



Central Valley Regional Water Quality Control Board

17 October 2023

Devon Morris Chief Plant Operator City of Colfax PO Box 702, 33 South Main Street Colfax, CA 95713 VIA EMAIL: devon.morris@colfax-ca.gov

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NOTICE OF APPLICABILITY (NOA); GENERAL ORDER FOR MUNICIPAL WASTEWATER DISCHARGERS THAT MEET OBJECTIVES/CRITERIA AT THE POINT OF DISCHARGE TO SURFACE WATER ORDER R5-2023-0025 (MUNICIPAL GENERAL ORDER), NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CAG585001; CITY OF COLFAX, WASTEWATER TREATMENT PLANT, PLACER COUNTY

Our office received a Notice of Intent (NOI) dated 31 May 2022 from the City of Colfax (Discharger), for discharge of tertiary treated domestic wastewater to surface water from the City of Colfax Wastewater Treatment Plant (Facility) to the unnamed tributary of Smuthers Ravine, which is tributary to Bunch Creek, which flows into the North Fork American River. The Municipal General Order requires the submittal of an NOI to apply for regulatory coverage of a surface water discharge. Based on the NOI 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 R5-2023-0025-001 and National Pollutant Discharge Elimination System (NPDES) Permit CAG585001. Please reference your Municipal General Order enrollee number, **R5-2023-0025-001**, in your correspondence and submitted documents.

Discharge to the unnamed tributary of Smuthers Ravine from the Facility is currently regulated by an individual NPDES permit, Order R5-2018-0012 (NPDES CA0079529) issued by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) on 5 April 2018. This NOA, authorizing coverage under the Municipal General Order, shall become effective on **1 November 2023**, after which the current individual NPDES permit will be rescinded by a separate action of the Central Valley Water Board. At which time the terms and conditions in Order R5-2018-0012 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, as specified in this NOA. This action in no way prevents the Central Valley Water Board from taking enforcement action for past violations of Order R5-2018-0012.

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

The enclosed Municipal General Order is available online at

(https://www.waterboards.ca.gov/centralvalley/board_decisions/general_orders/r5-2023-0025_npdes.pdf) and can be requested by email or phone from the <u>NPDES Permitting</u> <u>Contacts webpage</u> (https://www.waterboards.ca.gov/centralvalley/water_issues/waste_t o_surface_water/contacts/).

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

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

WDID	5A310101001
CIWQS Facility Place ID	215106
Discharger	City of Colfax
Name of Facility	Wastewater Treatment Plant
Facility Street Address	23500 Grand View Way
Facility City, State, Zip Code	Colfax, CA 95713
Facility County	Placer
Facility Contact, Title, and	Devon Morris, Chief Plant Operator
Phone	(707) 359-8661
Authorized Person to Sign	Same as above
Mailing Address	PO Box 702. Colfax. CA 95713
Billing Address	Same as Mailing Address
Type of Facility	Publicly Owned Treatment Works (POTW)
Major or Minor Facility	Minor
Threat to Water Quality	1
Complexity	В
Pretreatment Program	No
Recycling Requirements	Not Applicable
Permitted Average Dry	0.65 Million Gallons per Day (MGD) when at least 10 Million Gallons (MG) stored in Pond 3 on 1 July
Weather Flow (ADWF)	0.275 MGD when less than 10 MG stored in Pond 3 on 1 July
Design ADWF	0.5 MGD (as built) 0.8 MGD (engineered wet weather design flow)
Watershed	American River
Receiving Water	Unnamed tributary of Smuthers Ravine
Receiving Water Type	Inland Surface Water
Discharge Point 001	Latitude: 39?04' 44.5" N, Longitude: 120?56' 21.5" W

Table 1. Facility Information

I. FACILITY INFORMATION

The Discharger provides sewerage service for the community of the City of Colfax and serves a population of approximately 2,000. The design average dry weather flow capacity of the Facility is 0.65 MGD when the volume of water stored in Pond 3 is greater than or equal to 10 MG on 1 July or 0.275 MGD when the volume of water in Pond 3 is less than 10 MG on 1 July.

A. Description of Wastewater and Biosolids Treatment and Controls

- 1. **Wastewater Treatment Plant (WWTP)**. The treatment plant unit processes include:
 - Fine screens,
 - Influent pumping station to equalize incoming flow,
 - Two equalization/sedimentation/biological oxidation ponds (Pond 1 and Pond 2 each with a 4-inch thick bottom, 3-inch thick side, wire mesh, gunite lining). The hydraulic conductivity for the liners is not currently known.
 - Emergency storage/equalization pond (Pond 3 a 60-mil, high-density polyethylene [HDPE] geomembrane emergency storage pond). The design hydraulic conductivity for the liner is less than 1 x 10⁻⁶ cm/s.
 - Biological treatment facility (secondary clarification, aeration basins, nitrification, and denitrification),
 - Alkalinity and BOD adjustment,
 - Aerated digesters,
 - Tertiary filtration,
 - Ultraviolet (UV) disinfection, and
 - Biosolids processing facilities.

A Suspended Air Floatation (SAF) unit is planned to be installed at the Facility during this NOA cycle. A flow schematic showing the planned SAF unit is shown as Figure B-2 in Appendix B. Discharge point 001 is located downstream of the UV system.

The design flow for the biological treatment facility is 0.65 MGD. Ponds 1 and 2 have a combined capacity of approximately 4.6 MG. When flows are greater than 0.65 MGD, flows are diverted to Pond 1, Pond 2, and/or Pond 3 until flows subside enough to treat at the biological treatment facility. Pond 1 is used seasonally as a storm capacity basin, normally during peak or surge flows, and is emptied out once flow rates drop below 0.40 MGD. Flows under 0.65 MGD are diverted to Pond 2 when necessary. Pond 2 is in continuous year-round use, and is the main pond receiving process water such as decanted press water, plant diversion water, onsite stormwater collection, and primary effluent that has not been sent to the activated sludge process.

Pond 3 is a storage pond with a capacity of 59.7 MG with 2 feet of freeboard and is necessary in the wet season to handle excess infiltration and inflow (I&I). At times Pond 3 may also contain precipitation, raw sewage, secondary treated wastewater, and tertiary treated wastewater. The dam creating Pond 3 is classified as a jurisdictional dam by the California Department of Water Resources Division of Safety of Dams. Storm water is conveyed around the Facility, with the exception of storm water runoff from the hillside directly above Pond 3, and discharged to an unnamed tributary of Smuthers Ravine. Since the Facility has a design flow under 1 MGD and does not have an approved pretreatment program per 40 Code of Federal Regulations (C.F.R.) part 403, coverage under the Statewide NPDES General Permit for Strom Water Dischargers Associated with Industrial Activities is not required.

A 60-mil, HDPE liner was installed at Pond 3 in January 2013. The design leakage rate for the liner is zero gallons per day. The natural seepage of groundwater surrounding Pond 3 passes beneath the liner and daylights at the base of the dam, flowing through a v-notch weir for flow measurement and is then discharges to the unnamed tributary of Smuthers Ravine. Pond 3 collects storm water runoff from the hillside directly above it through storm grates. All water from Pond 3 is sent back through the tertiary treatment system for processing prior to discharge to surface water. All water discharged to surface water from the treatment system is tertiary treated wastewater.

It is necessary to dewater Pond 3 during dry months in preparation for the wet season. After average precipitation-years, Pond 3 will typically be dewatered by 30 June. However, after a higher-than-average precipitation year it may be necessary to continue dewatering efforts through October and the tertiary treatment plant may be operating near capacity for short periods. Because the Average Dry Weather Flow Prohibition (see Section IV.E) is based on the average daily flow over three consecutive dry weather months, these short-term elevated flows should not result in exceedances.

2. Flow. The Facility was originally designed to provide a tertiary level of treatment for up to 0.5 MGD and was later approved by the Central Valley Water Board to increase the "engineered wet weather design flow" to 0.8 MGD, based on a completed stress test. Prior to 2018, the Central Valley Water Board permitted the Facility to discharge up to 0.275 MGD, based on the average daily flow over three consecutive dry weather months of tertiary level treated effluent. Order R5-2018-0012 increased the ADWF from 0.275 MGD to 0.65 MGD, when 10 MG or more is stored in Pond 3 as of 1 July to facilitate the dewatering of Pond 3 and not to accommodate increases in dry weather influent flowrate to the WWTP.

A water balance and an antidegradation analysis was conducted in 2017 concluded that increasing the discharge rates during high precipitation events could alleviate storage capacity issues. The 2017 Antidegradation analysis assessed reducing I&I, increasing the treatment volume of the Facility, and increasing the ADWF discharge volume. Both the 2017 water balance and an antidegradation analysis concluded that an increase in ADWF discharge capacity from 0.275 MGD to 0.65 MGD would not affect downstream beneficial uses and would not cause further exceedances of applicable water quality objectives and effluent limitations. Order R5-2018-0012 increased the permitted ADWF to 0.65 MGD when at least 10 million gallons are stored at

Pond 3 on 1 July and maintained the permitted ADWF of 0.275 MGD if less than 10 million gallons are stored at Pond 3 on 1 July.

