



Central Valley Regional Water Quality Control Board

Day Month Year

Justin Vinson, Public Works Superintendent
City of Atwater
750 Bellevue Road
Atwater, CA 95301

VIA EMAIL:
Jvinson@atwater.org
CERTIFIED MAIL
<XXXX XXXX XXXX XXXX>

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

Our office received a Notice of Intent (NOI) dated 3 June 2022 from the City of Atwater (Discharger), for discharge of tertiary treated domestic wastewater to surface water from the Atwater Regional Wastewater Treatment Facility (Facility) to Peck/Atwater Drain. The 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) 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 R5-2023-0025-005 under National Pollutant Discharge Elimination System (NPDES) Permit CAG585001. Please reference your Municipal General Order enrollee number, **R5-2023-0025-005**, in your correspondence and submitted documents.

Discharges to surface waters from the Facility are currently regulated by the previous Municipal General Order R5-2017-0085-02 under enrollee number R5-2017-0085-001. The NOA was issued by the Executive Officer on 30 May 2018 and was later amended on 26 May 2020. This NOA, authorizing coverage under the Municipal General Order, shall become effective on **1 August 2024**, and at which time the terms and conditions in NOA R5-2017-0085-001 and General Order R5-2017-0085-02 will cease to be effective for the Facility except for enforcement purposes. To meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements contained in the Municipal General Order and as specified in this NOA. This action in no way prevents the Central Valley Water Board from taking enforcement action for past violations of NOA R5-2017-0085-001.

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

The enclosed [Municipal General Order](#) is available online (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2023-0025.pdf) and can be requested by email or phone from the [NPDES Permitting Contacts](#) webpage (https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/contacts/). You are urged to familiarize yourself with the entire contents of the enclosed document.

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

Table 1. Facility Information

| | |
|--|--|
| WDID | 5B24NP00017 |
| CIWQS Facility Place ID | 747519 |
| Discharger | City of Atwater |
| Name of Facility | Atwater Regional Wastewater Treatment Facility |
| Facility Street Address | 530 South Bert Crane Road |
| Facility City, State, Zip Code | Atwater, CA 95301 |
| Facility County | Merced County |
| Facility Contact, Title and Phone | Justin Vinson, Public Works Superintendent (209) 777-0273 |
| Authorized Person to Sign and Submit Reports | Justin Vinson, Public Works Superintendent (209) 777- 0273 Steven Pound, Project Manager (209) 769 - 8078 |
| Mailing Address | 750 Bellevue Road, Atwater, CA 95301 |
| Billing Address | Same as mailing address |
| Type of Facility | Publicly Owned Treatment Works (POTW) |
| Major or Minor Facility | Major |
| Threat to Water Quality | 2 |
| Complexity | B |
| Pretreatment Program | Yes |
| Recycling Requirements | Not Applicable |
| Facility Design Average Dry Weather Flow (ADWF) | 6.0 Million Gallons Per Day (MGD) |
| Permitted ADWF | 6.0 MGD |
| Watershed | San Joaquin Valley Floor Hydrologic Unit, El Nido-Stevinson Hydrologic Area (No. 535.70) |

| | |
|-----------------------------|--------------------------------|
| Receiving Water | Peck/Atwater Drain |
| Receiving Water Type | Inland Surface Water |
| Discharge Point 001 | Coordinates: 37.2803, -120.633 |

I. FACILITY INFORMATION

The Discharger is the owner of the Facility but currently contracts Veolia Water West Operating Services Inc. to operate and maintain the Facility. The Facility provides sewerage service for the community of Atwater (population of 31,970 based on 2020 census), the unincorporated community of Winton (population of 11,709 based on 2020 census), and both the Federal Bureau of Prisons – Atwater and the Castle Airport Aviation and Development Center (combined population of approximately 1,500). The design average dry weather flow capacity of the Facility is 6.0 MGD.

The Facility provides full nitrification and denitrification for nitrogen removal and uses ultraviolet light (UV) for disinfection. A Location Map is included in Appendix A and a Liquid/Solids Flow Schematic is included in Appendix B. The components of the Facility include:

- A headworks with fine screening and grit removal;
- Two oxidation ditches providing nitrification and denitrification;
- Three secondary clarifiers;
- Three cloth-media tertiary filters;
- An UV disinfection system;
- Two aerobic digesters;
- A solids holding day tank;
- Three rotary presses;
- A concrete biosolids storage/drying area; and
- An unlined emergency storage basin also used as a stormwater retention pond for onsite stormwater runoff.

The Facility has a design flow of 6.0 MGD. For the 2021 calendar year, the Facility received an annual average influent flow of 3.3 MGD. The Facility’s UV system consists of three UV chambers each containing five banks. Sludge wasted from the secondary clarifiers is either returned to the oxidation ditches as returned activated sludge or wasted to the aerobic digesters as waste activated sludge. Biosolids are stored and dried at the Facility for a minimum of three months.

II. RECEIVING WATER BENEFICIAL USES

The Facility discharges from Discharge Point 001 (37.2803, -120.633) to Peck/Atwater Drain, which is hydraulically connected to the San Joaquin River, a water of the United States, between Sack Dam and the mouth of the Merced River within the El Nido-Stevenson Hydrologic Area of the San Joaquin Valley Floor Hydrologic Unit (Hydrologic Area No. 535.70).

Peck Drain is a manmade, unlined channel constructed to convey water from Atwater Drain to Joseph Gallo Farms (Gallo Ranch). Atwater Drain empties into Peck Drain at the eastern boundary of the Gallo Ranch property just south of State Route 140 and along Bert Crane Road. The historic alignment of Atwater Drain is abandoned at this location. Peck Drain rejoins the original Atwater Drain alignment

on the southwest side of Gallo Ranch.

Beyond Gallo Ranch, Atwater Drain borders a few large agricultural parcels and two managed wetland areas. Atwater Drain is also a man-made, unlined channel originally constructed by Merced Irrigation District to dispose of groundwater pumped to lower the groundwater table in agricultural lands. The Atwater Drain was later modified to also collect and disperse agricultural tail waters from surrounding properties, overflow from the adjacent irrigation supply channels, and stormwater drainage from the City of Atwater. Gallo Ranch, as part of its agreement with the Discharger, has the right to all treated wastewater discharged to Peck Drain. Any water not extracted for use by Gallo Ranch flows into Atwater Drain. Atwater Drain terminates at the Arena Plains Unit of the Merced National Wildlife Refuge. Water in the Merced National Wildlife Refuge can flow into the San Joaquin River via the East Side Canal.

Starting in 2016, the United States Bureau of Reclamation entered into one-year agreements to purchase up to 6,000 acre-feet per year of tertiary-treated wastewater from Gallo Farms. The treated wastewater is pumped out of Peck/Atwater Drain into Bear Creek. Bear Creek is used to convey the treated wastewater to the East Bear Creek Unit of the San Luis National Wildlife Refuge complex. Water in Bear Creek, if not diverted, will flow into the San Joaquin River.

Beneficial uses applicable to discharge are carried over from the previous NOA R5-2017-0085-001. See Appendix C section III of this NOA for how surface water beneficial uses were established. Groundwater underlying the Facility is in the El Nido-Stevinson Detailed Analysis Unit (DAU) No. 212. The beneficial uses of groundwater for this DAU are designated in the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fifth Edition, revised February 2019 (Basin Plan). The following beneficial uses are applicable to the discharge:

Table 2. Beneficial Uses

| Discharge Point | Receiving Water Name | Beneficial Uses |
|-----------------|----------------------|---|
| 001 | Peck/Atwater Drain | Municipal and Domestic Supply (MUN) Agricultural Supply (AGR) Ground Water Recharge (GWR) Water Contact Recreation (REC-1) Warm Freshwater Habitat (WARM); and Wildlife Habitat (WILD) |
| -- | Groundwater | Municipal and Domestic Supply (MUN); Agricultural Supply, Including Irrigation and Stock Watering (AGR); Industrial Service Supply (IND); and Industrial Process Supply (PRO) |

III. RECEIVING WATER TOTAL MAXIMUM DAILY LOADS (TMDLS)

As specified in the Municipal General Order, section IV.D of Attachment F (Fact Sheet), and in accordance with section 303(d) of the Clean Water Act, U.S. EPA requires the Central Valley Water Board to develop TMDLs for each 303(d) listed pollutant and water body combination.

Peck/Atwater Drain is not listed for constituent(s) on the Clean Water Act 303(d) List of impaired water bodies. Therefore, no additional 303(d) based effluent limitations or monitoring requirements are included in this NOA. However, the San Joaquin River and Bear Creek are both listed as water quality-limited segments (WQLSs). Bear Creek (from Bear Valley to the San Joaquin River) is listed as a WQLS for bifenthrin, indicator bacteria (*Escherichia coli*), pyrethroids and unknown toxicity. The San Joaquin River segment between Bear Creek and Mud Slough is listed as a WQLS for arsenic, boron, DDT, electrical conductivity, indicator bacteria (*Escherichia coli*), Group A pesticides, linuron, mercury, temperature, total dissolved solids, selenium, and unknown toxicity. As specified in this NOA, the Municipal General Order includes monitoring for all these constituents, except *Escherichia coli* and linuron. However, this NOA includes total coliform effluent limitations and monitoring requirements and requires the Discharger to provide treatment equivalent to Title 22 disinfected tertiary recycled water, which means the Facility is required to produce an essentially pathogen-free effluent by maintaining a 5-log virus removal/inactivation barrier through filtration and disinfection.

The Basin Plan includes waste load allocations for diazinon and chlorpyrifos applicable to all NPDES dischargers that discharge directly or indirectly to the lower San Joaquin River. The Municipal General Order, section V.A.1.c.xii. includes an average monthly and average weekly effluent limitation for chlorpyrifos and diazinon for discharges to the San Joaquin River and its tributaries downstream of the major dams and reservoirs. These chlorpyrifos and diazinon limitations are included in this NOA.

IV. DISCHARGE PROHIBITIONS

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

1. The discharge of wastes, other than those described in section I.A and meeting the eligibility criteria in section I.B of the Municipal General Order, is prohibited unless the Discharger obtains coverage under another general or individual Order that regulates the discharge of such wastes. The discharge of waste at a location or in a manner different from that described in the NOI and NOA is prohibited. (Municipal General Order section IV.A)
2. The bypass or overflow of waste 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)
3. 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)
4. 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)

5. **Average Dry Weather Flow.** Discharges exceeding an average dry weather flow of 6.0 MGD are prohibited at Discharge Point 001 (compliance measured at Monitoring Location EFF-001). (Municipal General Order section IV.E)

V. EFFLUENT LIMITATIONS

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001. Effluent limitations are provided in the Municipal General Order. Only the effluent limitations listed below in Table 3 and items 1-5 are applicable to this Facility. Unless otherwise specified in this NOA, compliance shall be measured at Monitoring Location EFF-001, as described in the Monitoring and Reporting Program, Appendix D of this NOA.

The Discharger shall maintain compliance with the effluent limitations specified in Table 3 and items 1-5 below.

Table 3. Effluent Limitations

| Parameter | Units | Average Monthly | Average Weekly | Municipal General Order Section Reference |
|---|-----------------------------|-----------------|----------------|---|
| Biochemical Oxygen Demand (5-day @ 20°Celsius) (BOD5) | milligrams per liter (mg/L) | 10 | 15 | V.A.1.a.ii.(a) Table 4 |
| Total Suspended Solids (TSS) | mg/L | 10 | 15 | V.A.1.a.ii.(a) Table 4 |
| Ammonia Nitrogen, Total (as N) | mg/L | 1.2 | 2.7 | V.A.1.c.v Table 18C |
| Nitrate plus Nitrite, Total (as N) | mg/L | 10 | 14 | V.A.1.c.vi Table 20B |

1. **pH (Municipal General Order section V.A.1.c.iv.(a)).** The pH shall at all times be within the range of 6.5 and 8.5.
2. **Percent Removal (Municipal General Order section V.A.1.a.ii.(b).(2)).** The average monthly percent removal of BOD5 and TSS shall not be less than 90 percent.
3. **Total Coliform Organisms (Municipal General Order section V.A.1.a.ii.(c)).** (Measured at UVS-001). Effluent total coliform organisms shall not exceed:
 - i. 2.2 most probable number per 100 milliliters (MPN/100 mL), as a 7-day median;
 - ii. 23 MPN/100 mL, more than once in any 30-day period; and
 - iii. 240 MPN/100 mL, at any time.
4. **Whole Effluent Toxicity, Chronic (Municipal General Order section V.A.1.c.ii.(a)(2) and V.A.1.c.ii.(2)).**

i. **Chronic Whole Effluent Toxicity.**

- (a) **Maximum Daily Effluent Limitation (MDEL).** No chronic aquatic toxicity test using *Selenastrum capricornutum* shall result in a “Fail” at the Instream Waste Concentration (IWC) for the sub-lethal endpoint measured in the test **AND** a percent effect for that sub-lethal endpoint greater than or equal to 50 percent (as defined in section V.C of the MRP).
- (b) **Monthly Median Effluent Limitation (MMEL).** No more than one chronic aquatic toxicity test using *Selenastrum capricornutum* initiated in a toxicity calendar month shall result in a “Fail” (as defined in section V.C of the MRP) at the IWC for any endpoint.

