL), and 4) analytical method. The analytical methods shall be sufficiently sensitive with RL's consistent with the SSM Rule (see also General Monitoring Provision F in the Municipal General Order), and with the Minimum Levels (ML's) in the SIP, Appendix 4. The "Reporting Level or RL" is synonymous with the "Method Minimum Level" described in the SSM Rule. If an RL is not less than or equal to the applicable water quality objective for a constituent, the Discharger shall explain how the proposed analytical method complies with the SSM Rule. Central Valley Water Board staff will provide a tool with the Notice of Applicability to assist the Discharger in completing this requirement. The tool will include the constituents and associated applicable water quality objectives to be included in the Analytical Methods Report.
- 4. **Annual Operations Report.** By **1 February of each year**, the Discharger shall submit a written report containing the following:
  - a. The names, certificate grades, and general responsibilities of all persons employed at the Facility.
  - b. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.
  - c. A statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration.
  - d. A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.
  - e. The Discharger may also be requested to submit an annual report to the Central Valley Water Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.
- 5. Recycled Water Policy Annual Reports. In accordance with Section 3 of the Water Quality Control Policy for Recycled Water (Recycled Water Policy) and as specified in this NOA, the Discharger shall electronically submit an annual report of monthly data to the State Water Board by 30 April annually covering the previous calendar year using the State Water Board's GeoTracker website (https://geotracker.waterboards.ca.gov/). Information for setting up and using the GeoTracker system can be found in the ESI Guide for Responsible Parties document on the State Water Board's website for Electronic Submittal of Information (https://www.waterboards.ca.gov/ust/electronic\_submittal/index.html).

The annual report to GeoTracker must include volumetric reporting of the items listed in Section 3.2 of the Recycled Water Policy (https://www.waterboards.ca.gov/board\_decisions/adopted\_orders/resolutions/2018/121118\_7\_final\_amendment\_oal.pdf). A PDF of the upload confirmation from GeoTracker for the Recycled Water Policy Annual Report shall be uploaded into CIWQS to demonstrate compliance with this reporting requirement.

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

**Table D-11. Technical Reports** 

Report #	Technical Report	Due Date	CIWQS Report Name		
1	Notice of Intent	1 April 2025	NOI		
2	Salinity Evaluation and Minimization Plan	1 October 2021	VII.C.3.c		
3	Most Sensitive Species Determination	1 March 2024	MRP V.B.5		
4	Analytical Methods Report	31 May 2021	MRP X.D.3		
5	Analytical Methods Report Certification	1 April 2022	MRP IX.F.4		
6	Annual Operations Report #1	1 February 2021	MRP X.D.4		
7	Annual Operations Report #2	1 February 2022	MRP X.D.4		
8	Annual Operations Report #3	1 February 2023	MRP X.D.4		
9	Annual Operations Report #4	1 February 2024	MRP X.D.4		
10	Annual Operations Report #5	1 February 2025	MRP X.D.4		
11	Recycled Water Policy Annual Report #1	30 April 2021	MRP X.D.5		
12	Recycled Water Policy Annual Report #2	30 April 2022	MRP X.D.5		
13	Recycled Water Policy Annual Report #3	30 April 2023	MRP X.D.5		
14	Recycled Water Policy Annual Report #4	30 April 2024	MRP X.D.5		
15	Recycled Water Policy Annual Report #5	30 April 2025	MRP X.D.5		

# APPENDIX E - CALCULATION OF WATER QUALITY-BASED EFFLUENT LIMITATIONS (WQBELS)

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

#### **Abbreviations and Notes for Table E-1:**

- 1. CV = Coefficient of Variation (established in accordance with section 1.4 of the SIP)
- 2. 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 Criteria
- 7. CCC = Criterion Continuous Concentration Criteria
- 8. Coefficient of Variation (CV) calculated using 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.
- 10. For Table E-1 Only. California Primary Maximum Contaminant Level concentration for nitrate plus nitrite.

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	0.9	Table 19B	10	20

**Table E-2. Aquatic Life WQBELs Calculations** 

Parameter	Units	CMC Criteria	CCC Criteria	Lowest Criteria	CV for Aquatic Life Calculations	Effluent Limit Table in Municipal General Order	AMEL	AWEL	MDEL
Ammonia, Total (as N)	mg/L	9.64	2.69	2.69	3.8	Table 17F	1.7	5.6	
Copper, Total Recoverable	ug/L	18	12	12	0.5	Table 7E	9.7		18
Zinc, Total Recoverable	ug/L	150	150	150	0.5	Table 9E	81		150