- 3. **Biosolids.** Screenings and solids are aerobically digested before being dewatered using a belt filter press. The resultant sludge is hauled away for disposal at a landfill and the centrate is returned back to the influent pump station for treatment. Biosolids are stored within waterproof containers and disposed off-site at a landfill. The facility produces approximately 280 tons per year. Transportation and disposal/reuse of the biosolids is regulated by USEPA under 40 C.F.R. part 503.
- 4. **Pretreatment Assessment.** Federal regulations, 40 C.F.R. part 403, require facilities with a design flow greater than 5 MGD and receiving pollutants from industrial users that pass through or interfere with the operation of the POTW or are otherwise subject to pretreatment standards to have a pretreatment program in place. 40 C.F.R. 403.8(a) allows the Central Valley Water Board to impose a pretreatment program on facilities that discharge less than 5 MGD, where necessary.

A pretreatment compliance inspection and audit of the Facility, conducted in April 2014 and December 2015, respectively, concluded that the Discharger did not have any nondomestic users currently discharging process wastewaters which have the potential to affect the Facility. The Discharger did not list any Industrial Users in the NOI and there have not been any plant upsets due to high Biochemical Oxygen Demand (5-day @ 20°Celcius) (BOD5). Furthermore, the Discharger implements a sewer use ordinance with a control mechanism to regulate nonresidential users within its service area. Therefore, there is currently no need for the Discharger to be required to develop and implement a pretreatment program.

5. Groundwater. Previous Order R5-2018-0012 required the Discharger to conduct a Pond 3 Leak Assessment (2019 Assessment) to determine locations for groundwater monitoring to monitor for possible liner leaks. The Discharger submitted the Assessment in May 2019 and proposed to monitor and compare the upgradient groundwater at a cut-off wall, the groundwater flowing under the Pond 3 liner at the dam toe drain, and water contained in Pond 3 for potential Pond 3 liner leaks. However, it was later discovered that the cut-off wall monitoring location no longer exists, which prevents sampling. Therefore, the Discharger would not be able assess Pond 3 liner leaks as proposed in the 2019 Assessment. Since the Pond 3 leak detection monitoring proposed in the 2019 Assessment is no longer feasible, a supplemental 13267 Order, Order R5-2023-0809, was issued on 17 October 2023, concurrently with this NOA, requiring the Discharger to determine a different, feasible upgradient background groundwater sampling location for Ponds 1, 2, and 3. Order R5-2023-0809 also requires the Discharger to monitor the groundwater collected beneath Pond 3 along with water in Ponds 1, 2, and 3, to submit annual reports documenting inspection, maintenance, and repair activities for Ponds 1, 2 and 3, to determine the hydraulic conductivity of the three ponds, to collect and submit groundwater elevation data from two piezometers adjacent to Pond 3 as another method to

determine leaks from the Pond 3 liner, and to properly decommission well RGW-003 since it is no longer necessary for groundwater monitoring.

II. RECEIVING WATER BENEFICIAL USES

The Facility discharges from Discharge Point 001 to an unnamed tributary of Smuthers Ravine, a water of the United States and a tributary to the North Fork of the American River (via Smuthers Ravine and Bunch Creek) in the North Fork American River Watershed. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan) states that the beneficial uses of any specially identified water body in Table 2-1 of the Basin Plan generally apply to its tributaries. Therefore, the following beneficial uses apply to the unnamed tributary to Smuthers Ravine:

Discharge Point	Receiving Water Name	Beneficial Uses
001	Unnamed Tributary to Smuthers Ravine	Existing: Municipal and domestic supply (MUN); Agricultural supply, including irrigation (AGR); Water contact recreation, including canoeing and rafting (REC-1); Non-contact water recreation (REC-2); Cold freshwater habitat (COLD); Spawning, reproduction, and/or early development, cold (SPWN); and Wildlife habitat (WILD). Potential: Warm freshwater habitat (WARM)

Table 2. Beneficial Uses

III. RECEIVING WATER TOTAL MAXIMUM DAILY LOADS (TMDLS)

The unnamed tributary of Smuthers Ravine, Smuthers Ravine, and Bunch Canyon, are not listed on the 303(d) list of impaired water bodies. The North Fork of the American River is on the 303(d) list of impaired water bodies for mercury. Currently, no TMDL is scheduled for the North Fork of the American River; however, these programs may have future mercury requirements for dischargers. Therefore, no 303(d) based effluent limitations or monitoring requirements are included in this NOA (R5-2023-0025-001).

IV. DISCHARGE PROHIBITIONS

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

- A. The discharge of wastes, other than those described in section I.A and meeting the eligibility criteria in section I.B of the Municipal General Order, is prohibited unless the Discharger obtains coverage under another general or individual Order that regulates the discharge of such wastes. (Municipal General Order section IV.A).
- B. The bypass or overflow of wastes to surface waters is prohibited, except as allowed by Federal Standard Provisions sections I.G. and I.H in Attachment D, Standard Provisions, of the Municipal General Order. (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. (Municipal General Order section IV.C).
- D. Discharge of waste classified as 'hazardous', as defined in the CCR, title 22, section 66261.1 et seq., is prohibited. (Municipal General Order section IV.D).
- E. Average Dry Weather Flow (ADWF). The average daily flow over three consecutive dry weather months is referred to as the ADWF. Discharges exceeding the ADWF are prohibited. ADWF at the Facility varies due to the volume stored at Pond 3 on 1 July. When at least 10 MG is stored in Pond 3 on 1 July, the ADWF is 0.65 MGD, otherwise if less than 10 MG stored in Pond 3 on 1 July, the ADWF is 0.275 MGD. (Municipal General Order section IV.E).

V. EFFLUENT LIMITATIONS

A. Effluent Limitations – Discharge Point 001

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

The Discharger shall maintain compliance with the effluent limitations specified in Table 3 and items 1-4 below.

Parameter	Units	Average Monthly	Average Weekly
BOD ₅	milligrams per liter (mg/L)	10	15
Total Suspended Solids (TSS)	mg/L	10	15
Ammonia Nitrogen, Total (as N)	mg/L	1.0	3.5
Nitrate plus Nitrite, Total (as N)	mg/L	10	20

- 1. **pH.** The pH shall at all times be within the range of 6.5 and 8.5.
- 2. **Percent Removal.** The average monthly percent removal of BOD₅ and TSS shall not be less than 85 percent.
- 3. **Total Coliform Organisms.** (Measured at UVS-001). Effluent total coliform organisms shall not exceed:
 - a. 2.2 most probable number per 100 milliliters (MPN/100 mL), as a 7-day median;
 - b. 23 MPN/100 mL, more than once in any 30-day period; and
 - c. 240 MPN/100 mL, at any time.
- 4. Chronic Whole Effluent Toxicity
 - a. <u>Maximum Daily Effluent Limitation (MDEL).</u> No chronic aquatic toxicity test with the sensitive species shall result in a "Fail" at the IWC for the

sub-lethal endpoint measured in the test <u>AND</u> a percent effect for the survival endpoint greater than or equal to 50 percent.

b. <u>Monthly Median Effluent Limitation (MMEL).</u> No more than one chronic aquatic toxicity test, with the most sensitive species, initiated in a toxicity calendar month shall result in a "Fail" at the IWC for any endpoint.

VI. RECEIVING WATER LIMITATIONS

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

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

- Biostimulatory Substances (Municipal General Order section VI.A.3)
- Chemical Constituents (Municipal General Order section VI.A.4)
- Color (Municipal General Order section VI.A.5)
- Dissolved Oxygen (Municipal General Order section VI.A.6.a)
- Floating Material (Municipal General Order section VI.A.7)
- Oil and Grease (Municipal General Order section VI.A.8)
- pH (Municipal General Order section VI.A.9.a)
- Pesticides (Municipal General Order section VI.A.10.a-b)
- Radioactivity (Municipal General Order section VI.A.11)
- Suspended Sediments. (Municipal General Order section VI.A.12)
- Settleable Substances (Municipal General Order section VI.A.13)
- Suspended Material (Municipal General Order section VI.A.14)
- Taste and Odors (Municipal General Order section VI.A.15)
- Temperature (Municipal General Order section VI.A.16.a)
- Toxicity (Municipal General Order section VI.A.17)
- Turbidity (Municipal General Order section VI.A.18.a)

B. 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 greater than background quality or applicable groundwater quality objectives, whichever is greater.

VII. MONITORING AND REPORTING

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

VIII. PROVISIONS

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

- **A. Standard Provisions. (section VII.A of the Municipal General Order)** Applicable to all Dischargers.
- B. Monitoring and Reporting Program (MRP) Requirements. (section VII.B of the Municipal General Order)

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

C. Special Provisions Special Provisions are contained in section VII.C of the Municipal General Order. Only the following Special Provision sections from the Municipal General Order specified in Table 4 apply to this Facility:

Special Provision	Section Reference
1. Reopener Provisions	a. Major Modification of Treatment Works
2. Special Studies, Technical Reports and Additional Monitoring Requirements	b. Bis(2-ethylhexyl) Phthalate Study
3. Best Management Practices and Pollution Prevention	b. Salinity Evaluation and Minimization Plan (SEMP) for the Alternative Salinity Permitting Approach.
4. Construction, Operation and Maintenance Specifications	 a.i.(a)-(c). Filtration System Operating Specifications b.i.(a). UV Disinfection System – Dose b.ii. (a). UV Disinfection System – Transmittance b.iii-vi. UV Disinfection System – General c.i-x. Pond Operating Specifications
5. Special Provisions for Municipal Facilities	 b. Sludge/Biosolids Treatment or Discharge Specifications
6. Other Special Provisions	a. Title 22, or Equivalent, Disinfection Requirements

Table 4: Summary of Applicable Special Provisions

IX. COMPLIANCE DETERMINATION

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

- BOD₅ and TSS Effluent Limitations (Municipal General Order section VIII.A);
- Average Dry Weather Flow Effluent Prohibition (VIII.E);
- Total Coliform Organisms Effluent Limitations (VIII.F);
- Effluent Limitations (VIII.I);
- Dissolved Oxygen Receiving Water Limitation (VIII.J);
- Chronic Whole Effluent Toxicity Effluent Limitation (VIII.K.2); and,
- Turbidity Receiving Water Limitation (VIII.P).