5. **Diazinon and Chlorpyrifos (Municipal General Order section V.A.1.c.xii)**

Effluent diazinon and chlorpyrifos concentrations shall not exceed the sum of one (1.0) as identified below:

i. **Average Monthly Effluent Limitation (AMEL)**

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

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

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

ii. **Average Weekly Effluent Limitation (AWEL)**

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

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

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

VI. PERFORMANCE-BASED EFFLUENT TRIGGER

1. **Electrical Conductivity (Municipal General Order section V.A.1.c.viii.(b). Table 23).**

The effluent electrical conductivity at Discharge Point 001 shall not exceed the calendar annual average effluent trigger of 750 micromhos per centimeter (µmhos/cm). Compliance shall be measured at Monitoring Location EFF-001.

VII. RECEIVING WATER LIMITATIONS

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

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

- Biostimulatory Substances (VI.A.3);
- Chemical Constituents (VI.A.4);
- Color (VI.A.5);
- Dissolved Oxygen (VI.A.6.a.i, ii, iii);
- Floating Material (VI.A.7);

- Oil and Grease (VI.A.8);
- pH (VI.A.9.a);
- Pesticides (VI.A.10a. and b.);
- Radioactivity (VI.A.11);
- Suspended Sediments (VI.A.12);
- Settleable Substances (VI.A.13);
- Suspended Material (VI.A.14);
- Taste and Odors (VI.A.15);
- Temperature (VI.A.16.g)
- Toxicity (VI.A.17); and
- Turbidity (VI.A.18.a).

2. Groundwater Limitations (Municipal General Order section VI.B). Release of waste constituents from any storage, treatment, or disposal component associated with the Facility shall not cause the underlying groundwater to contain waste constituents in concentrations greater than background water quality or applicable water quality objectives, whichever is greater.

VIII. MONITORING AND REPORTING

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

IX. PROVISIONS

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

A. Standard Provisions. (section VII.A 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 below apply to this Facility:

Table 4: Summary of Applicable Special Provisions

| Special Provision | Section Reference |
|--|---|
| 1. Reopener Provisions | a. Major Modification of Treatment Works c. Water Effect Ratios (WERs) and Metal Translators |
| 2. Special Studies, Technical Reports and Additional Monitoring Requirements | Not applicable |

| Special Provision | Section Reference |
|---|--|
| 3. Best Management Practices and Pollution Prevention | b. Salinity Evaluation and Minimization Plan (SEMP) for the Alternative Salinity Permitting Approach. c. Pyrethroid Management Plan (if applicable) |
| 4. Construction, Operation and Maintenance Specifications | a. i. and iii. Filtration System Operating Specifications b. UV Disinfection System Operating Specifications i.(a). UV Disinfection System – Dose ii. (a). UV Disinfection System – Transmittance iii through vi. UV Disinfection System – General c. i through xiii. Pond Operating Specifications |
| 5. Special Provisions for Municipal Facilities | a. Pretreatment Requirements b. Sludge/Biosolids Treatment or Discharge Specifications |
| 6. Other Special Provisions | a. Title 22, or Equivalent, Disinfection Requirements |
| 7. Compliance Schedules | Not applicable |

X. COMPLIANCE DETERMINATION

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

- BOD₅ and TSS Effluent Limitations (VIII.A);
- Average Dry Weather Flow Prohibition (VIII.E);
- Total Coliform Organisms Effluent Limitations (VIII.F);
- Dissolved Oxygen Receiving Water Limitation (VIII.J);
- Chronic Whole Effluent Toxicity Effluent Limitations or Triggers (VIII.K);
- Chlorpyrifos and Diazinon Effluent Limitations (VIII.L);
- Period Average, Calendar Month Average, and Annual Average (VIII.O); and
- Turbidity Receiving Water Limitation (VIII.P)

XI. ANTI-BACKSLIDING REQUIREMENTS

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

Effluent limitations for ammonia, copper, zinc, acute whole effluent toxicity, pH, and mass-based effluent limitations for ammonia are less stringent than prescribed in the previous NOA, R5-2017-0085-001. A more detailed anti-backsliding 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 proved in

the federal anti-backsliding regulations.

XII. ANTIDegradation Requirements

Antidegradation requirements are specified in the Municipal General Order, section V.D.4, Attachment F (Fact Sheet). This NOA does not allow an increase in flow or mass of pollutants to the receiving water and the relaxation of effluent limitations for ammonia, copper, zinc, acute whole effluent toxicity, and pH, and mass-based effluent limitations for ammonia are 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.

XIII. 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.

XIV. Enforcement

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

XV. Communication

Until this NOA becomes effective on 1 August 2024, you will need to comply with the effluent limitations and requirements contained in your existing permit, NOA, Enrollee Number R5-2017-0085-001. For your monthly self-monitoring reports, you will need to demonstrate compliance with existing NOA R5-2017-0085-001 through 31 July 2024. You will need to demonstrate compliance with this NOA R5-2023-0025-005 beginning 1 August 2024.

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

- Attention: NPDES Compliance and Enforcement Section
- Discharger: City of Atwater
- Facility: Atwater Regional WWTF
- County: Merced County
- CIWQS Place ID: 747519

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. Jennifer Dolores 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 Jennifer Dolores by phone at (559) 710-1034 or email at Jennifer.Dolores@waterboards.ca.gov.

Patrick Pulupa
Executive Officer

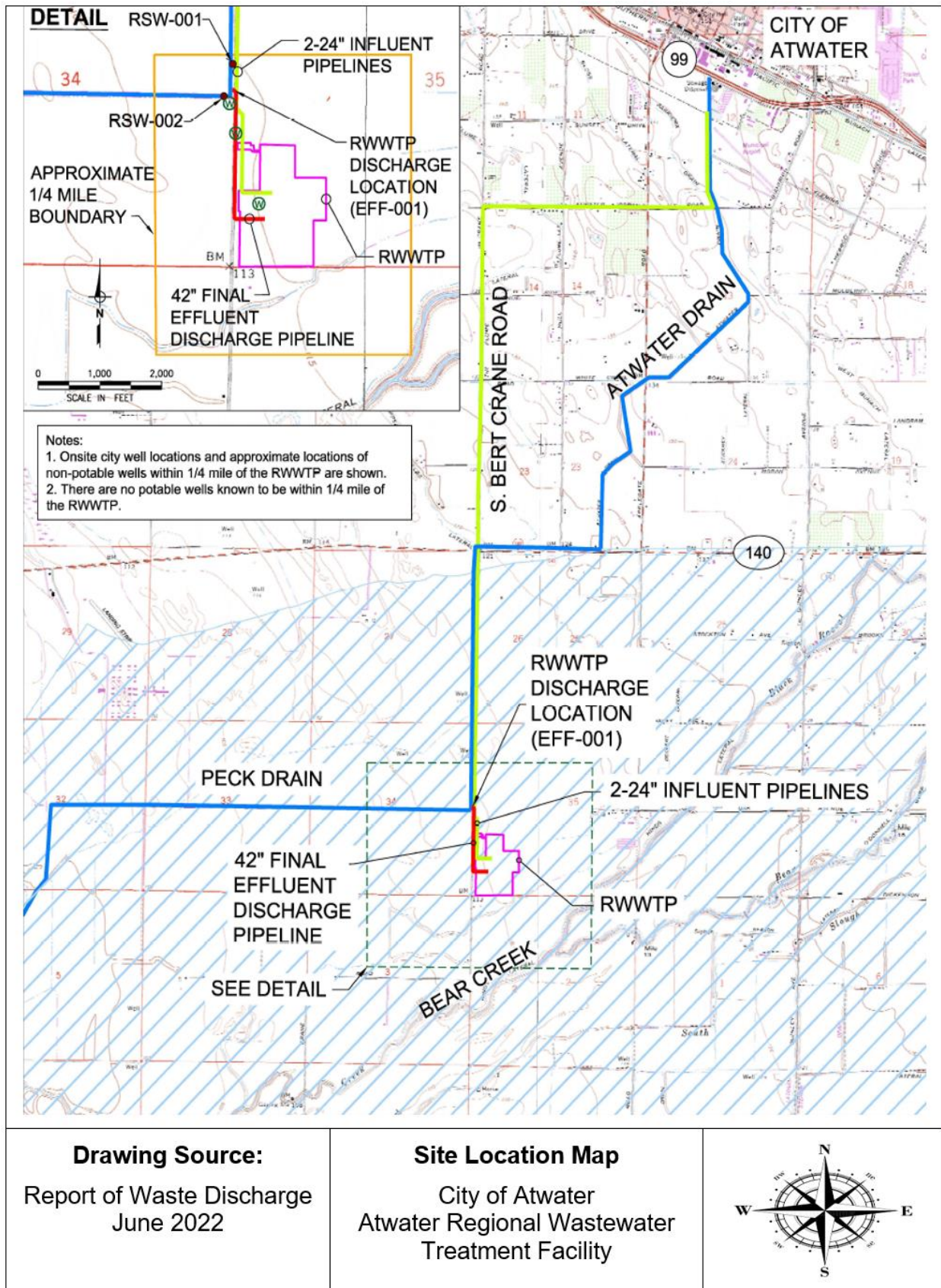
Appendices:
Appendix A – Location Map
Appendix B – Flow Schematic
Appendix C – Supplemental Fact Sheet
Appendix D – Monitoring and Reporting Program
Appendix E – Determination of WQBELs

Enclosures:
Municipal General Order R5-2023-0025 (Discharger Only)

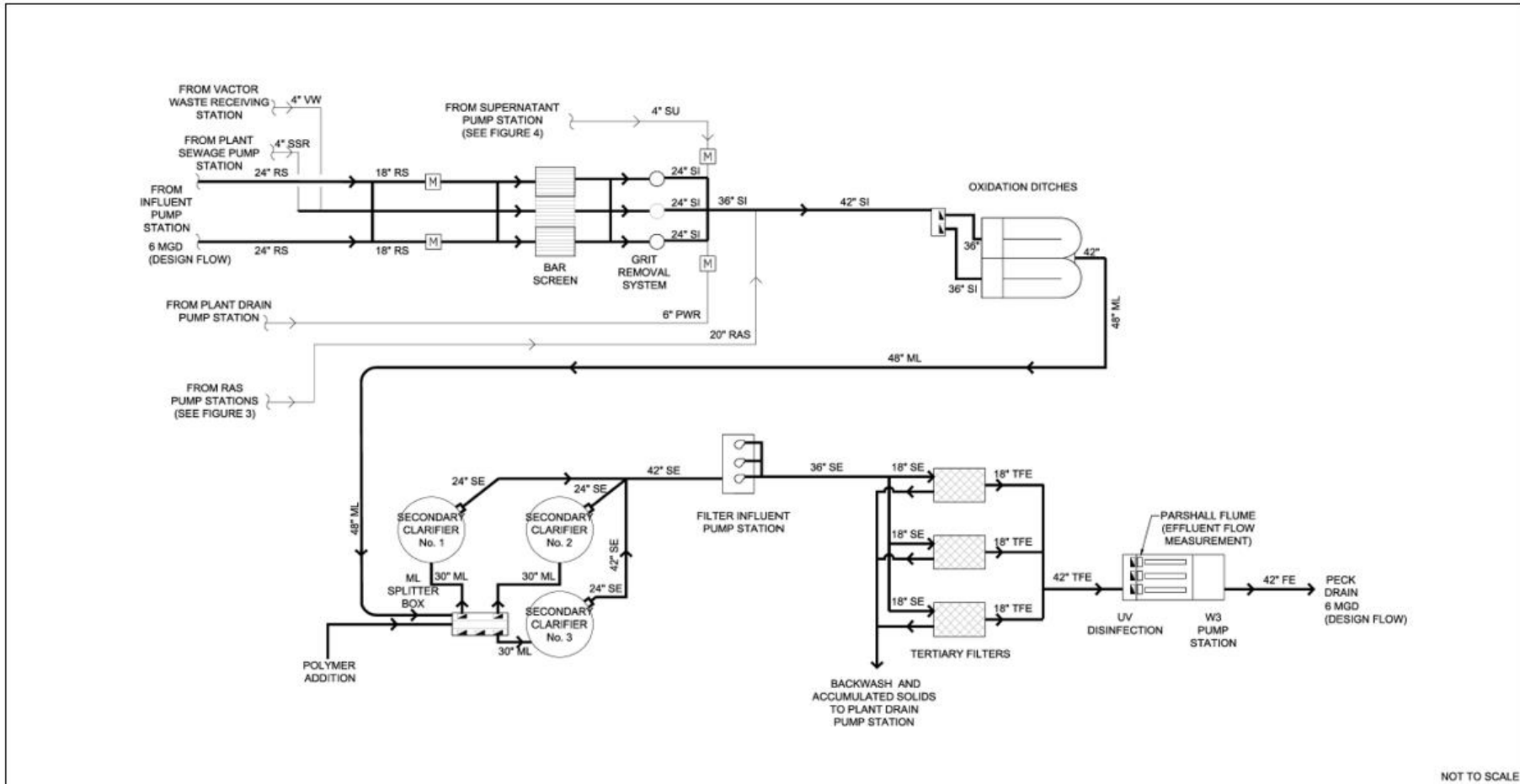
cc:

Prasad Gullapalli, U.S. EPA, Region IX, San Francisco (email only)
Peter Kozelka, U.S. EPA, Region IX, San Francisco (email only)
Justin Sloan, U.S. Fish and Wildlife Service, Sacramento (email only)
Merced National Wildlife Refuge (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)
Discharge Monitoring Reports, California State Water Resources Control Board (via email at dmr@waterboards.ca.gov)
California Department of Fish and Wildlife, Region 4, Fresno (email only)
Merced Irrigation District, Merced
Debbie Mackey, Central Valley Clean Water Association, Sacramento (email only)
Michelle Chester, Central Valley Clean Water Association, Sacramento (email only)
Steve Pound, Veolia Water, Atwater (email only)
Kathryn Gies, West Yost Associates, Walnut Creek (email only)
Michael D. Gallo, Joseph Gallo Farms, P.O. Box 775, Atwater, CA 95301-0775
Richard McHenry, California Sportfishing Protection Alliance, Stockton (and via email)
Jo Anne Kipps, Fresno (email only)
Michael Garabedian, Placer Group Sierra Club & Friends of the North Fork (via email)
Ed Ketchum, Amah Mutsun Tribal Band (via email)
Lloyd Mathiesen, Chicken Ranch Rancheria of Me-Wuk Indians (via email)
Robert Ledger, Dumna Wo-Wah Tribal Government (via email)
Monica Arellano, Muwekma Ohlone Indian Tribe of the SF Bay Area (via email)
Cosme Valdez, Nashville Enterprise Miwok-Maidu-Nishinam Tribe (via email)
Mary Stalter, North Fork Rancheria of Mono Indians (via email)
Timothy Perez, Northern Valley Yokut / Ohlone Tribe (via email)
Heather Airey, Picayune Rancheria of the Chukchansi Indians (via email)
Shana Powers, Santa Rosa Rancheria Tachi Yokut Tribe (via email)
Tara Fouch-Moore, Southern Sierra Miwuk Nation (via email)
Bob Pennell, Table Mountain Rancheria (via email)
Kerri Vera, Tule River Indian Tribe (via email)
Stanley Cox, Tuolumne Band of Me-Wuk Indians (via email)
Kenneth Woodrow, Wuksachi Indian Tribe/Eshom Valley Band (via email)
Linda Xiong, Community Initiatives for Collective Impact (via email)
Olivia Faz, Leadership Counsel for Justice & Accountability (via email)

APPENDIX A – LOCATION MAP

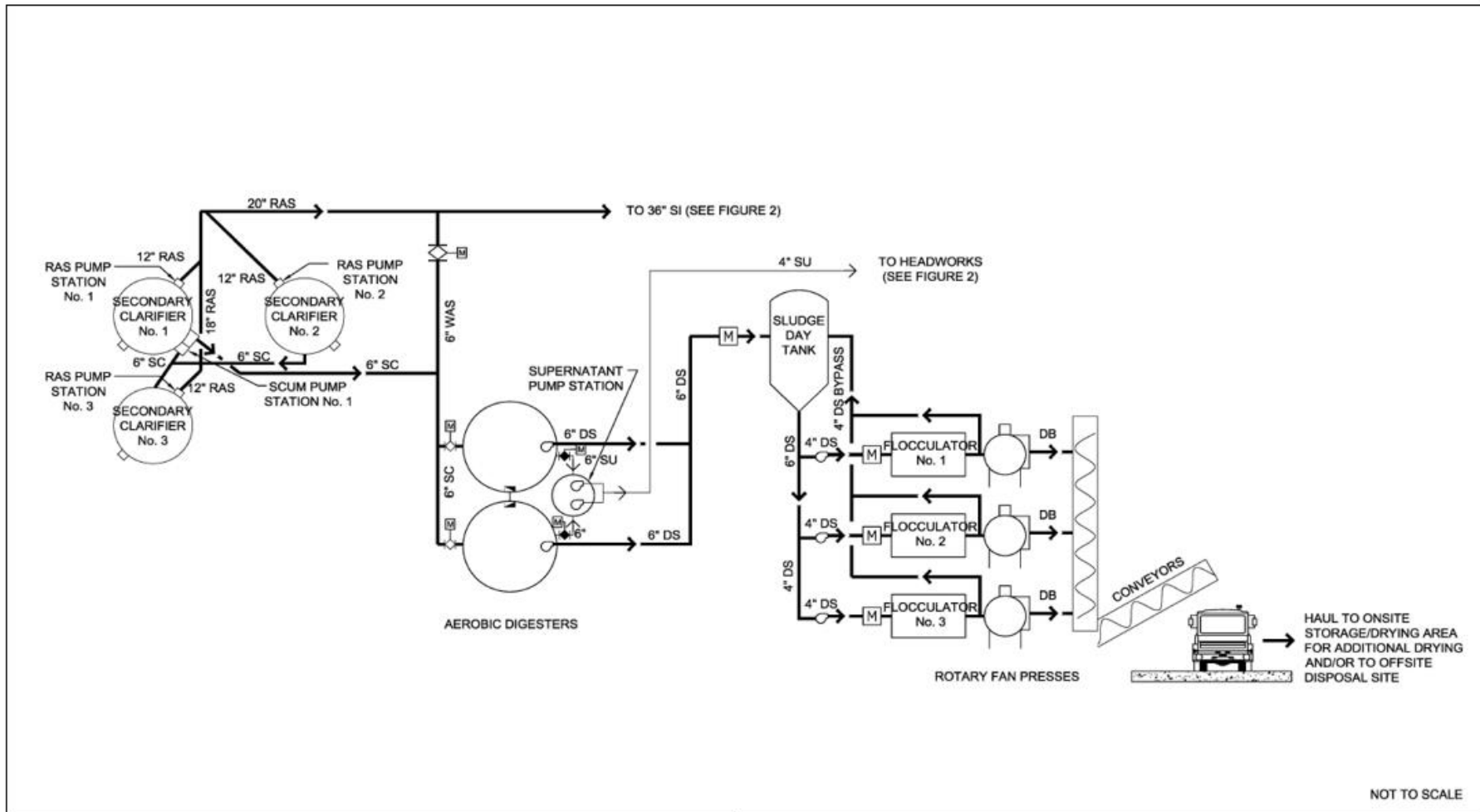


APPENDIX B – FLOW SCHEMATIC



Drawing Source:
Report of Waste Discharge
June 2022

Liquid Process Schematic
City of Atwater
Atwater Regional Wastewater Treatment Facility



Drawing Source:
Report of Waste Discharge
June 2022

Solids Process Schematic:
City of Atwater
Atwater Regional Wastewater Treatment Facility

[DRAFT] APPENDIX C – SUPPLEMENTAL FACT SHEET

I. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

II. FINAL EFFLUENT LIMITATION CONSIDERATIONS

A. Satisfaction of Anti-Backsliding Requirements

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

The effluent limitations in this NOA are at least as stringent as the effluent limitations in the Facility's previous NOA, Enrollee Number R5-2017-0085-001, with the exception of effluent limitations for ammonia, copper, zinc, pH, and acute whole effluent toxicity. This relaxation of effluent limitations for ammonia and pH, and the removal of effluent limitations for copper, zinc, and acute whole effluent toxicity is consistent with the anti-backsliding requirements of the CWA and federal regulations.

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

Peck/Atwater Drain is considered an attainment water for ammonia, copper, pH, zinc, and acute whole effluent toxicity because the receiving water is not listed as impaired on the 303(d) list for these constituents. The exceptions in Section 303(d)(4) address both waters in attainment with water quality standards and those not in attainment, i.e. waters on the section 303(d) impaired waters list (State Water Resources Control Board Order WQ-2008-0006, Berry Petroleum Company, Poso Creek/McVan Facility). As discussed below, relaxation of ammonia and pH, and removal of copper, zinc, and acute whole effluent toxicity complies with federal and state antidegradation requirements. Thus, relaxation and removal 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 NOA R5-2017-0085-001 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 R5-2017-0085-001 were not retained in this NOA. Updated information that was not available at the time NOA, Enrollee Number R5-2017-0085-001 was issued indicates that copper, zinc, and mass-based effluent limitations for ammonia do not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water. Additionally, the less stringent effluent limitations for ammonia satisfy requirements in CWA section 402(o)(2). The updated information that supports the relaxation of ammonia and removal of copper, zinc, acute whole effluent toxicity, and mass-based effluent limitations for ammonia 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. **Copper.** Monitoring data collected over the permit term for NOA, Enrollee Number R5-2017-0085-001 indicates that copper in the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of their respective water quality objectives/criteria.
- c. **Zinc.** Monitoring data collected over the permit term for NOA, Enrollee Number R5-2017-0085-001 indicates that zinc in the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of their respective water quality objectives/criteria.
- d. **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 effluent limits, which previous NOA R5-2017-0085-001 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 NOA R5-2017-0085-001.

Thus, relaxation of effluent limitations for ammonia and the removal of the effluent limitations for copper, zinc, and acute whole effluent toxicity from this NOA is in accordance with CWA section 402(o)(2)(B)(i), which allows for the removal or relaxation of effluent limitations based on information that was not available at the time previous NOA R5-2017-0085-001 was issued.

3. **Flow.** NOA R5-2017-0085-001, included flow as an effluent limit at Discharge Point 001 based on the Facility design flow. Compliance with the flow limit was calculated using the average daily flow over three consecutive dry weather months. Flow is not a pollutant and therefore has been changed from an effluent limit to a discharge prohibition in this NOA, which is an equivalent level of regulation. This NOA is not less stringent because compliance with flow as a discharge prohibition will be calculated the same way as the previous NOA. Flow as a discharge prohibition adequately regulates the Facility, does not allow for an increase in the discharge of pollutants, and does not constitute backsliding.

B. Antidegradation Policies

This NOA does not allow for an increase in flow or mass of pollutants to the receiving water. Therefore, a complete antidegradation analysis is not necessary. This NOA requires compliance with applicable federal technology-based standards and with 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 or removes effluent limitations for ammonia, pH, copper, zinc, and acute whole effluent toxicity. 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 or 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.

This NOA also removes mass-based effluent limitations for ammonia based on 40 C.F.R. Part 122.45 (f). These changes in effluent limitations will not result in a decrease in the level of treatment or control, or a reduction in water quality.

Furthermore, concentration-based average monthly effluent limitations (AMELs) and average weekly effluent limitations (AWELs) are included for ammonia, as well as a prohibition (section IV.E of this NOA) on discharging flows greater than the average dry weather flow that limits the amount of flow that can be discharged to the receiving water during dry weather months. The combination of flow and concentration-based effluent limits in this NOA are equivalent to mass-based effluent limitations, which were redundant limits contained in previous individual Orders by multiplying the concentration based effluent limits and permitted average dry weather flow by a conversion factor to determine the mass-based effluent limitations. These effluent limitation changes do not result in an allowed increase in pollutants or any additional degradation of the receiving water and are therefore consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and the State Antidegradation Policy.

C. Salinity (Electrical Conductivity or EC)

Based on effluent electrical conductivity data collected from the calendar years 2020 through 2022, the maximum calendar annual average electrical conductivity of the effluent was 506 $\mu\text{mhos/cm}$. The Municipal General Order includes a screening level for electrical conductivity of 1600 $\mu\text{mhos/cm}$ based on the Secondary Maximum Contaminant Level (MCL) to protect the municipal and domestic supply beneficial use.

When only considering the numeric water quality standards for salinity, the discharge does not have reasonable potential to cause or contribute to an in-stream excursion of water quality objectives for salinity. However, due to the Region-wide concerns regarding salinity and to ensure implementation of the Basin Plan's Salinity Control Program the Municipal General Order includes performance-based effluent triggers for EC that are applicable to this Facility. The EC concentration of the effluent is greater than the background concentration observed in Peck/Atwater Drain, 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 750 $\mu\text{mhos/cm}$ 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 Salinity Control Program the Discharger submitted a Notice of Intent on 2 August 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 750 $\mu\text{mhos/cm}$ that is applicable to this Facility.

In addition, the Discharger shall continue to implement a salinity evaluation and minimization plan (SEMP) to identify and address sources of salinity discharged from the Facility. If the effluent calendar annual average EC concentration exceeds the effluent trigger of 750 $\mu\text{mhos/cm}$ during the term of this NOA, the Discharger shall evaluate the effectiveness of the SEMP and provide a summary with the Notice of Intent, due 1 year prior to the expiration date of this NOA.

D. Whole Effluent Toxicity

Previous NOA R5-2017-0085-001 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 has reasonable potential for chronic whole effluent toxicity. It was not warranted to maintain the Facility's acute whole effluent toxicity limitations since, per the Statewide Toxicity Provisions, a chronic aquatic toxicity test is generally protective of both chronic and acute aquatic toxicity. 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)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Central Valley Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program, Attachment E of the Municipal General Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring requirements contained in Monitoring and Reporting Program, Appendix D, of this NOA.

