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## Central Valley Regional Water Quality Control Board

18 March 2021

Chad McBride  
Wastewater Plant Operations Supervisor  
Nevada County Sanitation District No. 1  
950 Maidu Ave.  
Nevada City, CA 95959

VIA EMAIL:  
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**NOTICE OF APPLICABILITY (NOA); MUNICIPAL GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2017-0085-01, NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CAG585001; NEVADA COUNTY SANITATION DISTRICT, NO. 1, CASCADE SHORES WASTEWATER TREATMENT PLANT, NEVADA COUNTY**

Our office received a Notice of Intent (NOI) dated 22 November 2019 from Nevada County Sanitation District, No. 1 (Discharger), for discharge of tertiary treated domestic wastewater to surface water from the Cascade Shores Wastewater Treatment Plant (Facility) to Gas Canyon Creek. The General Order for Municipal Wastewater Dischargers That Meet Objectives/Criteria at the Point of Discharge to Surface Water Order R5-2017-0085-01 (Municipal General Order) requires the submittal of an NOI to apply for regulatory coverage of a surface water discharge. Based on the NOI and subsequent information submitted by the Discharger, staff has determined that the NOI requirements have been fulfilled and the Facility is eligible for coverage under the Municipal General Order. This Facility's discharge is assigned Municipal General Order enrollee number R5-2017-0085-015 and National Pollutant Discharge Elimination System (NPDES) Permit CAG585001. Please reference your Municipal General Order enrollee number, **R5-2017-0085-015**, in your correspondence and submitted documents.

Discharges to surface water from the Facility are currently regulated by an individual NPDES permit, Order R5-2015-0031 (NPDES CA0083241) issued by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) on 1 June 2015. The current individual NPDES permit expired on 31 May 2020 and was administratively extended by the Executive Officer on 18 May 2020. This NOA, authorizing coverage under the Municipal General Order, shall become effective on **1 April 2021**, at which time the terms and conditions in Order R5-2015-0031 will cease to be effective except for enforcement purposes. To meet the provisions contained in division 7 of the California Water Code (Water Code) (commencing with section 13000) and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements contained in the Municipal General Order and as specified in this NOA. This action in no way prevents the Central Valley Water Board from taking enforcement action for past violations of Order R5-2015-0031.

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

The enclosed Municipal General Order is not currently available online but 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/) (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**

<b>WDID</b>	5A290107002
<b>CIWQS Facility Place ID</b>	213432
<b>Discharger</b>	Nevada County Sanitation District, No. 1
<b>Name of Facility</b>	Cascade Shores Wastewater Treatment Plant
<b>Facility Street Address</b>	14326 Gas Canyon Road
<b>Facility City, State, Zip Code</b>	Nevada City, CA 95959
<b>Facility County</b>	Nevada
<b>Facility Contact, Title and Phone</b>	Chad McBride Wastewater Plant Operations Supervisor (530) 265-7121
<b>Authorized Person to Sign and Submit Reports</b>	Same as above
<b>Mailing Address</b>	950 Maidu Ave. Nevada City, CA 95959
<b>Billing Address</b>	Same as above
<b>Type of Facility</b>	Publicly Owned Treatment Works (POTW)
<b>Major or Minor Facility</b>	Minor
<b>Threat to Water Quality</b>	3
<b>Complexity</b>	C
<b>Pretreatment Program</b>	No
<b>Recycling Requirements</b>	No
<b>Facility Design Average Dry Weather Flow (ADWF)</b>	0.026 Million Gallons Per Day (MGD)
<b>Permitted ADWF</b>	0.026 MGD
<b>Watershed</b>	Upper Bear River
<b>Receiving Water</b>	Gas Canyon Creek
<b>Receiving Water Type</b>	Inland Surface Water
<b>Discharge Point 001</b>	Latitude: 39° 15' 40" N, Longitude: 120° 54' 20" W

## **I. FACILITY INFORMATION**

The Discharger provides sewerage service for the community of Cascade Shores and serves a population of approximately 86 households (approximately 200 individuals). The design average dry weather flow capacity of the Facility is 0.026 million gallons per day (MGD).

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

- Combined grit screens at the headworks
- odor control unit;
- equalization tank;
- two parallel treatment trains consisting of:
  - o anoxic moving bed bioreactors (MBBRs);
  - o aerobic MBBRs;
  - o secondary clarifier
- 12 ultrafiltration membrane filters;
- two inline ultraviolet light (UV) units; and
- outdoor re-aeration tank and an effluent meter.

The emergency storage pond is not used as part of the WWTP daily operations. The emergency storage pond has a drain line where the stored wastewater is directed back to the headworks and through the treatment process. Excess sludge is transported to the Discharger's Lake Wildwood Wastewater Treatment Plant to be dewatered, then it is taken offsite for disposal at a landfill.