X. ANTI-BACKSLIDING REQUIREMENTS

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

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

Effluent limitations for ammonia, acute whole effluent toxicity, and nitrate plus nitrate less stringent than prescribed in previous R5-2018-0012. A more detailed antibacksliding analysis is provided in Appendix C to this NOA in section I.A Satisfaction of Anti-Backsliding Requirements, the relaxation of effluent limitations meets the exceptions provided in the federal anti-backsliding regulations.

XI. ANTIDEGRADATION REQUIREMENTS

Antidegradation requirements are specified in the Municipal General Order, section V.D.4, Attachment F (Fact Sheet). This NOA does not allow an increase in flow or mass of pollutants to the receiving water and the relaxation of effluent limitations for ammonia and nitrate plus nitrite consistent with the antidegradation provisions of 40 C.F.R. 131.12 and State Water Board Resolution 68-16.

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

XII. RATIONALE FOR LIMITATIONS AND MONITORING REQUIREMENTS

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

XIII. ENFORCEMENT

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

XIV. COMMUNICATION

Until this NOA becomes effective on 1 November 2023, you will need to comply with the effluent limitations and requirements contained in your existing permit, R5-2018-0012. For your October 2023 monthly self-monitoring reports, you will need to demonstrate compliance with existing Order R5-2018-0012 through 31 October 2023. For your November 2023 self-monitoring report, you will need to demonstrate compliance with this NOA beginning 1 November 2023.

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

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

All other documents not required to be submitted via CIWQS shall be converted to a searchable PDF and submitted by email to

centralvalleysacramento@waterboards.ca.gov. Please include the following information in the body of the email:

- Attention: NPDES Compliance and Enforcement Section
- Discharger: City of Colfax
- Facility: City of Colfax WWTP
- County: Placer
- CIWQS Place ID: 215106

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. Paul Wadding of the Compliance and Enforcement section is your point of contact for any questions regarding this NOA. If you find it necessary to make a change to your permitted operations, you will be directed to the appropriate Permitting staff. You may contact Paul Wadding by phone at (916) 464-4826 or email at

paul.wadding@waterboards.ca.gov.

Patrick Pulupa Executive Officer

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

Enclosures (2):

13267 Order R5-2023-0809 (Discharger [email only], Jo Anne Kipps [email only], Allen Edwards [email and hardcopy])

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

CC:

Elizabeth Sablad, U.S. EPA, Region IX, San Francisco (email only) Peter Kozelka, U.S. EPA, Region IX, San Francisco (email only) Prasad Gullapalli, U.S. EPA, Region IX, San Francisco (email only) Afrooz Farsimadan, California State Water Resources Control Board (email only) Renan Jauregui, California State Water Resources Control Board (email only) Jarma Bennett, California State Water Resources Control Board (email only) ICIS NPDES (Sarah Torres), PG Environmental (via email at icis-npdes@pgenv.com) Chron File (RB5S-chron@Waterboards.ca.gov) Xuan Luo, Central Valley Water Board, Rancho Cordova (email only) Jo Anne Kipps, Fresno (email only) Allen Edwards, Colfax (email and hardcopy)

APPENDIX A – FACILITY MAPS Figure A-1: Facility Location Map





APPENDIX B – FLOW SCHEMATIC Figure B-1: Existing Flow Schematic



Figure B-2: Future Flow Schematic (Suspended Air Flotation Unit installation)



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 and Antidegradation 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(I).

The effluent limitations in this NOA are at least as stringent as the effluent limitations in the Facility's previous R5-2018-0012, with the exception of effluent limitations for ammonia, acute whole effluent toxicity, and nitrate plus nitrite. This relaxation of effluent limitations for ammonia and nitrate plus nitrite and the removal of the acute whole effluent toxicity limitation is consistent with the anti-backsliding requirements of the CWA and federal regulations.

- CWA section 402(o)(1) and 303(d)(4). CWA section 402(o)(1) prohibits the establishment of less stringent water quality-based effluent limits (WQBELs) "except in compliance with Section 303(d)(4)." CWA section 303(d)(4) has two parts: paragraph (A) which applies to nonattainment waters and paragraph (B) which applies to attainment waters.
 - a. For waters where standards are not attained, CWA section 303(d)(4)(A) specifies that any effluent limit based on a TMDL or other waste load allocation (WLA) may be revised only if the cumulative effect of all such revised effluent limits based on such TMDLs or WLAs will assure the attainment of such water quality standards.
 - b. For attainment waters, CWA section 303(d)(4)(B) specifies that a limitation based on a water quality standard may be relaxed where the action is consistent with the antidegradation policy.

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

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

The Statewide Toxicity Provisions were not in effect at the time Order R5-2018-0012 was issued. The Statewide Toxicity Provisions do not require routine testing of acute whole effluent toxicity or effluent limitations because a chronic aquatic toxicity test is generally protective of both chronic and acute aquatic toxicity. Therefore, acute whole effluent toxicity limitations and routine monitoring from Order R5-2018-0012 were not retained in this NOA. Additionally, updated information that was not available at the time Order R5-2018-0012 was issued indicates that less stringent effluent limitations for ammonia and the sum of nitrate and nitrite satisfy requirements in CWA section 402(o)(2). The updated information that supports the relaxation of the ammonia and sum of nitrate and nitrite effluent limitations and removal of the effluent limitations for acute whole effluent toxicity includes the following:

- a. **Ammonia**. The ammonia effluent limitations have been revised based on updated pH and temperature data used for the calculation of the ammonia water quality criteria.
- b. **Nitrate plus Nitrite.** The nitrate plus nitrite average weekly effluent limitation (AWEL) has been revised from Order R5-2018-0012 due to updated data used for the calculation of the nitrate plus nitrite AWEL.
- c. Acute Whole Effluent Toxicity. The Municipal General Order implements the Statewide Toxicity Provisions. The Statewide Toxicity Provisions state that a chronic aquatic toxicity test is generally protective of both chronic and acute aquatic toxicity. This NOA prescribes chronic aquatic toxicity limits, which previous Order R5-2018-0012 did not include, and associated chronic toxicity monitoring that is protective of acute aquatic toxicity. Therefore, this NOA does not retain the acute whole effluent toxicity limitations from Order R5-2018-0012.

Thus, the relaxation of effluent limitations for ammonia and the nitrate plus nitrite and the removal of the acute whole effluent toxicity limitations from this NOA is in accordance with CWA section 402(0)(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 R5-2018-0012 was issued.

3. Antidegradation Policies

a. Surface Water

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 WQBELs where the discharge could have the reasonable potential to cause or contribute to an exceedance of water quality standards. The permitted discharge is consistent with the antidegradation provisions of 40 C.F.R.

section 131.12 and the State Anti-Degradation Policy. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The impact on existing water quality will be insignificant.

This NOA relaxes effluent limitations for ammonia and nitrate plus nitrite and removes the acute whole effluent toxicity limitation. Based on Facility performance the relaxation or removal of these effluent limitations is not expected to result in an increase in pollutants concentration or loading, a decrease in the level of treatment or control, or a reduction of water quality. Implementation of this NOA 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 removal and relaxation of effluent limitations for these constituents is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Resources Control Board (State Water Board) Resolution No. 68-16.

b. Groundwater

All ponds at the Facility are lined; Pond 1 and Pond 2 are gunite-lined and Pond 3 is lined with a High-Density Polyethylene (HDPE) liner. Solids created during the wastewater treatment process are dewatered and hauled offsite. The Discharger is not requesting, nor does it currently discharge to land. This NOA does not allow for an increase in flow or mass of pollutants to the groundwater. Therefore, a complete antidegradation analysis is not necessary. The permitted discharge is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and the State Anti-Degradation Policy. Implementation of this NOA will result in the best practicable treatment or control of the discharge to groundwater 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.

B. Salinity (Electrical Conductivity, Electrical Conductivity @ 25°C, or EC)

Based on effluent electrical conductivity data collected from the calendar years of 2019 through 2021, the maximum calendar annual average electrical conductivity of the effluent was 608 µmhos/cm. The Municipal General Order includes a screening level for electrical conductivity of 1,600 µmhos/cm based on the Secondary Maximum Contaminant Level (MCL) to protect the municipal and domestic supply beneficial use.

When only considering the numeric water quality standards for salinity, the discharge does not have reasonable potential to cause or contribute to an in-stream excursion of water quality objectives for salinity. However, due to the Region-wide concerns regarding salinity and to ensure implementation of the Basin Plan's Salt Control Program the Municipal General Order includes performance-based effluent limitations for EC that are applicable to this Facility. The EC concentration of the effluent is greater than the background concentration observed in the unnamed tributary to Smuthers Ravine; therefore, limited degradation is occurring in a high-quality water. Under the State Antidegradation Policy, the waste discharge requirements must result in the best practicable treatment or control (BPTC) of the discharge necessary to assure that (a) a pollution or nuisance will not occur; and (b) the highest water quality consistent with

maximum benefit to the people of the State will be maintained. In this case, the Discharger is currently utilizing BPTC, and a performance-based calendar annual average effluent trigger of 880 µmhos/cm for EC is applied limiting the discharge to current levels (thus ensuring that BPTC will continue to be met).