A. Influent Monitoring

1. Influent monitoring is required to collect data on the characteristics of the wastewater and to assess compliance with effluent limitations (e.g., BOD₅ and TSS reduction requirements). The monitoring frequencies for flow (continuous), BOD₅ (1/week) and TSS (1/week) have been retained from NOA, Enrollee Number R5-2017-0085-001.

B. Effluent Monitoring

1. Pursuant to the requirements of 40 C.F.R. section 122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations, assess the effectiveness of the treatment process, and to assess the impacts of the discharge on the receiving stream.
2. As discussed in Section II.B of this Appendix, the mass-based effluent limitations for ammonia, BOD₅, and TSS have not been retained from NOA R5-2017-0085-001.
3. The following effluent monitoring frequencies have been revised from NOA R5-2017-0085-001, all other effluent sampling frequencies from NOA R5-2017-0085-001 are carried forward to this NOA:

Table C-1. Revised Effluent Sampling Frequencies

| Parameter | Unit | Prior Sample Frequency | Revised Sample Frequency | Rationale for Sample Frequency Revision |
|---|-------------|-------------------------------|---------------------------------|---|
| Pyrethroids | ng/L | -- | 1/Quarter | As required per Pyrethroid Pesticides Control Program |
| Electrical Conductivity @ 25°C | µmhos/cm | 1/Week | 1/Month | Reduced frequency is adequate to determine electrical conductivity of the Facility since adequate data at a higher frequency already exist and past data don't show large variability |
| Hardness, Total (as CaCO ₃) | mg/L | 1/Month | 1/Quarter | Reduced frequency is adequate to determine hardness characterization of the Facility since adequate data at a higher frequency already exist and past data don't show large variability |
| Temperature | °F(°C) | 3/week | 1/week | No chronic temperature issues in the effluent. Also matches ammonia sampling frequency |
| Dissolved Oxygen | mg/L | 3/week | 1/week | Reduced frequency is adequate to determine compliance with the receiving water dissolved oxygen limitation |
| Total Dissolved Solids | mg/L | 1/month | 1/Quarter | Reduced frequency is adequate to determine Total Dissolved Solids of the Facility |
| Dissolved Organic Carbon | mg/L | -- | 1/Quarter | Add monitoring to calculate site-specific freshwater aluminum criteria for the next permit renewal |
| Acute Toxicity | % Survival | 1/Year | Discontinue | A chronic aquatic toxicity test is representative of acute aquatic toxicity |
| Chronic Toxicity | % Survival | 1/Quarter | 1/Month | As required in the Statewide Toxicity Provisions |

4. Monitoring data collected over the previous permit term for copper and zinc did not demonstrate reasonable potential to exceed water quality objectives/criteria. Thus,

specific monitoring requirements for these parameters have not been retained from NOA R5-2017-0085-001.

C. Receiving Water Monitoring

1. Peck/Atwater Drain

- a. Receiving water monitoring is necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge to Peck/Atwater Drain.

The following receiving water monitoring frequencies have been revised from NOA R5-2017-0085-001, all other receiving water sampling frequencies from NOA R5-2017-0085-001 are carried forward to this NOA:

Table C-2. Revised Receiving Water Sampling Frequencies

| Parameter | Unit | Prior Sample Frequency | Revised Sample Frequency | Rationale for Sample Frequency Revision |
|---|------|------------------------|--------------------------|--|
| Pyrethroids | ng/L | -- | 1/Quarter | As required per Pyrethroid Pesticides Control Program |
| Hardness, Total (as CaCO ₃) | mg/L | 1/Month | 1/Quarter | Reduced frequency is adequate to determine hardness characterization of the receiving water and a robust data set currently exists |
| Dissolved Organic Carbon | mg/L | -- | 1/Quarter | Add monitoring to calculate site-specific freshwater aluminum criteria for the next permit renewal |

2. Groundwater – Not Applicable

D. Biosolids Monitoring

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

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

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

E. Water Supply Monitoring – Not Applicable

F. 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 monitoring frequency for turbidity (continuous) is retained from previous NOA, R5-2017-0085-001 to evaluate compliance with the turbidity operating specifications.

G. UV Disinfection System Monitoring

1. Monitoring frequencies for flow (continuous), number of UV banks in operation (continuous), UV transmittance (continuous) and UV dose (continuous) have been retained from previous NOA R5-2017-0085-001, to evaluate compliance with UV operating specifications.

H. Pond Monitoring

1. Pond monitoring is required to ensure proper operation of the unlined emergency storage basin that is also used as a stormwater retention pond for onsite stormwater runoff. Daily monitoring for freeboard, and monthly monitoring for pH, odors, and dissolved oxygen has been retained from previous NOA, Enrollee Number R5-2017-0085-001.

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

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

J. Effluent and Receiving Water Characterization Monitoring

1. The previous NOA R5-2017-0085-001, included annual effluent characterization monitoring when discharging to Peck/Atwater Drain and receiving water monitoring twice per permit term. This NOA modifies the effluent characterization monitoring to be conducted quarterly between 1 October 2024 and 30 September 2025. Additionally, this NOA modifies the receiving water characterization monitoring to be conducted twice between 1 October 2024 and 30 September 2025, concurrent with effluent characterization monitoring.

K. Pyrethroid Pesticides Monitoring

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

V. PRETREATMENT PROVISION

A. Pretreatment Requirements

1. On 22 June 2007, the Central Valley Water Board approved the Discharger's pretreatment program. The Industrial Pretreatment Program requires issuance of waste discharge permits to Significant Industrial Users/Categorical Industrial Users, Non-significant Industrial Users, and food service establishments (to control fats, oils, and grease). The program also regulates Significant Commercial Users and dental offices and implements best management practices. The Facility has undergone one pretreatment compliance inspection on 15 February 2019 in the last five years.
2. The federal CWA section 307(b), and federal regulations, 40 C.F.R. part 403, require POTWs to develop an acceptable industrial pretreatment program. A pretreatment program is required to prevent the introduction of pollutants, which will interfere with treatment plant operations or sludge disposal, and prevent pass through of pollutants that exceed water quality objectives, standards or permit limitations. Pretreatment requirements are imposed pursuant to 40 C.F.R. part 403.
3. The Discharger shall implement and enforce its approved pretreatment program in accordance with 40 C.F.R. part 403 and is an enforceable condition of this NOA. If the Discharger fails to perform the pretreatment functions, the Central Valley Water Board, the State Water Board or U.S. EPA may take enforcement actions against the Discharger as authorized by the CWA.

VI. SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Abbreviations used in Table C-3:

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

Table C-3: SUMMARY OF REASONABLE POTENTIAL ANALYSIS

| Parameter | Units | MEC | B | C | CMC | CCC | Water and Org | Org. Only | Basin Plan | MCL | RP |
|-----------------------------|-------|-----|------|-----|-----|-----|---------------|-----------|------------|-----|-----|
| Ammonia (as Nitrogen) | mg/L | 0.5 | 0.01 | 1.3 | 5.7 | 1.3 | -- | -- | -- | -- | Yes |
| Nitrate Plus Nitrite (as N) | mg/L | 7.7 | -- | 10 | -- | -- | -- | -- | -- | 10 | Yes |

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

APPENDIX D – MONITORING AND REPORTING PROGRAM

| | | |
|-------|---|----|
| I. | GENERAL MONITORING PROVISIONS | 27 |
| II. | MONITORING LOCATIONS..... | 28 |
| III. | INFLUENT MONITORING REQUIREMENTS | 29 |
| | A. Monitoring Location INF-001 | 29 |
| IV. | EFFLUENT MONITORING REQUIREMENTS | 30 |
| | A. Monitoring Location EFF-001 | 30 |
| V. | WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS | 32 |
| | A. Acute Toxicity Testing – Not Applicable | 32 |
| | B. Chronic Toxicity Testing..... | 32 |
| | C. Quality Assurance and Additional Requirements..... | 34 |
| | D. WET Testing Notification Requirements..... | 35 |
| | E. WET Testing Reporting Requirements..... | 35 |
| | F. Most Sensitive Species Screening | 35 |
| | G. Toxicity Reduction Evaluations (TRE) | 36 |
| VI. | LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE..... | 38 |
| VII. | RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE..... | 38 |
| VIII. | RECEIVING WATER MONITORING REQUIREMENTS | 38 |
| | A. Monitoring Locations RSW-001 and RSW-002..... | 38 |
| IX. | OTHER MONITORING REQUIREMENTS | 39 |
| | A. Biosolids | 39 |
| | B. Ponds | 40 |
| | C. Municipal Water Supply – Not Applicable..... | 40 |
| | D. Filtration System..... | 40 |
| | E. Ultraviolet Light (UV) Disinfection System..... | 41 |
| | F. Effluent Characterization and Receiving Water Characterization | 42 |
| | G. Pyrethroid Pesticides Monitoring | 50 |
| X. | REPORTING REQUIREMENTS..... | 53 |
| | A. General Monitoring and Reporting Requirements | 53 |
| | B. Self-Monitoring Reports..... | 53 |
| | C. Discharge Monitoring Reports (DMRs)..... | 57 |
| | D. Other Reports | 57 |

Tables

| | | |
|-------------|---|----|
| Table D-1. | Monitoring Station Locations | 29 |
| Table D-2. | Influent Monitoring | 29 |
| Table D-3. | Effluent Monitoring..... | 30 |
| Table D-4. | Receiving Water Monitoring Requirements | 38 |
| Table D-5. | Pond Monitoring Requirements | 40 |
| Table D-6. | Filtration System Monitoring Requirements | 40 |
| Table D-7. | UV Disinfection System Monitoring Requirements | 41 |
| Table D-8. | Effluent and Receiving Water Characterization Monitoring..... | 43 |
| Table D-9. | Pyrethroid Pesticides Monitoring | 50 |
| Table D-10. | Pyrethroid Pesticide Partition Coefficients..... | 52 |
| Table D-11. | Monitoring Periods and Reporting Schedule | 54 |
| Table D-12. | Technical Reports..... | 61 |

APPENDIX D – MONITORING AND REPORTING PROGRAM (MRP)

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

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 (EC), turbidity, and temperature are exempt pursuant to Water Code Section 13176. A manual containing the steps followed in this program for any field measurements such as, but not limited to, pH, dissolved oxygen, EC, turbidity, and temperature must be kept onsite in the treatment facility laboratory and shall be available for inspection by Central Valley Water Board staff. The Discharger must demonstrate sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform these field measurements. The Quality Assurance-Quality Control Program must conform to U.S. EPA guidelines or to procedures approved by the Central Valley Water Board.
- D.** Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. All monitoring instruments and devices used by the Discharger to fulfill the prescribed

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

- E. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.
- F. Laboratory analytical methods shall be sufficiently sensitive in accordance with the Sufficiently Sensitive Methods Rule (SSM Rule) specified under 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv). A U.S. EPA-approved analytical method is sufficiently sensitive for pollutant/parameter where:
 - The method minimum level (ML) is at or below the applicable water quality objective for the receiving water, or;
 - The method ML is above the applicable water quality objective for the receiving water but the amount of the pollutant/parameter in the discharge is high enough that the method detects and quantifies the level of the pollutant/parameter, or;
 - The method ML is above the applicable water quality objective for the receiving water, but the ML is the lowest of the 40 C.F.R. 136 U.S. EPA-approved analytical methods for the pollutant/parameter.
- G. The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually, [via email](mailto:QualityAssurance@waterboards.ca.gov), to QualityAssurance@waterboards.ca.gov to the State Water Resources Control.
- H. The Discharger shall file with the Central Valley Water Board technical reports on self-monitoring performed according to the detailed specifications contained in this MRP.
- I. The results of all monitoring required by this MRP shall be reported to the Central Valley Water Board and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of the NOA. Unless otherwise specified, discharge flows shall be reported in terms of the monthly average and the daily maximum discharge flows.

J. Multiple Discharge Points – Not Applicable

II. MONITORING LOCATIONS

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

Table D-1. Monitoring Station Locations

| Discharge Point Name | Monitoring Location Name | Monitoring Location Description |
|----------------------|--------------------------|--|
| -- | INF-001 | A location where a representative sample of the Facility’s influent can be obtained prior to any additives, treatment processes, and plant return flows. |
| 001 | EFF-001 | A location where a representative sample of the effluent can be collected prior to discharging to Peck/Atwater Drain. Latitude: 37° 16' 49" N - Longitude: 120° 38' 00" W |
| -- | RSW-001 | Peck/Atwater Drain approximately 500 feet upstream of Discharge Point 001 |
| -- | RSW-002 | Peck/Atwater Drain approximately 250 feet downstream of Discharge Point 001 |
| -- | BIO-001 | A location where a representative sample of the biosolids can be obtained prior to removal from the Facility. |
| -- | FIL-001 | Influent to the tertiary treatment filters |
| -- | FIL-002 | Location after the tertiary treatment filters and prior to the ultraviolet light disinfection system |
| -- | UVS-001 | Ultraviolet light disinfection system |
| -- | PND-001 | Storm Water Retention Pond/Emergency Storage Basin |

The North latitude and West longitude information in Table D-1 are approximate for administrative purposes.