In accordance with the Basin Plan's Salt Control Program, the Discharger submitted a Notice of Intent on 28 May 2021 indicating participation in the Alternative Salinity Permitting Approach. Accordingly, the Municipal General Order includes a calendar annual average performance-based effluent trigger for electrical conductivity of 880 µmhos/cm that is applicable to the Facility.

C. Constituents with Total Maximum Daily Load (TMDL)

The unnamed tributary of Smuthers Ravine, Smuthers Ravine, and Bunch Canyon, are not listed on the 303(d) list of impaired water bodies. The North Fork of the American River is on the 303(d) list of impaired water bodies for mercury. Currently, no TMDL is scheduled for the North Fork of the American River; however, these programs may have future mercury requirements for dischargers. Therefore, no 303(d) based effluent limitations or monitoring requirements are included in this NOA.

D. Whole Effluent Toxicity

Previous Order R5-2018-0012 did not include chronic whole effluent toxicity limitations. The Statewide Toxicity Provisions, as approved by USEPA on 1 May 2023, establishes new Reasonable Potential Analysis requirements for both acute and chronic whole effluent toxicity. Central Valley reviewed the whole effluent toxicity data and determined the Facility had reasonable potential for chronic whole effluent toxicity. The Facility did not warrant a need to maintain acute whole effluent toxicity limitations since, per the Statewide Toxicity Provisions, a chronic aquatic toxicity test is generally protective of both chronic and acute aquatic toxicity. Therefore, the NOA includes chronic whole effluent toxicity limitations consistent with the Statewide Toxicity Provisions.

III. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

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

IV. RATIONALE FOR MONITORING REQUIREMENTS

CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(I), 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., BOD5 and TSS reduction requirements). The monitoring frequencies for flow, BOD5 and TSS have been retained from Order R5-2018-0012.

B. Effluent Monitoring

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

The effluent exceeded the Bis(2-Ethylhexyl) Phthalate water quality objective on one out of the four characterization samples. All other samples were non-detect and data from previous Order R5-2013-0045 did not show an exceedance of the Bis(2-Ethylhexyl) Phthalate water quality objective. To confirm that the effluent does not have reasonable potential to cause, or contribute to, an excursion above the Bis(2-Ethylhexyl) Phthalate water quality objective, this Order requires the Discharger to monitor the effluent for Bis(2-Ethylhexyl) Phthalate for 2 years, after which the monitoring may be terminated or continued (with a possibility of the NOA being reopened to include Bis(2-Ethylhexyl) Phthalate effluent limitations).

The following effluent monitoring frequencies have been revised from Order R5-2018-0012, all other effluent sampling frequencies from Order R5-2018-0012 are carried forward to this NOA:

Parameter	Unit	Prior Sample	Revised Sample	Rationale for Sample Frequency		
	Unit	Frequency	Frequency	Revision		
	<u>Otanaland</u>			Frequency is adequate to		
рН	Standard	3/Week	1/Week	determine compliance with the		
	Units	0/WCCK	1,0001	effluent limitations. Also matches		
				ammonia sampling frequency.		
	ml/L	1/Month	Discontinue	Discharger has a granular		
Sattlaabla Salida				filtration system equivalent,		
Selleable Solids				Filtration and UV specs substitute		
				for settleable solids monitoring		
	°C		1/Week	No chronic temperature issues in		
Temperature		3/Week		the effluent. Also matches		
				ammonia sampling frequency		
Bis(2-Ethylhexyl)	ua/I		1/Quarter for 24	Constituent Study		
Phthalate	µg/L		Months	Constituent Study		

Table C-1. Revised Effluent Sampling Frequencies at EFF-001

Parameter	Unit	Prior Sample Frequency	Revised Sample Frequency	Rationale for Sample Frequency Revision
Dissolved Oxygen	mg/L		1/Week	To determine compliance with the receiving water dissolved oxygen limitation
Hardness, Total (as CaCO3)	mg/L	1/Month	1/Quarter	Reduced frequency is adequate to determine hardness characterization of the Facility.
Dissolved Organic Carbon	mg/L		1/Quarter	Needed to calculate site-specific freshwater aluminum criteria for next permit renewal.
Chronic Toxicity		1/Year	2/Year	As required in the Statewide Toxicity Provisions.
Acute Toxicity	%	2/Year	Discontinue	A chronic aquatic toxicity test is representative of acute aquatic toxicity.

D. Receiving Water Monitoring

1. Unnamed Tributary of Smuthers Ravine

a. Receiving water monitoring is necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge to the unnamed tributary of Smuthers Ravine.

The following receiving water monitoring frequencies have been revised from Order R5-2018-0012, all other receiving water sampling frequencies from Order R5-2018-0012 are carried forward to this NOA:

Table C-2. Revised Receivin	g Water Sampl	ng Frequencies a	t RSW-001U and RSW-002D
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Parameter	Unit	Prior Sample Frequency	Revised Sample Frequency	Rationale for Sample Frequency Revision
Dissolved Oxygen	Percent Saturation	1/Week	Discontinue	Percent Saturation receiving water limitation does not apply to the receiving water.
Total Organic Carbon	mg/L		1/Quarter	Needed to calculate site-specific freshwater aluminum criteria for next permit renewal.
Electrical Conductivity	µmhos/cm	1/Month	1/Quarter	Frequency is sufficient for evaluating compliance
Ammonia (as N)	mg/L	1/Month	Discontinue	Monitoring of the effluent is sufficient to determine compliance with the applicable limitations.
Hardness, Total (as CaCO3)	mg/L	1/Month	1/Quarter	Frequency is sufficient for characterization

2. Groundwater

a. Order R5-2018-0012 required the Discharger to complete a study to determine a background groundwater monitoring location to monitor possible leaks in the liner

from Pond 3. The Pond 3 Leak Assessment (Assessment) was submitted in May 2019. The Assessment determined that monitoring locations RGW-001, RGW-002, and RGW-003 were not appropriate locations to monitor potential liner leaks from Pond 3. Wells RGW-001 and RGW-002 were destroyed in March 2019 per Order R5-2018-0012, and RGW-003 is yet to be destroyed. A separate 13267 Order (R5-2023-0809) from this NOA will require an RGW-003 destruction report. Any further groundwater monitoring will be required by Order R5-2023-0809.

E. Biosolids 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.
- 2. The continuous monitoring for turbidity is retained from previous Order R5-2018-0012 to evaluate compliance the turbidity operating specifications.

H. UV Disinfection System Monitoring

1. Monitoring frequencies for flow (continuous), UV transmittance, UV dose, and total coliform organisms have been retained from previous Order R5-2018-0012, to evaluate compliance with UV operating specifications.

I. Pond Monitoring

1. Pond monitoring is required to ensure proper operation of the storage pond. Weekly monitoring for freeboard, pH, electrical conductivity, and dissolved oxygen and daily monitoring for odors has been retained from Order R5-2018-0012.

J. Discharge Monitoring Report-Quality Assurance Study Program – Not Applicable

K. Effluent and Receiving Water Characterization Monitoring

- 1. This NOA retains the quarterly effluent characterization monitoring for one year from Order R5-2018-0012, when discharging to surface water.
- 2. This NOA retains the quarterly upstream receiving water characterization monitoring for one year from Order R5-2018-0012, when discharging to surface water.

V. PRETREATMENT PROVISION – NOT APPLICABLE

VI. SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Abbreviations used in Table C-3:

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

			-			-					
Parameter	Units	MEC	В	С	СМС	ccc	Water and Org	Org. Only	Basin Plan	MCL	RP
Ammonia (as Nitrogen)	mg/L	5.1	0.08	1.37	8.1	1.4					Yes
Nitrate Plus Nitrite (as N)	mg/L	12.7		10						10	Yes

Table C-3: SUMMARY OF REASONABLE POTENTIAL ANALYSIS

- 1. Table C-3 Notes:
 - i. **CMC.** For ammonia, the CMC or criterion maximum concentration is based on the U.S. EPA National Recommended Ambient Water Quality Criteria Freshwater Aquatic Life Protection, 1-hour average. For copper and zinc, the CMC is based on the CTR, 1-hour average criterion.
 - ii. **CCC.** For ammonia, the CCC or criterion continuous concentration is based on the U.S. EPA National Recommended Ambient Water Quality Criteria Freshwater Aquatic Life Protection, 30-day average. For copper and zinc, the CCC is based on the CTR, 4-day average criterion.
 - iii. **Ammonia and Nitrate plus Nitrite.** Reasonable potential exists due to the biological processes inherent to the treatment of domestic wastewater (see sections V.C.3.b.ii and V.C.3.b.ix in Attachment F, Fact Sheet, of the Municipal General Order).

APPENDIX D – MONITORING AND REPORTING PROGRAM

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

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

I. GENERAL MONITORING PROVISIONS

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

least yearly, to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

- **E.** Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.
- F. Laboratory analytical methods shall be sufficiently sensitive in accordance with the Sufficiently Sensitive Methods Rule (SSM Rule) specified under 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv). A U.S. EPA-approved analytical method is sufficiently sensitive for pollutant/parameter where:
 - The method minimum level (ML) is at or below the applicable water quality objective for the receiving water, or;
 - The method ML is above the applicable water quality objective for the receiving water but the amount of the pollutant/parameter in the discharge is high enough that the method detects and quantifies the level of the pollutant/parameter, or;
 - The method ML is above the applicable water quality objective for the receiving water, but the ML is the lowest of the 40 C.F.R. 136 U.S. EPA-approved analytical methods for the pollutant/parameter.
- **G.** The Discharger shall file with the Central Valley Water Board technical reports on self-monitoring performed according to the detailed specifications contained in this MRP.
- H. 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.

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.

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
	INF-001	Facility Headworks
001	EFF-001	Downstream from the last connection through which wastewater is admitted to the outfall (between the UV System and Pond 3)
	RSW-001U	Approximately 100 feet upstream from the discharge point EFF-001
	RSW-002D	Approximately 100 feet downstream from the discharge point EFF-001

Table D-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description				
	FIL-001	Downstream of the filters and prior to the UV disinfection system				
	UVS-001	Immediately downstream of the UV disinfection system				
	PND-001	Treatment Pond 1				
	PND-002	Treatment Pond 2				
	PND-003	Storage Reservoir (Pond 3)				

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

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

Parameter	Units	Sample Type	Sampling Frequency
Flow	MGD	Meter	Continuous
Biochemical Oxygen Demand, 5- day @ 20°Celcius (BOD5)	mg/L	24-hour Composite	1/Week
Total Suspended Solids	mg/L	24-hour Composite	1/Week

Table D-2. Influent Monitoring

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

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

 The Discharger shall monitor treated domestic wastewater at Monitoring Location EFF-001 when discharging to the unnamed tributary of Smuthers Ravine 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 state so in the monthly self-monitoring report (SMR).

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	MGD	Meter	Continuous
BOD5	mg/L	24-hr Composite	1/Week
BOD5	Percent Removal	Calculate	1/Month
Total Suspended Solids	mg/L	24-hr Composite	1/Week
Total Suspended Solids	Percent Removal	Calculate	1/Month
рН	Standard Units	Grab	1/Week
Total Ammonia (As Nitrogen)	mg/L	Grab	1/Week
Total Nitrate (As Nitrogen)	mg/L	Grab	1/Month
Total Nitrite (As Nitrogen)	mg/L	Grab	1/Month
Total Nitrate plus Total Nitrite (As Nitrogen)	mg/L	Calculate	1/Month
Electrical Conductivity	µmhos/cm	Grab	1/Month
Total Hardness (as CaCO3)	mg/L	Grab	1/Quarter
Temperature	°F	Grab	1/Week
Dissolved Oxygen	mg/L	Grab	1/Week
Bis(2-ethylhexyl) phthalate	µg/L	Grab	1/Quarter
Dissolved Organic Carbon	mg/L	Grab	1/Quarter

Table D-3. Effluent Monitoring

- 2. Table D-3 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-3:
 - a. **Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.
 - b. **Applicable to all parameters.** Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
 - c. **Grab Sample.** A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.
 - d. **Ammonia.** Samples for pH and temperature shall be recorded at the time of ammonia sample collection.
 - e. **Field Meter.** A hand-held field meter may be used for 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. **Dissolved Organic Carbon.** Hardness, total (as CaCO₃) and pH samples shall be taken concurrent with dissolved organic carbon samples.
- g. **Dissolved Oxygen and Temperature.** Effluent samples for dissolved oxygen and temperature shall be taken concurrent with receiving water dissolved oxygen and temperature samples.
- Bis(2-Ethylhexyl) Phthalate. Bis(2-ethylhexyl) phthalate shall be collected quarterly beginning 1 January 2024. The Discharger shall evaluate the bis(2-ethylhexyl) phthalate effluent samples from 1 January 2024 through 31 December 2025 and comply with one of the conditions below, as applicable:
 - i. If the discharge does not show reasonable potential to cause or contribute to an exceedance of the water quality objective for bis(2-ethylhexyl) phthalate, quarterly bis(2-ethylhexyl) phthalate effluent sampling may be terminated after 31 December 2025;
 - ii. If the discharge shows reasonable potential to cause or contribute to an exceedance of the water quality objective for bis(2-ethylhexyl) phthalate, the Discharger shall continue the quarterly effluent bis(2ethylhexyl) phthalate monitoring and the NOA may be reopened to include bis(2-ethylhexyl) phthalate effluent limitations.

V. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

A. Chronic Toxicity Testing.

- 1. Instream Waste Concentration (IWC) for Chronic Toxicity. The chronic toxicity IWC is 100 percent effluent.
- 2. Routine Monitoring Frequency. The Discharger shall perform routine chronic toxicity testing twice per toxicity calendar year.
- 3. Toxicity Calendar Month, Quarter, and Year.
 - a. Toxicity Calendar Month. The toxicity calendar month is defined as the period of time beginning on the day of the initiation of the routine toxicity monitoring to the day before the corresponding day of the next month if the corresponding day exists, or if not to the last day of the next month. For purposes of this NOA, the toxicity calendar month begins on 1st of the month (e.g., from January 1 to January 31, from February 1 to February 28/29, from March 1 to March 31, etc.).
 - b. Toxicity Calendar Quarter. A toxicity calendar quarter is defined as three consecutive toxicity calendar months. For purposes of this NOA, the toxicity calendar quarters begin on January 1, April 1, July 1, and October 1 (i.e., from January 1 to March 31, from April 1 to June 30, from July 1 to September 30, and October 1 to December 31).

- c. Toxicity Calendar Year. A toxicity calendar year is defined as twelve consecutive toxicity calendar months. For purposes of this NOA, the toxicity calendar year begins on January 1 (i.e., January 1 to December 31), in years in which there are at least 15 days of discharge in at least one calendar quarter.
- 4. Chronic Toxicity MMEL Compliance Testing. If a routine chronic toxicity monitoring test results in a "fail" at the IWC, then a maximum of two chronic toxicity MMEL compliance tests shall be completed. The chronic toxicity MMEL compliance tests shall be initiated within the same toxicity calendar month that the routine monitoring chronic toxicity test was initiated that resulted in the "fail" at the IWC. If the first chronic toxicity MMEL compliance test results in a "fail" at the IWC, then the second chronic toxicity MMEL compliance test is unnecessary and is waived.
- 5. Additional Routine Monitoring Tests for TRE Determination. In order to determine if a TRE is necessary, an additional routine monitoring test is required when there is one violation of the chronic toxicity MDEL or MMEL, but not two violations in a single toxicity calendar month. This additional routine monitoring test is not required if the Discharger is already conducting a TRE. This additional routine monitoring test shall be initiated within two weeks after the toxicity calendar month in which the MMEL or MDEL violation occurred. The toxicity calendar month of the violation and the toxicity calendar month of the additional routine monitoring test is not required shall be considered "successive toxicity calendar months" for purposes of determining whether a TRE is required. This additional routine monitoring test is also used for compliance purposes and could result in the need to conduct MMEL compliance testing per Section V.B.4 above.
- 6. **Sample Volumes.** Adequate sample volumes shall be collected to provide renewal water to complete the test in the event that the discharge is intermittent.
- Test Species. The testing shall be conducted using the most sensitive species. The Discharger shall conduct chronic toxicity tests with fathead minnow (*Pimephales promelas*), unless otherwise specified in writing by the Executive Officer.

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

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

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

12. **No Effluent Available for Test.** When there is no effluent available to complete a routine monitoring test or MMEL compliance test, the test shall not be required, and routine monitoring continues at the frequency specified in this NOA.

B. Quality Assurance and Additional Requirements.

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

- The discharge is subject to determination of "Pass" or "Fail" from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1 and Table A-1 (Chronic Freshwater and East Coast Methods) and Appendix B, Table B-1.
- 2. The null hypothesis (Ho) for the TST statistical approach is:

Mean discharge IWC response \leq RMD x Mean control response, where the chronic RMD = 0.75.

A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail".

3. The relative "Percent Effect" at the discharge IWC is defined and reported as:

$$Percent \ Effect = 100 \times \frac{(\text{Mean control response - Mean discharge IWC response)}}{\text{Mean control response}}$$

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

C. WET Testing Notification Requirements.

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

D. WET Testing Reporting Requirements.

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

- 1. The valid toxicity test results for the TST statistical approach, reported as "Pass" or "Fail" and "Percent Effect" at the IWC for the discharge, the dates of sample collection and initiation of each toxicity test and all results for effluent parameters monitored concurrently with the toxicity test(s).
- The statistical analysis used in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010) Appendix A Figure A-1 and Table A-1, and Appendix B, Table B-1.

3. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.

E. Most Sensitive Species Screening.

If the effluent used in the last species sensitivity screening is no longer representative of the current effluent, the Discharger shall perform rescreening to re-evaluate the most sensitive species. The species sensitivity screening shall be conducted as follows and the results submitted with the Notice of Intent.

- Frequency of Testing for Species Sensitivity Screening. Species sensitivity screening for chronic toxicity shall include, at a minimum, chronic WET testing <u>four consecutive calendar quarters</u> using the water flea (*Ceriodaphnia dubia*), fathead minnow (*Pimephales promelas*), and green alga (*Pseudokirchneriella subcapitata*). The tests shall be performed at an IWC of 100 percent effluent.
- 2. Determination of Most Sensitive Species. The Central Valley Water Board will determine the most sensitive species from the water flea (Ceriodaphnia dubia). fathead minnow (Pimephales promelas), and green alga (Pseudokirchneriella subcapitata) using the following procedure. If a single test in the species sensitivity screening testing results in a "fail" using the TST statistical approach, then the species used in that test shall be established as the most sensitive species. If there is more than a single test that results in a "fail", then of the species with results of a "fail", the species that exhibits the highest percent effect shall be established as the most sensitive species. If none of the tests in the species sensitivity screening results in a "fail", but at least one of the species exhibits a percent effect greater than 10 percent, then the single species that exhibits the highest percent effect shall be established as the most sensitive species. In all other circumstances, the Executive Officer shall have discretion to determine which single species is the most sensitive considering the test results from the species sensitivity screening.