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

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

Table D-2. Influent Monitoring

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

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

- a. **Applicable to all parameters.** Parameters shall be analyzed using the analytical methods described in 40 C.F.R. part 136; or by methods approved by the Central Valley Water Board or the State Water Board. In addition, if requested by the Discharger, the sample type may be modified by the Executive Officer to another 40 C.F.R. part 136 allowed sample type.
- b. **Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

1. The Discharger shall monitor treated domestic wastewater at Monitoring Location EFF-001 when discharging to Peck/Atwater Drain 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 in the monthly self-monitoring report (SMR).

Table D-3. Effluent Monitoring

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|-----------------|-----------------|----------------------------|
| Flow | MGD | Meter | Continuous |
| Biochemical Oxygen Demand (5-day @ 20° C) | mg/L | 24-hr Composite | 1/Week |
| Biochemical Oxygen Demand (5-day @ 20° C) | Percent Removal | Calculate | 1/Month |
| pH | standard units | Grab | 1/Day |
| Total Suspended Solids | mg/L | 24-hr Composite | 1/Week |
| Total Suspended Solids | Percent Removal | Calculate | 1/Week |
| Dissolved Organic Carbon | mg/L | Grab | 1/Quarter |
| Ammonia Nitrogen, Total (as N) | mg/L | Grab | 1/Week |
| Chlorpyrifos | µg/L | Grab | 1/Year |
| Diazinon | µg/L | Grab | 1/Year |
| Dissolved Oxygen | mg/L | Grab | 1/Week |
| Electrical Conductivity @ 25°C | µmhos/cm | Grab | 1/Month |
| Hardness, Total (as CaCO ₃) | mg/L | Grab | 1/Quarter |
| Nitrate Nitrogen, Total (as N) | mg/L | Grab | 1/Week |
| Nitrite Nitrogen, Total (as N) | mg/L | Grab | 1/Week |
| Nitrate plus Nitrite, Total (as N) | mg/L | Calculate | 1/Week |
| Nitrogen, Total (as N) | mg/L | Grab | 1/Week |
| Temperature | °C | Grab | 1/Week |
| Total Coliform Organisms | MPN/100 mL | Grab | 5/Week |

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|--------|------------------|----------------------------|
| Total Dissolved Solids | mg/L | 24-hr Composite | 1/Quarter |
| Pyrethroids | ng/L | See Section IX.G | See Section IX.G |
| Priority Pollutants and Other Constituents of Concern | varies | See Section IX.F | See Section IX.F |

2. 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, dissolved oxygen, electrical conductivity, and temperature, 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. **Chlorpyrifos and Diazinon.** Chlorpyrifos and diazinon shall be sampled using U.S. EPA Method 625M, Method 8141, or equivalent GC/MS method with a lower Reporting Limit than the Basin Plan Water Quality Objectives of 0.015 µg/L and 0.1 µg/L for chlorpyrifos and diazinon, respectively.
 - g. **Total Coliform Organisms.** Total coliform organisms samples may be collected at any point following disinfection.
 - h. **Temperature, pH, Hardness, Dissolved Oxygen, and Dissolved Organic Carbon.** The effluent samples for temperature, pH, hardness, dissolved oxygen, and dissolved organic carbon shall be taken approximately the same time and on the same date with the receiving water samples for these parameters.

V. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

A. Acute Toxicity Testing – Not Applicable

B. Chronic Toxicity Testing.

1. **Instream Waste Concentration (IWC) for Chronic Toxicity.** The chronic toxicity IWC is 100 percent effluent.
2. **Routine Monitoring Frequency.** Discharger shall perform routine chronic toxicity testing **once per toxicity calendar month** in months in which there is expected to be at least 15 days of discharge to the receiving water. While the Discharger is conducting a Toxicity Reduction Evaluation the routine monitoring may be reduced to two (2) tests 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** (i.e., from January 1 to January 31, from February 1 to February 28, from March 1 to March 31, etc.).
 - b. **Toxicity Calendar Quarter.** A toxicity calendar quarter is defined as **three consecutive toxicity calendar months**. For purposes of this NOA, the toxicity calendar quarters **begin on January 1, April 1, July 1, and October 1** (i.e., from January 1 to March 31, from April 1 to June 30, from July 1 to September 30, etc.).
 - c. **Toxicity Calendar Year.** A toxicity calendar year is defined as **twelve consecutive toxicity calendar months**. For purposes of this NOA, 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 Monthly Median Effluent Limitation (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 Toxicity Reduction Evaluation (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 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.
7. **Test Species.** The testing shall be conducted using the most sensitive species. The Discharger shall conduct chronic toxicity tests with green alga (*Pseudokirchneriella subcapitata*), unless otherwise specified in writing by the Executive Officer.

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

8. **Test Methods.** 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 initiated. The new toxicity test and any MMEL compliance tests required to be conducted due to the results of the new toxicity test shall not 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.

C. Quality Assurance and Additional Requirements.

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

1. The discharge is subject to determination of "pass" or "fail" from an acute toxicity test or a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in Section IV.B.1.c of the Statewide Toxicity Provisions.
2. The null hypothesis (Ho) for the TST statistical approach is:
Mean discharge IWC response \leq RMD x Mean control response, where the chronic RMD = 0.75 and the acute RMD = 0.80.
A test result that rejects this null hypothesis is reported as "pass." A test result that does not reject this null hypothesis is reported as "fail."
3. The relative "Percent Effect" at the discharge IWC is defined and reported as:
Percent Effect = (Mean control response – Mean discharge IWC response) / Mean control response) x 100.

This is a t-test (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.

D. 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.

E. 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, all results for effluent parameters monitored concurrently with the toxicity test(s).
2. The statistical analysis used in Section IV.B.1.c of the Statewide Toxicity Provisions.
3. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.

F. Most Sensitive Species Screening

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

1. **Frequency of Testing for Species Sensitivity Screening.** Species sensitivity screening for chronic toxicity shall include, at a minimum, chronic WET testing four consecutive toxicity calendar quarters using the water flea (*Ceriodaphnia dubia*), fathead minnow (*Pimephales promelas*), and green alga (*Pseudokirchneriella subcapitata*). The tests shall be performed at an IWC of 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. *Pseudokirchnerella 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 *Pseudokirchnerella 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.

G. Toxicity Reduction Evaluations (TRE)

1. **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. **Within 30 days** 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 end 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-12. 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. Monitoring Locations RSW-001 and RSW-002

- 1. The Discharger shall monitor the receiving water at Monitoring Locations RSW-001 and RSW-002 when discharging to the Peck/Atwater Drain 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-001 during that period. Whenever monitoring is not required, the Discharger shall state so in the monthly SMR.

Table D-4. Receiving Water Monitoring Requirements

| Parameter | Units | Sample Type | Minimum Sampling Frequency |
|---|----------------|--------------|----------------------------|
| pH | standard units | Grab | 1/Week |
| Dissolved Oxygen | mg/L | Grab | 1/Week |
| Dissolved Organic Carbon | mg/L | Grab | 1/Quarter |
| Electrical Conductivity @ 25°C | µmhos/cm | Grab | 1/Month |
| Hardness, Total (as CaCO ₃) | mg/L | Grab | 1/Quarter |
| Temperature | °F | Grab | 1/Week |
| Turbidity | NTU | Grab | 1/Month |
| Pyrethroids | varies | Section IX.G | See Section IX.G |
| Priority Pollutants and Other Constituents of Concern | varies | Section IX.F | See Section IX.F |

- 2. 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. **Temperature, pH, Hardness, Dissolved Oxygen, and Dissolved Organic Carbon.** The effluent samples for temperature, pH, hardness, dissolved oxygen, and dissolved organic carbon shall be taken approximately the same time and on the same date with the receiving water samples for these parameters.
3. In conducting the receiving water sampling required by section VIII.A.1 above, a log shall be kept of the receiving water conditions throughout the reach bounded by Monitoring Locations RSW-001 and RSW-002. Attention shall be given to the presence or absence of:
- a. Floating or suspended matter;
 - b. Discoloration;
 - c. Bottom deposits;
 - d. Aquatic life;
 - e. Visible films, sheens, or coatings;
 - f. Fungi, slimes, or objectionable growths; and
 - g. Potential nuisance conditions.

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

IX. OTHER MONITORING REQUIREMENTS

A. Biosolids

1. Monitoring Location BIO-001

- a. Biosolids to meet pretreatment requirements under section X.D.6 of the Municipal General Order shall still apply.
- b. A composite sample of sludge shall be collected at Monitoring Location BIO-001 in accordance with EPA's POTW Sludge Sampling and Analysis Guidance Document, August 1989, and tested as follows:
 - i. The Dischargers shall monitor for the metals listed in Title 22 quarterly and the priority pollutants (excluding asbestos) annually.
- c. Biosolids monitoring shall be conducted using the methods in Test Methods for Evaluating Solid Waste, Physical/Chemical methods (EPA publication SW-846), as required in 40 C.F.R. section 503.8(b)(4). All

results must be reported on a 100% dry weight basis. Records of all analyses must state on each page of the laboratory report whether the results are expressed in “100% dry weight” or “as is.”

B. Ponds

1. Monitoring Location PND-001

- a. The Discharger shall keep a log regarding the use of the Storm Water Retention/Emergency Storm Water Basin. In particular, the Discharger shall record the following when any type of wastewater is directed to the basin.
 - i. The date(s) when the wastewater is directed to the basin;
 - ii. The type(s) of wastewater (e.g., untreated due to plant upset, tertiary treated, etc.) directed to the basin;
 - iii. The total volume of wastewater directed to the basin (volume may be estimated), and;
 - iv. The daily freeboard in the basin.
- b. The Discharger shall monitor the emergency storage basin at Monitoring Location PND-001, per Table D-5, when the emergency storage basin holds wastewater for 7 consecutive days or more. When the emergency storage basin holds wastewater for less than 7 consecutive days, monitoring shall not be required. If monitoring is not required, the Discharger shall so state in the SMR.

Table D-5. Pond Monitoring Requirements

| Parameter | Units | Sample Type | Sampling Frequency |
|------------------|----------------|-------------|--------------------|
| Freeboard | Feet | Observation | 1/day |
| pH | Standard Units | Grab | 1/Month |
| Odors | -- | Observation | 1/Month |
| Dissolved Oxygen | mg/L | Grab | 1/Month |

C. Municipal Water Supply – Not Applicable

D. Filtration System

1. Monitoring Location FIL-001 and FIL-002

- a. The Discharger shall monitor the filtration system at Monitoring Location FIL-001 (only when coagulation is not used) and FIL-002 when discharging to Peck/Atwater Drain as specified in Table D-6 and the testing requirements in section IX.D.2.

Table D-6. Filtration System Monitoring Requirements

| Parameter | Units | Sample Type | Sampling Frequency |
|-----------|-------|-------------|--------------------|
| Turbidity | NTU | Meter | Continuous |

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

- a. **Turbidity.** Turbidity 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. **Continuous analyzers.** If analyzers are taken out of operation for routine maintenance activities and no continuous measurements are available from a redundant meter, the Discharger shall divert flow to another filtration device or to storage to the extent feasible. If the Discharger is not able to divert away from the analyzer, 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. **Turbidity Reporting.** Report daily average and maximum turbidity. If maximum daily turbidity exceeds 5 NTU (for granular filtration systems or equivalent) or 0.2 NTU (for membrane filtration systems or equivalent), include the total amount of time that turbidity exceeded these levels.
- d. The Discharger shall indicate in their monthly self-monitoring report which days coagulation was used.

E. Ultraviolet Light (UV) Disinfection System

1. Monitoring Locations UVS - 001

- a. The Discharger shall monitor the UV disinfection system at Monitoring Location UVS-001 when discharging to Peck/Atwater Drain as specified in Table D-7 and the testing requirements in section IX.E.2.

Table D-7. UV Disinfection System Monitoring Requirements

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

2. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-7:
 - a. **Continuous analyzers.** If analyzers are taken out of operation for routine maintenance activities and no continuous measurements are available from a redundant meter, the Discharger shall divert flow to another disinfection channel or to storage to the extent feasible. If the Discharger

is not able to divert away from the analyzer, 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. The Discharger shall not decrease power settings or reduce the number of UV lamp banks in operation, or reduce the tertiary filtration, while the continuous analyzers are out of service and water is being disinfected.

- b. **UV Banks.** Report daily minimum number of UV banks in operation.
- c. **UV Transmittance.** Report daily minimum hourly average UV transmittance. The minimum hourly average transmittance shall consist of the lowest average transmittance recorded over an hour of a day when flow is being discharged. If the system does not operate for an entire hour interval on a given day or if effluent flow is not discharged for an entire hour, the transmittance will be averaged based on the actual operation time when discharges are occurring.
- d. **UV Dose.** Report daily minimum hourly average UV dose and daily average UV dose. The minimum hourly average dose shall consist of the lowest hourly average dose provided in any channel that had at least one bank of lamps operating during the hour interval. For channels that did not operate for the entire hour interval, the dose will be averaged based on the actual operation time.

F. Effluent Characterization and Receiving Water Characterization

The Discharger shall monitor the effluent at Monitoring Location EFF-001 and Peck/Atwater Drain at Monitoring Location RSW-001 for the constituents listed in Table D-8, as described in this section.

1. Monitoring Frequency

- a. **Effluent Sampling.** Samples shall be collected from the effluent (Monitoring Location EFF-001) Quarterly between **1 October 2025 and 30 September 2026**. Each sampling event shall be conducted a minimum of 60 days apart.
- b. **Receiving Water Sampling.** Samples shall be collected from the upstream receiving water (Monitoring Location RSW-001), once between **1 October 2025 and 31 March 2026** (wet season) and **once** between **1 April 2026 and 31 September 2026** (dry season). The upstream receiving water sample shall be collected concurrent (on the same date and at approximately the same time) with one of the effluent sampling events required in the section above.

All sampling shall be analyzed for the constituents listed in Table D-8, below. The results of such monitoring shall be submitted to the Central Valley Water

Board with the monthly 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-8, below and the testing requirements in section IX.F.4. Receiving water samples shall be grab samples.
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 the State Water Board’s California Integrated Water Quality System (CIWQS) in accordance with the reporting requirements in Table D-12, Technical Reports.

**Table D-8. Effluent and Receiving Water Characterization Monitoring
VOLATILE ORGANICS**

| CTR Number | Volatile Organic Parameters | CAS Number | Units | Effluent Sample Type |
|------------|-------------------------------|------------|-------|----------------------|
| 25 | 2-Chloroethyl vinyl Ether | 110-75-8 | µg/L | Grab |
| 17 | Acrolein | 107-02-8 | µg/L | Grab |
| 18 | Acrylonitrile | 107-13-1 | µg/L | Grab |
| 19 | Benzene | 71-43-2 | µg/L | Grab |
| 20 | Bromoform | 75-25-2 | µg/L | Grab |
| 21 | Carbon Tetrachloride | 56-23-5 | µg/L | Grab |
| 22 | Chlorobenzene | 108-90-7 | µg/L | Grab |
| 24 | Chloroethane | 75-00-3 | µg/L | Grab |
| 26 | Chloroform | 67-66-3 | µg/L | Grab |
| 35 | Methyl Chloride | 74-87-3 | µg/L | Grab |
| 23 | Dibromochloromethane | 124-48-1 | µg/L | Grab |
| 27 | Dichlorobromomethane | 75-27-4 | µg/L | Grab |
| 36 | Methylene Chloride | 75-09-2 | µg/L | Grab |
| 33 | Ethylbenzene | 100-41-4 | µg/L | Grab |
| 89 | Hexachlorobutadiene | 87-68-3 | µg/L | Grab |
| 34 | Methyl Bromide (Bromomethane) | 74-83-9 | µg/L | Grab |

| CTR Number | Volatile Organic Parameters | CAS Number | Units | Effluent Sample Type |
|------------|--------------------------------|------------|-------|----------------------|
| 94 | Naphthalene | 91-20-3 | µg/L | Grab |
| 38 | Tetrachloroethylene (PCE) | 127-18-4 | µg/L | Grab |
| 39 | Toluene | 108-88-3 | µg/L | Grab |
| 40 | trans-1,2-Dichloroethylene | 156-60-5 | µg/L | Grab |
| 43 | Trichloroethylene (TCE) | 79-01-6 | µg/L | Grab |
| 44 | Vinyl Chloride | 75-01-4 | µg/L | Grab |
| 21 | Methyl-tert-butyl ether (MTBE) | 1634-04-4 | µg/L | Grab |
| 41 | 1,1,1-Trichloroethane | 71-55-6 | µg/L | Grab |
| 42 | 1,1,2-Trichloroethane | 79-00-5 | µg/L | Grab |
| 28 | 1,1-Dichloroethane | 75-34-3 | µg/L | Grab |
| 30 | 1,1-Dichloroethylene (DCE) | 75-35-4 | µg/L | Grab |
| 31 | 1,2-Dichloropropane | 78-87-5 | µg/L | Grab |
| 32 | 1,3-Dichloropropylene | 542-75-6 | µg/L | Grab |
| 37 | 1,1,2,2-Tetrachloroethane | 79-34-5 | µg/L | Grab |
| 101 | 1,2,4-Trichlorobenzene | 120-82-1 | µg/L | Grab |
| 29 | 1,2-Dichloroethane | 107-06-2 | µg/L | Grab |
| 75 | 1,2-Dichlorobenzene | 95-50-1 | µg/L | Grab |
| 76 | 1,3-Dichlorobenzene | 541-73-1 | µg/L | Grab |
| 77 | 1,4-Dichlorobenzene | 106-46-7 | µg/L | Grab |

SEMI-VOLATILE ORGANICS

| CTR Number | Semi-Organic Volatile Parameters | CAS Number | Units | Effluent Sample Type |
|------------|----------------------------------|------------|-------|----------------------|
| 60 | Benzo(a)Anthracene | 56-55-3 | µg/L | Grab |
| 85 | 1,2-Diphenylhydrazine | 122-66-7 | µg/L | Grab |
| 45 | 2-Chlorophenol | 95-57-8 | µg/L | Grab |
| 46 | 2,4-Dichlorophenol | 120-83-2 | µg/L | Grab |
| 47 | 2,4-Dimethylphenol | 105-67-9 | µg/L | Grab |
| 49 | 2,4-Dinitrophenol | 51-28-5 | µg/L | Grab |
| 82 | 2,4-Dinitrotoluene | 121-14-2 | µg/L | Grab |
| 55 | 2,4,6-Trichlorophenol | 88-06-2 | µg/L | Grab |
| 83 | 2,6-Dinitrotoluene | 606-20-2 | µg/L | Grab |
| 50 | 2-Nitrophenol | 88-75-5 | µg/L | Grab |
| 71 | 2-Chloronaphthalene | 91-58-7 | µg/L | Grab |
| 78 | 3,3-Dichlorobenzidine | 91-94-1 | µg/L | Grab |

| CTR Number | Semi-Organic Volatile Parameters | CAS Number | Units | Effluent Sample Type |
|------------|----------------------------------|------------|-------|----------------------|
| 62 | Benzo(b)Fluoranthene | 205-99-2 | µg/L | Grab |
| 52 | 4-Chloro-3-methylphenol | 59-50-7 | µg/L | Grab |
| 48 | 2-Methyl-4,6-Dinitrophenol | 534-52-1 | µg/L | Grab |
| 51 | 4-Nitrophenol | 100-02-7 | µg/L | Grab |
| 69 | 4-Bromophenyl Phenyl Ether | 101-55-3 | µg/L | Grab |
| 72 | 4-Chlorophenyl Phenyl Ether | 7005-72-3 | µg/L | Grab |
| 56 | Acenaphthene | 83-32-9 | µg/L | Grab |
| 57 | Acenaphthylene | 208-96-8 | µg/L | Grab |
| 58 | Anthracene | 120-12-7 | µg/L | Grab |
| 59 | Benzidine | 92-87-5 | µg/L | Grab |
| 61 | Benzo(a)Pyrene | 50-32-8 | µg/L | Grab |
| 63 | Benzo(ghi)Perylene | 191-24-2 | µg/L | Grab |
| 64 | Benzo(k)Fluoranthene | 207-08-9 | µg/L | Grab |
| 65 | Bis (2-Chloroethoxy) Methane | 111-91-1 | µg/L | Grab |
| 66 | Bis (2-Chloroethyl) Ether | 111-44-4 | µg/L | Grab |
| 67 | Bis (2-Chloroisopropyl) Ether | 108-60-1 | µg/L | Grab |
| 68 | Bis(2-Ethylhexyl) Phthalate | 117-81-7 | µg/L | Grab |
| 70 | Butylbenzyl Phthalate | 85-68-7 | µg/L | Grab |
| 73 | Chrysene | 218-01-9 | µg/L | Grab |
| 81 | Di-n-butyl Phthalate | 84-74-2 | µg/L | Grab |
| 84 | Di-n-Octyl Phthalate | 117-84-0 | µg/L | Grab |
| 74 | Dibenzo(a,h)anthracene | 53-70-3 | µg/L | Grab |
| 79 | Diethyl Phthalate | 84-66-2 | µg/L | Grab |
| 80 | Dimethyl Phthalate | 131-11-3 | µg/L | Grab |
| 86 | Fluoranthene | 206-44-0 | µg/L | Grab |
| 87 | Fluorene | 86-73-7 | µg/L | Grab |
| 88 | Hexachlorobenzene | 118-74-1 | µg/L | Grab |
| 90 | Hexachlorocyclopentadiene | 77-47-4 | µg/L | Grab |
| 91 | Hexachloroethane | 67-72-1 | µg/L | Grab |
| 92 | Indeno(1,2,3-cd) Pyrene | 193-39-5 | µg/L | Grab |
| 93 | Isophorone | 78-59-1 | µg/L | Grab |
| 98 | N-Nitrosodiphenylamine | 86-30-6 | µg/L | Grab |
| 96 | N-Nitrosodimethylamine | 62-75-9 | µg/L | Grab |
| 97 | N-Nitrosodi-n-Propylamine | 621-64-7 | µg/L | Grab |
| 95 | Nitrobenzene | 98-95-3 | µg/L | Grab |
| 53 | Pentachlorophenol (PCP) | 87-86-5 | µg/L | Grab |
| 99 | Phenanthrene | 85-01-8 | µg/L | Grab |
| 54 | Phenol | 108-95-2 | µg/L | Grab |
| 100 | Pyrene | 129-00-0 | µg/L | Grab |

INORGANICS

| CTR Number | Inorganic Parameters | CAS Number | Units | Effluent Sample Type |
|------------|----------------------|------------|-------|----------------------|
| NL | Aluminum | 7429-90-5 | µg/L | 24-hour Composite |
| 1 | Antimony, Total | 7440-36-0 | µg/L | 24-hour Composite |
| 2 | Arsenic, Total | 7440-38-2 | µg/L | 24-hour Composite |
| 15 | Asbestos | 1332-21-4 | µg/L | 24-hour Composite |
| 3 | Beryllium, Total | 7440-41-7 | µg/L | 24-hour Composite |
| 4 | Cadmium, Total | 7440-43-9 | µg/L | 24-hour Composite |
| 5a | Chromium, Total | 7440-47-3 | µg/L | 24-hour Composite |
| 6 | Copper, Total | 7440-50-8 | µg/L | 24-hour Composite |
| 14 | Iron, Total | 7439-89-6 | µg/L | 24-hour Composite |
| 7 | Lead, Total | 7439-92-1 | µg/L | 24-hour Composite |
| 8 | Mercury, Total | 7439-97-6 | µg/L | Grab |
| NL | Mercury, Methyl | 22967-92-6 | µg/L | Grab |
| NL | Manganese, Total | 7439-96-5 | µg/L | 24-hour Composite |
| 9 | Nickel, Total | 7440-02-0 | µg/L | 24-hour Composite |
| 10 | Selenium, Total | 7782-49-2 | µg/L | 24-hour Composite |
| 11 | Silver, Total | 7440-22-4 | µg/L | 24-hour Composite |
| 12 | Thallium, Total | 7440-28-0 | µg/L | 24-hour Composite |
| 13 | Zinc, Total | 7440-66-6 | µg/L | 24-hour Composite |

NON-METALS/MINERALS

| CTR Number | Non-Metal/Mineral Parameters | CAS Number | Units | Effluent Sample Type |
|------------|------------------------------|------------|-------|----------------------|
| NL | Boron | 7440-42-8 | µg/L | 24-hour Composite |
| NL | Chloride | 16887-00-6 | mg/L | 24-hour Composite |
| 14 | Cyanide, Total (as CN) | 57-12-5 | µg/L | Grab |
| NL | Sulfate | 14808-79-8 | mg/L | 24-hour Composite |
| NL | Sulfide (as S) | 5651-88-7 | mg/L | 24-hour Composite |