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

species, if the tests were conducted in a manner sufficient to make such determination.

If the most sensitive species is not able to be determined from the species sensitivity screening discussed above, the Discharger shall rotate the test species every toxicity calendar year as follows and specified in the NOA:

- i. *Ceriodaphnia dubia* (survival and reproduction test) for the remainder of the toxicity calendar year the NOA is issued;
- ii. *Pimephales promelas* (larval survival and growth test) for the entire toxicity calendar year following the toxicity calendar year the NOA is issued;
- iii. Pseudokirchnereilla subcapitata (growth test) for the entire toxicity calendar year of the second year following the toxicity calendar year the NOA is issued; and
- iv. Cycling back to *Ceriodaphnia dubia* (survival and reproduction test) after *Pseudokirchnereilla subcapitata* (growth test) and through the same rotation.

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

F. Toxicity Reduction Evaluations (TRE)

- TRE Implementation. The Discharger is required to initiate a TRE when there is any combination of two or more chronic toxicity MDEL or MMEL violations within a single toxicity calendar month or within two successive toxicity calendar months. If other information indicates toxicity (e.g., results of additional monitoring, results of monitoring at a higher concentration than the IWC, fish kills, intermittent recurring toxicity), the Central Valley Water Board may require a TRE. A TRE may also be required when there is no effluent available to complete a routine monitoring test or MMEL compliance test.
 - a. **Preparation and Implementation of Detailed TRE Action Plan.** The Discharger shall conduct TREs in accordance with an approved TRE Work Plan. <u>Within 30 days</u> of the test result that triggered the TRE, the Discharger shall submit to the Executive Officer a TRE Action Plan, which per the Discharger's approved TRE Work Plan. The TRE Action Plan shall include the following information, and comply with additional conditions set by the Executive Officer:
 - i. Specific actions the Discharger will take to investigate and identify the cause(s) of toxicity, including a TRE WET monitoring schedule;
 - ii. Specific actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and
 - iii. A schedule for these actions, progress reports, and the final report.
 - b. The Central Valley Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be

successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

- 2. TRE Work Plan Guidance. The Discharger shall submit to the Central Valley Water Board a TRE Work Plan for approval by the Executive Officer by the due date in the Technical Reports Table D-9. If the Executive Officer does not disapprove the TRE Work Plan within 60 days, the TRE Work Plan shall become effective. The TRE Work Plan shall outline the procedures for identifying the source(s) of and reducing or eliminating effluent toxicity. The TRE Work Plan must be of adequate detail to allow the Discharger to immediately initiate a TRE and shall be developed in accordance with U.S. EPA guidance as discussed below.
 - a. Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833-B-99/002, August 1999.
 - b. Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (TREs), EPA/600/2-88/070, April 1989.
 - c. Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition, EPA 600/6-91/003, February 1991.
 - d. Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, EPA/600/6-91/005F, May 1992.
 - e. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity, Second Edition, EPA/600/R-92/080, September 1993.
 - f. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity, Second Edition, EPA 600/R-92/081, September 1993.
 - g. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, EPA-821-R-02-012, October 2002.
 - h. 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.
 - i. Technical Support Document for Water Quality-based Toxics Control, EPA/505/2-90-001, March 1991.

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

A. Surface Water Monitoring Locations RSW-001U and RSW-002D

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

Parameter	Units	Sample Type	Minimum Sampling Frequency
Dissolved Oxygen	mg/L	Grab	1/Week
Hardness, Total (as CaCO ₃)	mg/L	Grab	1/Quarter
Dissolved Organic Carbon	mg/L	Grab	1/Quarter
Electrical Conductivity	µmhos/cm	Grab	1/Quarter
рН	Standard Units	Grab	1/Week
Temperature	°F	Grab	1/Week
Turbidity	NTU	Grab	1/Week

Table D-4. Receiving Water Monitoring Requirements

- 2. Table D-4 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-4:
 - a. **Applicable to all parameters.** Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
 - b. **Grab Sample.** A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.
 - c. **Field Meter.** A hand-held field meter may be used for pH, 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.
 - d. **Dissolved Organic Carbon.** Hardness, total (as CaCO₃) and pH samples shall be taken concurrent with dissolved organic carbon samples.
 - e. **Dissolved Oxygen and Temperature.** Receiving water samples for dissolved oxygen and temperature shall be taken concurrent with effluent dissolved oxygen and temperature 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-001U and RSW-002D. 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 SMR.

IX. OTHER MONITORING REQUIREMENTS

A. Ponds

1. Monitoring Locations PND-001, PND-002, PND-003

A sampling station shall be established on each equalization and storage pond where a representative sample can be obtained. The Discharger shall monitor the two equalization ponds at PND-001 and PND-002 and the storage pond at PND-003 as follows:

Parameter Units Sample		Sample Type	Sampling Frequency
Dissolved Oxygen	mg/L	Grab	1/Week
pН	Standard Units	Grab	1/Week
Odors		Observation	1/Week
Freeboard	Tenths of Feet	Measured	1/Week
Pond Elevation	Tenths of Feet	Measured	1/Week
Storage Pond Volume	MG	Measured	1/week beginning 1 July when stored volume is greater than 10 MG

 Table D-5. Pond Monitoring Requirements

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

B. Filtration System and Ultraviolet Light (UV) Disinfection System

1. Monitoring Locations FIL-001 and UVS-001

a. The Discharger shall monitor the filtration system at Monitoring Location FIL-001 and the UV disinfection system at Monitoring Location UVS-001, as follows:

Parameter	Units	Sample Type	Monitoring Location	Sampling Frequency
Flow	MGD	Meter	UVS-001	Continuous
Turbidity	NTU	Meter	FIL-001	Continuous
UV Banks in Operation	Number	Observation	N/A	Continuous
UV Transmittance	Percent	Meter	UVS-001	Continuous
UV Dose	mJ/cm ²	Calculated	N/A	Continuous
Total Coliform Organisms	MPN/100mL	Grab	UVS-001	3/Week

Table D-6. Filtration System Monitoring Requirements

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

C. Effluent Characterization and Receiving Water Characterization

The Discharger shall monitor the effluent and upstream receiving water at Monitoring Locations EFF-001 and RSW-001U respectively, for the constituents listed in Table D-7, as described in this section.

- 1. Monitoring Frequency
 - a. Effluent Sampling. Samples shall be collected from the effluent (Monitoring Location EFF-001) quarterly between 1 October 2024 and 30 September 2025.
 - b. Receiving Water Sampling. Samples shall be collected from the upstream receiving water (Monitoring Location RSW-001U) quarterly between 1 October 2024 and 30 September 2025 when there is 15 days or more of consecutive flow during a calendar quarter.

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

- 2. **Sample Type.** Effluent samples shall be taken as described in Table D-7 below, and the testing requirements in section IX.E.4.
- 3. **Analytical Methods Report Certification**. Prior to beginning the Effluent Characterization monitoring, the Discharger shall provide a certification acknowledging the scheduled start date of the Effluent Characterization monitoring and confirming that samples will be collected and analyzed as described in the previously submitted Analytical Methods Report. If there are changes to the previously submitted Analytical Methods Report, the Discharger shall outline those changes. A one-page certification form will be provided by the Central Valley Water Board staff with this NOA that the Discharger can use to satisfy this requirement. The certification form shall be submitted electronically via CIWQS in accordance with the reporting requirements in Table D-9, Technical Reports.

CTR	Parameter	CAS Number	Units	Effluent Sample Type	Parameter Type
41	1,1,1-Trichloroethane	71-55-6	µg/L	Grab	Volatile Organic
37	1,1,2,2- Tetrachloroethane	79-34-5	µg/L	Grab	Volatile Organic
42	1,1,2-Trichloroethane	79-00-5	µg/L	Grab	Volatile Organic
28	1,1-Dichloroethane	75-34-3	µg/L	Grab	Volatile Organic
30	1,1-Dichloroethylene (DCE)	75-35-4	µg/L	Grab	Volatile Organic
101	1,2,4-Trichlorobenzene	120-82-1	µg/L	Grab	Volatile Organic
75	1,2-Dichlorobenzene	95-50-1	µg/L	Grab	Volatile Organic
29	1,2-Dichloroethane	107-06-2	µg/L	Grab	Volatile Organic
31	1,2-Dichloropropane	78-87-5	µg/L	Grab	Volatile Organic
76	1,3-Dichlorobenzene	541-73-1	µg/L	Grab	Volatile Organic
32	1,3-Dichloropropylene	542-75-6	µg/L	Grab	Volatile Organic
77	1,4-Dichlorobenzene	106-46-7	µg/L	Grab	Volatile Organic
25	2-Chloroethyl vinyl Ether	110-75-8	µg/L	Grab	Volatile Organic
17	Acrolein	107-02-8	µg/L	Grab	Volatile Organic
18	Acrylonitrile	107-13-1	µg/L	Grab	Volatile Organic
19	Benzene	71-43-2	µg/L	Grab	Volatile Organic
20	Bromoform	75-25-2	µg/L	Grab	Volatile Organic
21	Carbon Tetrachloride	56-23-5	µg/L	Grab	Volatile Organic
22	Chlorobenzene	108-90-7	µg/L	Grab	Volatile Organic
24	Chloroethane	75-00-3	µg/L	Grab	Volatile Organic
26	Chloroform	67-66-3	µg/L	Grab	Volatile Organic
23	Dibromochloromethane	124-48-1	µg/L	Grab	Volatile Organic
27	Dichlorobromomethane	75-27-4	µg/L	Grab	Volatile Organic

Table D-7. Effluent Characterization Monitoring

CTR	Parameter	CAS Number	Units	Effluent Sample Type	Parameter Type
33	Ethylbenzene	100-41-4	µg/L	Grab	Volatile Organic
89	Hexachlorobutadiene	87-68-3	µg/L	Grab	Volatile Organic
34	Methyl Bromide (Bromomethane)	74-83-9	µg/L	Grab	Volatile Organic
35	Methyl Chloride	74-87-3	µg/L	Grab	Volatile Organic
36	Methylene Chloride	75-09-2	µg/L	Grab	Volatile Organic
21	Methyl-tert-butyl ether (MTBE)	1634-04- 4	µg/L	Grab	Volatile Organic
94	Naphthalene	91-20-3	µg/L	Grab	Volatile Organic
38	Tetrachloroethylene (PCE)	127-18-4	µg/L	Grab	Volatile Organic
39	Toluene	108-88-3	µg/L	Grab	Volatile Organic
40	trans-1,2- Dichloroethylene	156-60-5	µg/L	Grab	Volatile Organic
43	Trichloroethylene (TCE)	79-01-6	µg/L	Grab	Volatile Organic
44	Vinyl Chloride	75-01-4	µg/L	Grab	Volatile Organic
85	1,2-Diphenylhydrazine	122-66-7	µg/L	Grab	Semi-Organic Volatile
55	2,4,6-Trichlorophenol	88-06-2	µg/L	Grab	Semi-Organic Volatile
46	2,4-Dichlorophenol	120-83-2	µg/L	Grab	Semi-Organic Volatile
47	2,4-Dimethylphenol	105-67-9	µg/L	Grab	Semi-Organic Volatile
49	2,4-Dinitrophenol	51-28-5	µg/L	Grab	Semi-Organic Volatile
82	2,4-Dinitrotoluene	121-14-2	µg/L	Grab	Semi-Organic Volatile
83	2,6-Dinitrotoluene	606-20-2	µg/L	Grab	Semi-Organic Volatile
71	2-Chloronaphthalene	91-58-7	µg/L	Grab	Semi-Organic Volatile
45	2-Chlorophenol	95-57-8	µg/L	Grab	Semi-Organic Volatile
48	2-Methyl-4,6- Dinitrophenol	534-52-1	µg/L	Grab	Semi-Organic Volatile
50	2-Nitrophenol	88-75-5	µg/L	Grab	Semi-Organic Volatile
78	3,3-Dichlorobenzidine	91-94-1	µg/L	Grab	Semi-Organic Volatile
69	4-Bromophenyl Phenyl Ether	101-55-3	µg/L	Grab	Semi-Organic Volatile
52	4-Chloro-3- methylphenol	59-50-7	µg/L	Grab	Semi-Organic Volatile
72	4-Chlorophenyl Phenyl Ether	7005-72- 3	µg/L	Grab	Semi-Organic Volatile
51	4-Nitrophenol	100-02-7	µg/L	Grab	Semi-Organic Volatile
56	Acenaphthene	83-32-9	µg/L	Grab	Semi-Organic Volatile
57	Acenaphthylene	208-96-8	µg/L	Grab	Semi-Organic Volatile
58	Anthracene	120-12-7	µg/L	Grab	Semi-Organic Volatile
59	Benzidine	92-87-5	µg/L	Grab	Semi-Organic Volatile

CTR	Parameter	CAS Number	Units	Effluent Sample Type	Parameter Type
60	Benzo(a)Anthracene	56-55-3	µg/L	Grab	Semi-Organic Volatile
61	Benzo(a)Pyrene	50-32-8	µg/L	Grab	Semi-Organic Volatile
62	Benzo(b)Fluoranthene	205-99-2	µg/L	Grab	Semi-Organic Volatile
63	Benzo(ghi)Perylene	191-24-2	µg/L	Grab	Semi-Organic Volatile
64	Benzo(k)Fluoranthene	207-08-9	µg/L	Grab	Semi-Organic Volatile
65	Bis (2-Chloroethoxy) Methane	111-91-1	µg/L	Grab	Semi-Organic Volatile
66	Bis (2-Chloroethyl) Ether	111-44-4	µg/L	Grab	Semi-Organic Volatile
67	Bis (2-Chloroisopropyl) Ether	108-60-1	µg/L	Grab	Semi-Organic Volatile
68	Bis(2-Ethylhexyl) Phthalate	117-81-7	µg/L	Grab	Semi-Organic Volatile
70	Butylbenzyl Phthalate	85-68-7	µg/L	Grab	Semi-Organic Volatile
73	Chrysene	218-01-9	µg/L	Grab	Semi-Organic Volatile
74	Dibenzo(a,h)anthracen e	53-70-3	µg/L	Grab	Semi-Organic Volatile
79	Diethyl Phthalate	84-66-2	µg/L	Grab	Semi-Organic Volatile
80	Dimethyl Phthalate	131-11-3	µg/L	Grab	Semi-Organic Volatile
81	Di-n-butyl Phthalate	84-74-2	µg/L	Grab	Semi-Organic Volatile
84	Di-n-Octyl Phthalate	117-84-0	µg/L	Grab	Semi-Organic Volatile
86	Fluoranthene	206-44-0	µg/L	Grab	Semi-Organic Volatile
87	Fluorene	86-73-7	µg/L	Grab	Semi-Organic Volatile
88	Hexachlorobenzene	118-74-1	µg/L	Grab	Semi-Organic Volatile
90	Hexachlorocyclopentad iene	77-47-4	µg/L	Grab	Semi-Organic Volatile
91	Hexachloroethane	67-72-1	µg/L	Grab	Semi-Organic Volatile
92	Indeno(1,2,3-cd) Pyrene	193-39-5	µg/L	Grab	Semi-Organic Volatile
93	Isophorone	78-59-1	µg/L	Grab	Semi-Organic Volatile
95	Nitrobenzene	98-95-3	µg/L	Grab	Semi-Organic Volatile
96	N- Nitrosodimethylamine	62-75-9	µg/L	Grab	Semi-Organic Volatile
97	N-Nitrosodi-n- Propylamine	621-64-7	µg/L	Grab	Semi-Organic Volatile
98	N- Nitrosodiphenylamine	86-30-6	µg/L	Grab	Semi-Organic Volatile
53	Pentachlorophenol (PCP)	87-86-5	µg/L	Grab	Semi-Organic Volatile
99	Phenanthrene	85-01-8	µg/L	Grab	Semi-Organic Volatile
54	Phenol	108-95-2	µg/L	Grab	Semi-Organic Volatile

CTR	Parameter	CAS Number	Units	Effluent Sample Type	Parameter Type
100	Pyrene	129-00-0	µg/L	Grab	Semi-Organic Volatile
	Aluminum	7429-90- 5	µg/L	24-hour Composite	Inorganic
1	Antimony, Total	7440-36- 0	µg/L	24-hour Composite	Inorganic
2	Arsenic, Total	7440-38- 2	µg/L	24-hour Composite	Inorganic
15	Asbestos	1332-21- 4	µg/L	24-hour Composite	Inorganic
3	Beryllium, Total	7440-41- 7	µg/L	24-hour Composite	Inorganic
4	Cadmium, Total	7440-43- 9	µg/L	24-hour Composite	Inorganic
5a	Chromium, Total	7440-47- 3	µg/L	24-hour Composite	Inorganic
6	Copper, Total	7440-50- 8	µg/L	24-hour Composite	Inorganic
14	Iron, Total	7439-89- 6	µg/L	24-hour Composite	Inorganic
7	Lead, Total	7439-92- 1	µg/L	24-hour Composite	Inorganic
	Manganese, Total	7439-96- 5	µg/L	24-hour Composite	Inorganic
	Mercury, Methyl	22967- 92-6	µg/L	Grab	Inorganic
8	Mercury, Total	7439-97- 6	µg/L	Grab	Inorganic
9	Nickel, Total	7440-02- 0	µg/L	24-hour Composite	Inorganic
10	Selenium, Total	7782-49- 2	µg/L	24-hour Composite	Inorganic
11	Silver, Total	7440-22- 4	µg/L	24-hour Composite	Inorganic
12	Thallium, Total	7440-28- 0	µg/L	24-hour Composite	Inorganic
13	Zinc, Total	7440-66- 6	µg/L	24-hour Composite	Inorganic
	Boron	7440-42- 8	µg/L	24-hour Composite	Non-Metal/Mineral
	Chloride	16887- 00-6	mg/L	24-hour Composite	Non-Metal/Mineral
14	Cyanide, Total (as CN)	57-12-5	µg/L	Grab	Non-Metal/Mineral

CTR	Parameter	CAS Number	Units	Effluent Sample Type	Parameter Type
	Sulfate	14808- 79-8	mg/L	24-hour Composite	Non-Metal/Mineral
	Sulfide (as S)	5651-88- 7	mg/L	24-hour Composite	Non-Metal/Mineral
16	2,3,7,8-TCDD (Dioxin)	1746-01- 6	mg/L	24-hour Composite	Pesticide/PCB/Dioxin
110	4,4-DDD	72-54-8	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
109	4,4-DDE	72-55-9	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
108	4,4-DDT	50-29-3	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
102	Aldrin	309-00-2	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
103	alpha-BHC (Benzene hexachloride)	319-84-6	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
112	alpha-Endosulfan	959-98-8	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
104	beta-BHC (Benzene hexachloride)	319-85-7	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
113	beta-Endosulfan	33213- 65-9	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
107	Chlordane	57-74-9	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
106	delta-BHC (Benzene hexachloride)	319-86-8	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
111	Dieldrin	60-57-1	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
114	Endosulfan Sulfate	1031-07- 8	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
115	Endrin	72-20-8	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
116	Endrin Aldehyde	7421-93- 4	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
105	gamma-BHC (Benzene hexachloride or Lindane)	58-89-9	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
117	Heptachlor	76-44-8	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
118	Heptachlor Epoxide	1024-57- 3	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
120	PCB 1221	11104- 28-2	µg/L	24-hour Composite	Pesticide/PCB/Dioxin