PESTICIDES/PCBs/DIOXINS

| CTR Number | Pesticide/PCB/Dioxin Parameters | CAS Number | Units | Effluent Sample Type |
|------------|----------------------------------|------------|-------|----------------------|
| 110 | 4,4-DDD | 72-54-8 | µg/L | 24-hour Composite |
| 109 | 4,4-DDE | 72-55-9 | µg/L | 24-hour Composite |
| 108 | 4,4-DDT | 50-29-3 | µg/L | 24-hour Composite |
| 112 | alpha-Endosulfan | 959-98-8 | µg/L | 24-hour Composite |
| 103 | alpha-BHC (Benzene hexachloride) | 319-84-6 | µg/L | 24-hour Composite |
| 102 | Aldrin | 309-00-2 | µg/L | 24-hour Composite |
| 113 | beta-Endosulfan | 33213-65-9 | µg/L | 24-hour Composite |
| 104 | beta-BHC (Benzene hexachloride) | 319-85-7 | µg/L | 24-hour Composite |
| 107 | Chlordane | 57-74-9 | µg/L | 24-hour Composite |

| CTR Number | Pesticide/PCB/Dioxin Parameters | CAS Number | Units | Effluent Sample Type |
|------------|---|------------|-------|----------------------|
| 106 | delta-BHC (Benzene hexachloride) | 319-86-8 | µg/L | 24-hour Composite |
| 111 | Dieldrin | 60-57-1 | µg/L | 24-hour Composite |
| 114 | Endosulfan Sulfate | 1031-07-8 | µg/L | 24-hour Composite |
| 115 | Endrin | 72-20-8 | µg/L | 24-hour Composite |
| 116 | Endrin Aldehyde | 7421-93-4 | µg/L | 24-hour Composite |
| 117 | Heptachlor | 76-44-8 | µg/L | 24-hour Composite |
| 118 | Heptachlor Epoxide | 1024-57-3 | µg/L | 24-hour Composite |
| 105 | gamma-BHC (Benzene hexachloride or Lindane) | 58-89-9 | µg/L | 24-hour Composite |
| 119 | Polychlorinated Biphenyl (PCB) 1016 | 12674-11-2 | µg/L | 24-hour Composite |
| 120 | PCB 1221 | 11104-28-2 | µg/L | 24-hour Composite |
| 121 | PCB 1232 | 11141-16-5 | µg/L | 24-hour Composite |
| 122 | PCB 1242 | 53469-21-9 | µg/L | 24-hour Composite |
| 123 | PCB 1248 | 12672-29-6 | µg/L | 24-hour Composite |
| 124 | PCB 1254 | 11097-69-1 | µg/L | 24-hour Composite |
| 125 | PCB 1260 | 11096-82-5 | µg/L | 24-hour Composite |
| 126 | Toxaphene | 8001-35-2 | µg/L | 24-hour Composite |
| 16 | 2,3,7,8-TCDD (Dioxin) | 1746-01-6 | mg/L | 24-hour Composite |

CONVENTIONAL PARAMETERS

| CTR Number | Conventional Parameters | CAS Number | Units | Effluent Sample Type |
|------------|-------------------------|------------|-------|----------------------|
| NL | pH | -- | SU | Grab |
| NL | Temperature | -- | °C | Grab |

NON-CONVENTIONAL PARAMETERS

| CTR Number | Nonconventional Parameters | CAS Number | Units | Effluent Sample Type |
|------------|--|------------|----------|----------------------|
| NL | Foaming Agents (MBAS) | MBAS | mg/L | 24-hour Composite |
| NL | Hardness (as CaCO ₃) | 471-34-1 | mg/L | Grab |
| NL | Specific Conductance (Electrical Conductivity or EC) | EC | µmhos/cm | 24-hour Composite |
| NL | Total Dissolved Solids (TDS) | TDS | mg/L | 24-hour Composite |
| NL | Dissolved Organic Carbon (DOC) | DOC | mg/L | 24-hour Composite |

NUTRIENTS

| CTR Number | Nutrient Parameters | CAS Number | Units | Effluent Sample Type |
|------------|---------------------|------------|-------|----------------------|
| NL | Ammonia (as N) | 7664-41-7 | mg/L | 24-hour Composite |

| CTR Number | Nutrient Parameters | CAS Number | Units | Effluent Sample Type |
|------------|--------------------------|------------|-------|----------------------|
| NL | Nitrate (as N) | 14797-55-8 | mg/L | 24-hour Composite |
| NL | Nitrite (as N) | 14797-65-0 | mg/L | 24-hour Composite |
| NL | Phosphorus, Total (as P) | 7723-14-0 | mg/L | 24-hour Composite |

OTHER CONSTITUENTS OF CONCERN

| CTR Number | Other Constituents of Concern | CAS Number | Units | Effluent Sample Type |
|------------|---------------------------------------|------------|-------|----------------------|
| NL | 1,2,3-Trichloropropane (TCP) | 96-18-4 | µg/L | Grab |
| NL | Trichlorofluoromethane | 75-69-4 | µg/L | Grab |
| NL | 1,1,2-Trichloro-1,2,2-Trifluoroethane | 76-13-1 | µg/L | Grab |
| NL | Styrene | 100-42-5 | µg/L | Grab |
| NL | Xylenes | 1330-20-7 | µg/L | Grab |
| NL | Barium | 7440-39-3 | µg/L | 24-hour Composite |
| NL | Fluoride | 16984-48-8 | mg/L | 24-hour Composite |
| NL | Molybdenum | 7439-98-7 | µg/L | 24-hour Composite |
| NL | Tributyltin | 688-73-3 | µg/L | 24-hour Composite |
| NL | Alachlor | 15972-60-8 | µg/L | 24-hour Composite |
| NL | Atrazine | 1912-24-9 | µg/L | 24-hour Composite |
| NL | Bentazon | 25057-89-0 | µg/L | 24-hour Composite |
| NL | Carbofuran | 1563-66-2 | µg/L | 24-hour Composite |
| NL | 2,4-D | 94-75-7 | µg/L | 24-hour Composite |
| NL | Dalapon | 75-99-0 | µg/L | 24-hour Composite |
| NL | 1,2-Dibromo-3-chloropropane (DBCP) | 96-12-8 | µg/L | 24-hour Composite |
| NL | Di(2-ethylhexyl)adipate | 103-23-1 | µg/L | 24-hour Composite |
| NL | Dinoseb | 88-85-7 | µg/L | 24-hour Composite |
| NL | Diquat | 85-00-7 | µg/L | 24-hour Composite |
| NL | Endothal | 145-73-3 | µg/L | 24-hour Composite |
| NL | Ethylene Dibromide (EDB) | 106-93-4 | µg/L | 24-hour Composite |
| NL | Methoxychlor | 72-43-5 | µg/L | 24-hour Composite |
| NL | Molinate (Ordram) | 2212-67-1 | µg/L | 24-hour Composite |
| NL | Oxamyl | 23135-22-0 | µg/L | 24-hour Composite |
| NL | Picloram | 1918-02-1 | µg/L | 24-hour Composite |
| NL | Simazine (Princep) | 122-34-9 | µg/L | 24-hour Composite |
| NL | Thiobencarb | 28249-77-6 | µg/L | 24-hour Composite |
| NL | 2,4,5-TP (Silvex) | 93-72-1 | µg/L | 24-hour Composite |
| NL | Chlorpyrifos | 2921-88-2 | µg/L | 24-hour Composite |
| NL | Diazinon | 333-41-5 | µg/L | 24-hour Composite |

4. **Table D-8 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-8:

- a. **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. **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.
- c. **24-hour Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.
- d. **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.
- e. **Concurrent Sampling.** Effluent and receiving water sampling shall be conducted at approximately the same time, on the same date.
- f. **Redundant Sampling.** The Discharger is not required to conduct effluent monitoring for constituents that have already been sampled in a given month, as required in Table D-3, except for dissolved organic carbon, hardness, pH, and temperature, which shall be conducted concurrently with the characterization sampling.
- g. **Total Mercury and methylmercury.** Samples for total mercury and unfiltered methylmercury shall be taken using clean hands/dirty hands procedures, as described in U.S. EPA method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels, for collection of equipment blanks (section 9.4.4.2), and shall be analyzed by U.S. EPA method 1630/1631 (Revision E) with a maximum reporting limit of 0.05 ng/L for methylmercury and 0.5 nanograms per liter (ng/L) for total mercury.
- h. **Sample Type.** All receiving water samples shall be taken as grab samples. Effluent samples shall be taken as described in Table D-8.
- i. Chlorpyrifos and Diazinon shall be sampled using U.S. EPA Method 625M, Method 8141, or equivalent GC/MS method with a lower Reporting Limit than the Basin Plan Water Quality Objectives of 0.015 µg/L and 0.1 µg/L for chlorpyrifos and diazinon, respectively.
- j. Aluminum. Aluminum can be tested by using either total or acid-soluble (inductively coupled plasma/atomic emission spectrometry or inductively coupled plasma/mass spectrometry) analysis methods, as supported by U.S. EPA's Ambient Water Quality Criteria for Aluminum document (EPA 440/5-86-008), or other methods that exclude aluminum silicate particles as approved by the Executive Officer for comparison with the 2018 U.S. EPA NAWQC for protection of freshwater aquatic life criterion aquatic life criteria. For comparison to the Secondary MCL, aluminum samples may be passed through a 1.5-micron filter.
- k. Iron and Manganese. Iron and manganese samples may be passed through a 1.5-micron filter for comparison with the Secondary MCL.

G. Pyrethroid Pesticides Monitoring

- 1. Water Column Chemistry Monitoring Requirements.** The Discharger shall conduct effluent and receiving water baseline monitoring in accordance with Table D-9. Quarterly monitoring shall be conducted for **one year beginning with the fourth quarter of 2025** concurrent with Water Column Toxicity Monitoring and Effluent and Receiving Water Characterization Monitoring. The Discharger shall also submit a minimum of one quality assurance/quality control (QA/QC) sample during the year to be analyzed for the constituents listed in Table D-9.

The monitoring shall be conducted in the effluent at monitoring location EFF-001 and the **downstream receiving water at monitoring location RSW-002** and the results of such monitoring be submitted to the Central Valley Water Board with the monthly self-monitoring reports. The Discharger shall use Environmental Laboratory Accreditation Program (ELAP)-accredited laboratories and methods validated by the Central Valley Water Board staff for pyrethroid pesticides water column chemistry monitoring. A current list of ELAP approved laboratories and points of contact can be found on the [Central Valley Water Board's Pyrethroid Pesticides TMDL and Basin Plan Amendment Webpage](https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/central_valley_pesticides/pyrethroid_tmdl_bpa/index.html), (https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/central_valley_pesticides/pyrethroid_tmdl_bpa/index.html).

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

Table D-9. Pyrethroid Pesticides Monitoring

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

| Parameter | CAS Number | Sample Units | Sample Type | Analytical Method | Reporting Level |
|-------------------------------------|------------|--------------|-------------|-------------------------------------|-----------------|
| Freely Dissolved Lambda-cyhalothrin | 91465-08-6 | ng/L | Calculated | Calculated from total concentration | -- |
| Freely Dissolved Permethrin | 52645-53-1 | ng/L | Calculated | Calculated from total concentration | -- |
| Dissolved Organic Carbon (DOC) | -- | mg/L | Grab | -- | -- |
| Total Organic Carbon (TOC) | -- | mg/L | Grab | -- | -- |

2. **Table E-9 Testing Requirements.** The freely dissolved concentration of each quantified pyrethroid pesticide in a sample may be directly measured or estimated using partition coefficients. Methods for direct measurement must be approved by the Executive Officer before they are used to determine the freely dissolved pyrethroid concentrations that are used for determining exceedances of the pyrethroid pesticides numeric triggers.

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

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

Where:

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

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

KOC = organic carbon-water partition coefficient for the individual pyrethroid pesticide (L/kg),

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

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

KDOC = dissolved organic carbon-water partition coefficient (L/kg),

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

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

Table D-10. Pyrethroid Pesticide Partition Coefficients

| Pyrethroid Pesticide | Receiving water KOC (L/kg) | Receiving water KDOC (L/kg) | Effluent KOC (L/kg) | Effluent KDOC (L/kg) |
|----------------------|----------------------------|-----------------------------|---------------------|----------------------|
| Bifenthrin | 4,228,000 | 1,737,127 | 15,848,932 | 800,000 |
| Cyfluthrin | 3,870,000 | 2,432,071 | 3,870,000 | 2,432,071 |
| Cypermethrin | 3,105,000 | 762,765 | 6,309,573 | 200,000 |
| Esfenvalerate | 7,220,000 | 1,733,158 | 7,220,000 | 1,733,158 |
| Lambda-cyhalothrin | 2,056,000 | 952,809 | 7,126,428 | 200,000 |
| Permethrin | 6,075,000 | 957,703 | 10,000,000 | 200,000 |

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

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

Quarterly monitoring shall be conducted for one year concurrent with the Pyrethroid Pesticides Water Column Chemistry Monitoring during Effluent and Receiving Water Characterization Monitoring. **Downstream receiving water monitoring shall be conducted at monitoring location RSW-002** when discharging to the Peck/Atwater Drain and the results of such monitoring be submitted to the Central Valley Water Board with the monthly self-monitoring reports. Monitoring can either be conducted by the Discharger or can be done as part of a group monitoring effort. If the Discharger chooses to participate in a group monitoring effort, the timing of the monitoring can be modified by the Executive Officer.

4. **Exceedance of Numeric Triggers.** If the Pyrethroid Pesticides Water Column Chemistry Monitoring results in an exceedance of any prohibition numeric trigger, the Discharger shall submit a formal letter notifying the Central Valley Water Board of the exceedance and the Discharger’s intent to submit a Pyrethroid Management Plan. The Pyrethroid Management Plan, as outlined in Section VII.C.3.c of the Municipal General Order, shall be submitted to the Central Valley Water Board within one year from the date that an exceedance is identified by either the Discharger or Central Valley Water Board staff. Pyrethroid concentrations that exceed the acute and/or chronic pyrethroid

numeric triggers as outlined in Table 4-2 of the Basin Plan constitute an exceedance. In the absence of a pyrethroid numeric trigger exceedance, observed toxicity in the water column does not constitute a violation of the pyrethroid conditional prohibition.

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

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D of the Municipal General Order) related to monitoring, reporting, and recordkeeping. Upon written request of the Central Valley Water Board, the Discharger shall submit a summary monitoring report. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year(s).
2. The Discharger shall report to the Central Valley Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.
3. Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if a Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

B. Self-Monitoring Reports

1. The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) [Program website](http://www.waterboards.ca.gov/ciwqs/index.html) (www.waterboards.ca.gov/ciwqs/index.html). The CIWQS Web site will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly SMRs including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this MRP. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this MRP, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall begin on 1 August 2024 and be completed according to the following:

Table D-11. Monitoring Periods and Reporting Schedule

| Sampling Frequency | Monitoring Period | SMR Due Date |
|--------------------|--|---|
| Continuous | All | Submit with monthly SMR |
| 1/Day | (Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling. | Submit with monthly SMR |
| 1/Week | Sunday through Saturday | Submit with monthly SMR |
| 5/Week | Sunday through Saturday | Submit with monthly SMR |
| 1/Month | 1st day of calendar month through last day of calendar month | First day of second calendar month following month of sampling |
| 1/Quarter | 1 January through 31 March; 1 April through 30 June; 1 July through 30 September; 1 October through 31 December | 1 May; 1 August; 1 November; 1 February of following year (respectively) |
| 1/Year | 1 January through 31 December | 1 February of following year |

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

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

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

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (\pm 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 submit all monitoring data within CIWQS as much as possible. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall contact the CIWQS help desk (CIWQS@waterboards.ca.gov) to request that capability be added in CIWQS for entry of the data within the system. Prior to creation of this a capability in CIWQS, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. 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.
 - c. 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.

- d. 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 Triggers** - For Dischargers subject to effluent triggers specified as “calendar annual trigger” (e.g., electrical conductivity), the Discharger shall report the calendar annual average in the December SMR. The annual average shall be calculated as the average of the samples gathered for the calendar year.
 - b. **Mass Loading Limitations – Not Applicable.**
 - c. **Removal Efficiency (BOD₅ and TSS).** – The Discharger shall calculate and report the percent removal of BOD₅ and TSS in the SMRs. The percentage removal shall be calculated as specified in section VIII.A of the Limitations and Discharge Requirements in the Municipal General Order.
 - d. **Total Coliform Organisms Effluent Limitations.** The Discharger shall calculate and report the 7-day median of total coliform organisms for the effluent. The 7-day median of total coliform organisms shall be calculated as specified in section VIII.E of the Limitations and Discharge Requirements in the Municipal General Order.
 - e. **Total Calendar Annual Mass Loading Mercury Effluent Limitations – Not Applicable.**
 - f. **Temperature Effluent Limitation – Not Applicable.**
 - g. **Chlorpyrifos and Diazinon Effluent Limitations** –The Discharger shall calculate and report the value of SAMEL and SAWEL for the effluent, using the equation in section V.A.1.c.xii and consistent with the Compliance Determination Language in section VIII.L of the Municipal General Order.
 - h. **Dissolved Oxygen Receiving Water Limitations.** The Discharger shall report monthly in the SMR the dissolved oxygen concentrations in the receiving water (Monitoring Locations RSW-001 and RSW 002).
 - i. **Turbidity Receiving Water Limitations.** The Discharger shall calculate and report the turbidity increase in the receiving water applicable to the natural turbidity condition specified in section VI.A.18.a, of the Limitations and Discharge Requirements in the Municipal General Order.
 - j. **Temperature Receiving Water Limitations - Not Applicable**

C. Discharge Monitoring Reports (DMRs)

1. The Discharger shall electronically submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic submittal of DMRs will be in addition to electronic submittal of SMRs. Information about electronic submittal of DMRs is provided by the [Discharge Monitoring Report website](http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring/):
(www.waterboards.ca.gov/water_issues/programs/discharge_monitoring/).

D. Other Reports

1. Special Study Reports – Not Applicable

2. The Discharger shall report the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required by Special Provisions – Section IX.C of this NOA. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.

3. **Analytical Methods Report.** The Discharger shall complete and submit an Analytical Methods Report, electronically via CIWQS submittal, by the due date specified in Table D-12 below. The Analytical Methods Report shall include the following for each constituent listed in tables D-2, D-3, D-5, D-6, D-7, D-8, and D-9 of this NOA: 1) applicable water quality objective, 2) reporting level (RL), 3) method detection limit (MDL), and 4) analytical method. The analytical methods shall be sufficiently sensitive with RLs consistent with the SSM Rule (see also General Monitoring Provision F in the Municipal General Order), and with the Minimum Levels (MLs) in the SIP, Appendix 4. The “Reporting Level or RL” is synonymous with the “Method Minimum Level” described in the SSM Rule. If an RL is 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.

4. **Annual Operations Report.** The Discharger shall submit in accordance with the reporting requirements in Table D-12, 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.

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

An annual report shall be submitted by the due date shown in the Technical Reports Table D-12 and include at least the following items:

- a. A summary of analytical results from representative sampling of the POTWs influent and effluent for those pollutants U.S. EPA has identified under section 307(a) of the CWA which are known or suspected to be discharged by nondomestic users. This will consist of an annual full priority pollutant scan. The Discharger is not required to sample and analyze asbestos. The Discharger shall submit the results of the priority pollutant scan electronically to the Central Valley Water Board using the State Water Board's CIWQS Program Website.

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

- b. A discussion of Upset, Interference, or Pass-Through incidents, if any, at the treatment plant, which the Discharger knows or suspects were caused by nondomestic users of the POTW. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of, the nondomestic user(s) responsible.

- The discussion shall also include a review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent Pass-Through, Interference, or noncompliance with sludge disposal requirements.
- c. The cumulative number of nondomestic users that the Discharger has notified regarding Baseline Monitoring Reports and the cumulative number of nondomestic user responses.
 - d. An updated list of the Discharger's significant industrial users (SIUs) including their names and addresses, or a list of deletions, additions and SIU name changes keyed to a previously submitted list. The Discharger shall provide a brief explanation for each change. The list shall identify the SIUs subject to federal categorical standards by specifying which set(s) of standards are applicable to each SIU. The list shall indicate which SIUs, or specific pollutants from each industry, are subject to local limitations. Local limitations that are more stringent than the federal categorical standards shall also be identified.
 - e. The Discharger shall characterize the compliance status through the year of record of each SIU by employing the following descriptions:
 - i. complied with baseline monitoring report requirements (where applicable);
 - ii. consistently achieved compliance;
 - iii. inconsistently achieved compliance;
 - iv. significantly violated applicable pretreatment requirements as defined by 40 C.F.R. section 403.8(f)(2)(vii);
 - v. complied with schedule to achieve compliance (include the date final compliance is required);
 - vi. did not achieve compliance and not on a compliance schedule; and
 - vii. compliance status unknown.
 - f. A summary of the inspection and sampling activities conducted by the Discharger during the past year to gather information and data regarding the SIUs. The summary shall include:
 - i. The names and addresses of the SIUs subjected to surveillance and an explanation of whether they were inspected, sampled, or both and the frequency of these activities at each user; and
 - ii. The conclusions or results from the inspection or sampling of each industrial user.
 - g. The Discharger shall characterize the compliance status of each SIU by providing a list or table which includes the following information:
 - i. Name of SIU;
 - ii. Category, if subject to federal categorical standards;
 - iii. The type of wastewater treatment or control processes in place;
 - iv. The number of samples taken by the POTW during the year;

- v. The number of samples taken by the SIU during the year;
 - vi. For a SIU subject to discharge requirements for total toxic organics, whether all required certifications were provided;
 - vii. A list of the standards violated during the year. Identify whether the violations were for categorical standards or local limits.
 - viii. Whether the facility is in significant noncompliance (SNC) as defined at 40 C.F.R. section 403.8(f)(2)(viii) at any time during the year; and
 - ix. A summary of enforcement or other actions taken during the year to return the SIU to compliance. Describe the type of action (e.g., warning letters or notices of violation, administrative orders, civil actions, and criminal actions), final compliance date, and the amount of fines and penalties collected, if any. Describe any proposed actions for bringing the SIU into compliance;
 - x. Restriction of flow to the POTW.
 - xi. Disconnection from discharge to the POTW.
- h. A brief description of any programs the POTW implements to reduce pollutants from nondomestic users that are not classified as SIUs;
 - i. A brief description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to, changes concerning: the program's administrative structure, local limits, monitoring program or monitoring frequencies, legal authority, enforcement policy, funding levels, or staffing levels;
 - j. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases; and
 - k. A summary of activities to involve and inform the public of the program including a copy of the newspaper notice, if any, required under 40 C.F.R. section 403.8(f)(2)(viii).
 - l. Pretreatment Program reports shall be submitted as follows:
 - i. Electronically to the Central Valley Water Board using the CIWQS system:
 - ii. [Emailed to the State Water Board as a PDF file to:](#) NPDES_Wastewater@waterboards.ca.gov; and
 - iii. [Emailed to the U.S. EPA to:](#) R9Pretreatment@epa.gov.
6. **Recycled Water Policy Annual Reports.** In accordance with Section 3 of the Water Quality Control Policy for Recycled Water (Recycled Water Policy) and as specified in this NOA, the Discharger shall electronically submit an annual report of monthly data to the State Water Board by 30 April annually covering the previous calendar year using the State Water Board's [GeoTracker website](https://geotracker.waterboards.ca.gov/) (<https://geotracker.waterboards.ca.gov/>). Information for setting up and using the GeoTracker system can be found in the ESI Guide for Responsible Parties document on the State Water Board's website for [Electronic Submittal of Information](#) (https://www.waterboards.ca.gov/ust/electronic_submittal/index.html).

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

7. **Technical Report Submittals.** The Municipal General Order, as specified in this NOA, includes requirements to submit various reports and documents that may include, a Notice of Intent, special study technical reports, progress reports, and other reports identified in the MRP (hereafter referred to collectively as “technical reports”). The Technical Reports Table D-12 below summarizes the technical reports that are applicable to this discharge and required by this NOA, and the due dates for each submittal. All technical reports shall be submitted electronically via CIWQS submittal. Technical reports should be uploaded as a PDF, Microsoft Word, or Microsoft Excel file attachment.

Table D-12. Technical Reports

| Report # | Technical Report | Due Date | CIWQS Report Name |
|-----------------|---|-----------------|--------------------------|
| 1 | Notice of Intent | 31 July 2028 | NOI |
| 2 | Analytical Methods Report | 1 November 2024 | MRP X.D.3 |
| 3 | Analytical Methods Report Certification | 1 August 2025 | MRP IX.F.3 |
| 4 | Annual Operations Report #1 | 1 February 2025 | MRP X.D.4 |
| 5 | Annual Operations Report #2 | 1 February 2026 | MRP X.D.4 |
| 6 | Annual Operations Report #3 | 1 February 2027 | MRP X.D.4 |
| 7 | Annual Operations Report #4 | 1 February 2028 | MRP X.D.4 |
| 8 | Annual Operations Report #5 | 1 February 2029 | MRP X.D.4 |
| 9 | Recycled Water Policy Annual Report Submittal Confirmation #1 | 30 April 2025 | MRP X.D.6 |
| 10 | Recycled Water Policy Annual Report Submittal Confirmation #2 | 30 April 2026 | MRP X.D.6 |
| 11 | Recycled Water Policy Annual Report Submittal Confirmation #3 | 30 April 2027 | MRP X.D.6 |

| Report # | Technical Report | Due Date | CIWQS Report Name |
|-----------------|---|--|--------------------------|
| 12 | Recycled Water Policy Annual Report Submittal Confirmation #4 | 30 April 2028 | MRP X.D.6 |
| 13 | Recycled Water Policy Annual Report Submittal Confirmation #5 | 30 April 2029 | MRP X.D.6 |
| 14 | Updated Salinity Evaluation and Minimization Plan | 1 April of year following exceedance | MGO VII.C.3.b |
| 15 | Annual Pretreatment Reports #1 | 28 February 2025 | MRP X.D.5 |
| 16 | Annual Pretreatment Reports #2 | 28 February 2026 | MRP X.D.5 |
| 17 | Annual Pretreatment Reports #3 | 28 February 2027 | MRP X.D.5 |
| 18 | Annual Pretreatment Reports #4 | 28 February 2028 | MRP X.D.5 |
| 19 | Annual Pretreatment Reports #5 | 28 February 2029 | MRP X.D.5 |
| 20 | Pyrethroid Management Plan (if necessary) | One year from the date an exceedance is identified | MRP IX.G.4 |

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

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

Abbreviations and Notes:

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. The specific table listed is used to determine the appropriate AMEL, AWEL, or MDEL.

Table E-1. Human Health WQBELS Calculations

| Parameter | Units | Criteria | CV | Effluent Limit Table in Municipal General Order | AMEL | AWEL |
|-----------------------------|-------|----------|-----|---|------|------|
| Nitrate Plus Nitrite (as N) | mg/L | 10 | 0.3 | 19B | 10 | 14 |

Table E-2. Aquatic Life WQBELS Calculations

| Parameter | Units | CMC | CCC | CV | Effluent Limit Table in Municipal General Order | AMEL | AWEL |
|-----------------------|-------|-----|-----|-----|---|------|------|
| Ammonia, Total (as N) | mg/L | 5.7 | 1.3 | 0.6 | 18C | 1.2 | 2.7 |