CTR	Parameter	CAS Number	Units	Effluent Sample Type	Parameter Type
121	PCB 1232	11141- 16-5	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
122	PCB 1242	53469- 21-9	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
123	PCB 1248	12672- 29-6	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
124	PCB 1254	11097- 69-1	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
125	PCB 1260	11096- 82-5	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
119	Polychlorinated Biphenyl (PCB) 1016	12674- 11-2	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
126	Toxaphene	8001-35- 2	µg/L	24-hour Composite	Pesticide/PCB/Dioxin
	рН		SU	Grab	Conventional Parameters
1	Temperature		°C	Grab	Conventional Parameters
	Dissolved Organic Carbon (DOC)	DOC	mg/L	24-hour Composite	Nonconventional Parameters
1	Foaming Agents (MBAS)	MBAS	mg/L	24-hour Composite	Nonconventional Parameters
	Hardness (as CaCO3)	471-34-1	mg/L	Grab	Nonconventional Parameters
	Electrical Conductivity	EC	µmho s /cm	24-hour Composite	Nonconventional Parameters
1	Total Dissolved Solids (TDS)	TDS	mg/L	24-hour Composite	Nonconventional Parameters
	Ammonia (as N)	7664-41- 7	mg/L	24-hour Composite	Nutrients
1	Nitrate (as N)	14797- 55-8	mg/L	24-hour Composite	Nutrients
	Nitrite (as N)	14797- 65-0	mg/L	24-hour Composite	Nutrients
	Phosphorus, Total (as P)	7723-14- 0	mg/L	24-hour Composite	Nutrients
	1,1,2-Trichloro-1,2,2- Trifluoroethane	76-13-1	µg/L	Grab	Other Constituents of Concern
	1,2,3-Trichloropropane (TCP)	96-18-4	µg/L	Grab	Other Constituents of Concern

^{4.} **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 **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. **Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.
- c. **Grab Sample.** A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.
- d. **Concurrent Sampling.** The Discharger is not required to conduct effluent monitoring for constituents that have already been sampled in a given month, as required in Table D-3, except for hardness, pH, and temperature, which shall be conducted concurrently with the effluent sampling.
- e. **Total Mercury and methylmercury.** Samples for total mercury and methylmercury shall be taken using clean hands/dirty hands procedures, as described in U.S. EPA method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels, for collection of equipment blanks (section 9.4.4.2), and shall be analyzed by U.S. EPA method 1630/1631 (Revision E) with a reporting limit of 0.05 ng/L for methylmercury and 0.5 nanograms per liter (ng/L) for total mercury.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

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

B. Self-Monitoring Reports

 The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) <u>Program</u> <u>website</u> (www.waterboards.ca.gov/ciwqs/index.html). The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.

- 2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly SMRs including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this MRP. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this MRP, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
- Monitoring periods and reporting for all required monitoring shall begin on 1 November 2023 and be completed according to the following:

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

Table D-8. Monitoring Periods and Reporting Schedule

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

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

- a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

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

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
- d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- 5. **Multiple Sample Data.** When determining compliance with an AMEL, AWEL, or maximum daily effluent limitation (MDEL) for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or ND. In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
 - a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
 - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
- 6. The Discharger shall submit SMRs in accordance with the following requirements:
 - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data are required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; discuss corrective actions taken or planned; and

the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation. The cover letter must be uploaded directly into CIWQS and violations must be entered into CIWQS under the Violations tab for the reporting period in which the violation occurred in addition to them being identified in the cover letter.

- c. The Discharger shall attach final laboratory reports for all contracted, commercial laboratories, including quality assurance/quality control information, with all its SMRs for which sample analyses were performed. Bench sheets are not required but should be available upon request by Regional Board staff.
- 7. The Discharger shall submit in the SMRs calculations and reports in accordance with the following requirements.
 - a. **Calendar Annual Average Limitations/Triggers –** 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. **Removal Efficiency (BOD5 and TSS).** The Discharger shall calculate and report the percent removal of BOD5 and TSS in the SMRs. The percent removal shall be calculated as specified in section VIII.A of the Limitations and Discharge Requirements in the Municipal General Order.
 - c. **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.
 - d. **Dissolved Oxygen Receiving Water Limitations.** The Discharger shall report monthly in the SMR the dissolved oxygen concentrations in the receiving water (Monitoring Locations RSW-001U and RSW-002D).
 - e. **Turbidity Receiving Water Limitations**. The Discharger shall calculate and report the turbidity increase in the receiving water applicable to the natural turbidity condition specified in section VI.A.18.a, of the Limitations and Discharge Requirements in the Municipal General Order.

C. Discharge Monitoring Reports (DMRs)

 The Discharger shall electronically submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic submittal of DMRs will be in addition to electronic submittal of SMRs. Information about electronic submittal of DMRs is provided by the <u>Discharge Monitoring Report website</u>:

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

D. Other Reports

- 1. **Special Study Reports.** Special study reports required by section VIII.C, Provisions, in this NOA shall be submitted in accordance with the reporting requirements in Table D-9, Technical Reports.
- 2. Analytical Methods Report. The Discharger shall complete and submit an Analytical Methods Report, electronically via CIWQS submittal, by the due date specified in Table D-9 below. The Analytical Methods Report shall include the following for each constituent listed in tables D-3, D-4, and D-7 of this NOA: 1) applicable water quality objective, 2) reporting level (RL), 3) method detection limit (MDL), and 4) analytical method. The analytical methods shall be sufficiently sensitive with RLs consistent with the SSM Rule (see also General Monitoring Provision F in the Municipal General Order), and with the Minimum Levels (MLs) in the SIP, Appendix 4. The "Reporting Level or RL" is synonymous with the "Method Minimum Level" described in the SSM Rule. If an RL is greater than the applicable water quality objective for a constituent, the Discharger shall explain how the proposed analytical method complies with the SSM Rule. Central Valley Water Board staff will provide a tool with this NOA to assist the Discharger in completing this requirement. The tool will include the constituents and associated applicable water quality objectives to be included in the Analytical Methods Report.
- 3. **Annual Operations Report.** The Discharger shall submit in accordance with the reporting requirements in Table D-9, Technical Reports, a written report containing the following:
 - a. The names, certificate grades, and general responsibilities of all persons employed at the Facility.
 - b. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.
 - c. A statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration.
 - d. A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.
 - e. The Discharger may also be requested to submit an annual report to the Central Valley Water Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.
- 4. **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 <u>GeoTracker website</u> (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 <u>Electronic Submittal of Information</u>

(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 <u>Recycled Water Policy</u> (https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions /2018/121118_7_final_amendment_oal.pdf). A PDF of the upload confirmation from GeoTracker for the Recycled Water Policy Annual Report shall be uploaded into CIWQS to demonstrate compliance with this reporting requirement.

5. **Technical Report Submittals.** The Municipal General Order, as specified in this NOA, includes requirements to submit various reports and documents that may include, a Notice of Intent, special study technical reports, progress reports, and other reports identified in the MRP (hereafter referred to collectively as "technical reports"). The Technical Reports Table D-9 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.

Report #	Technical Report	Due Date	CIWQS Report Name	
1	Notice of Intent	31 October 2027	NOI	
2	Analytical Methods Report	1 February 2024	MRP X.D.2	
3	TRE Work Plan	1 November 2023	MRP V.F.2	
4	Analytical Methods Report Certification	1 October 2024	MRP IX.C.3	
5	Annual Operations Report #1	1 February 2024	MRP X.D.3	
6	Annual Operations Report #2	1 February 2025	MRP X.D.3	
7	Annual Operations Report #3	1 February 2026	MRP X.D.3	
8	Annual Operations Report #4	1 February 2027	MRP X.D.3	
9	Annual Operations Report #5	1 February 2028	MRP X.D.3	
10	Recycled Water Policy Annual Report Submittal Confirmation #1	30 April 2024	MRP X.D.4	
11	Recycled Water Policy Annual Report Submittal Confirmation #2	30 April 2025	MRP X.D.4	
12	Recycled Water Policy Annual Report Submittal Confirmation #3	30 April 2026	MRP X.D.4	
13	Recycled Water Policy Annual Report Submittal Confirmation #4	30 April 2027	MRP X.D.4	
14	Recycled Water Policy Annual Report Submittal Confirmation #5	30 April 2028	MRP X.D.4	

Table D-9. Technical Reports

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

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

Abbreviations and Notes:

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

Parameter	Parameter Units		CV	Effluent Limit Table in Municipal General Order	AMEL	AWEL
Nitrate Plus Nitrite (as N)	mg/L	10	1.01	20B	10	20

Table E-1. Human Health WQBELs Calculations

Parameter	Units	СМС	ССС	CV	Effluent Limit Table in Municipal General Order	AMEL	AWEL
Ammonia, Total (as N)	mg/L	8.1	1.4	2.9	18C	1.0	3.5

Table E-2. Aquatic Life WQBELs Calculations