## **II. RECEIVING WATER BENEFICIAL USES**

The Facility discharges from Discharge Point 001 to Gas Canyon Creek which flows to Greenhorn Creek and Rollins Reservoir, tributary to the Bear River, within the Upper Bear River watershed. According to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan) and the Tributary Rule, the following beneficial uses apply to Gas Canyon Creek:

- Municipal and Domestic Supply (MUN)
- Agricultural Supply (AGR)
- Hydropower Generation (POW)
- Water Contact Recreation (REC-1)
- Non-contact Water Recreation (REC-2)
- Warm Freshwater Habitat (WARM)
- Cold Freshwater Habitat (COLD)
- Wildlife Habitat (WILD)

Gas Canyon Creek also has the following potential beneficial use:

- Migration of Aquatic Organisms (MIGR)
- Spawning, Reproduction, and/or Early Development (SPWN)

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

- Municipal and Domestic Supply (MUN);
- Agricultural Supply, including Irrigation and Stock Watering (AGR);
- Industrial Service Supply (IND); and
- Industrial Process Supply (PRO);

**III. RECEIVING WATER TOTAL MAXIMUM DAILY LOADS (TMDLS)**

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

**IV. DISCHARGE PROHIBITIONS**

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

- A. The discharge of wastes, other than those described in section I.A and meeting the eligibility criteria in section I.B of the Municipal General Order, is prohibited unless the Discharger obtains coverage under another general or individual Order that regulates the discharge of such wastes. (see Municipal General Order section IV.A)
- B. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Federal Standard Provisions sections I.G. and I.H in Attachment D, Standard Provisions, of the Municipal General Order. (see Municipal General Order section IV.B)
- C. Neither the discharge nor its treatment shall create a nuisance as defined in section 13050 of the Water Code. (see Municipal General Order section IV. C)
- D. **Average Dry Weather Flow.** Discharges exceeding an average dry weather flow of 0.026 million gallons per day (MGD) are prohibited. (see Municipal General Order section IV.D)

**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 2 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 2 and items 1-5 below.

**Table 2. Effluent Limitations**

<b>Parameter</b>	<b>Units</b>	<b>Average Monthly</b>	<b>Average Weekly</b>	<b>Municipal General Order Section Reference</b>
Biochemical Oxygen Demand (5-day @ 20°Celsius) (BOD <sub>5</sub> )	milligrams per liter (mg/L)	10	15	V.A.1.a.ii.(a) Table 4

Parameter	Units	Average Monthly	Average Weekly	Municipal General Order Section Reference
Total Suspended Solids (TSS)	mg/L	10	15	V.A.1.a.ii.(a) Table 4
Ammonia Nitrogen, Total (as N)	mg/L	1.9	4.1	V.A.1.c.v.(b) Table 18A
Nitrate plus Nitrite, Total (as N)	mg/L	10	20	V.A.1.c.vi Table 19B

1. **pH (Municipal General Order section V.A.1.c.iv.(a). Table 15)**, 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).(1))**. The average monthly percent removal of BOD<sub>5</sub> and TSS shall not be less than 85 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, Acute (Municipal General Order section V.A.1.c.i)**. Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:
  - i. 70%, minimum for any one bioassay; and
  - ii. 90%, median for any three consecutive bioassays.
5. **Electrical Conductivity (Municipal General Order section V.A.1.c.viii.(a). Table 21)**.  
 The effluent electrical conductivity shall not exceed the calendar annual average effluent limitation of 625 micromhos per centimeter (µmhos/cm).

## VI. RECEIVING WATER LIMITATIONS

1. **Surface Water Limitations (Municipal General Order section VI.A)**.  
 The Municipal General Order includes receiving surface water limitations in Section VI.A. Based on the information provided in the NOI, only the following receiving surface water limitations listed in Municipal General Order Section VI.A are applicable to the Facility.
  - Biostimulatory Substances (VI.A.3);
  - Chemical Constituents (VI.A.4);
  - Color (VI.A.5);
  - Dissolved Oxygen (VI.A.6.a.i-iv);
  - Floating Material (VI.A.7);
  - Oil and Grease (VI.A.8);
  - pH (VI.A.9.a);

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

**VII. MONITORING AND REPORTING**

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

**VIII. PROVISIONS**

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

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

Applicable to all Dischargers.

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

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

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

**Table 3: Summary of Applicable Special Provisions**

<b>Special Provision</b>	<b>Section Reference</b>
1. Reopener Provisions	a. Major Modification of Treatment Works c. Whole Effluent Toxicity d. Water Effect Ratios (WERs) and Metal Translators
2. Special Studies, Technical Reports and Additional Monitoring Requirements	a.iii-iv. Toxicity Reduction Evaluation Requirements
4. Construction, Operation and Maintenance Specifications	a.ii.(a)-(b). Filtration System Operating Specifications b.i.(b). UV Disinfection System – Dose b.ii.(b). UV Disinfection System – Transmittance b.iii-vi. UV Disinfection System – General c.i-x. Pond Operating Specifications
5. Special Provisions for Municipal Facilities	b. Sludge/Biosolids Treatment or Discharge Specifications
6. Other Special Provisions	a. Title 22, or Equivalent, Disinfection Requirements

**IX. COMPLIANCE DETERMINATION**

The following compliance determinations, as contained and more fully described in the Municipal General Order, are applicable to this discharge (Municipal General

Order section given in brackets, if applicable):

- BOD<sub>5</sub> and TSS Effluent Limitations (VIII.A);
- Average Dry Weather Flow Prohibition (VIII.D);
- Total Coliform Organisms Effluent Limitations (VIII.E);
- Chronic Whole Effluent Toxicity Effluent Trigger (VIII.J);
- Period Average, Calendar Month Average, and Annual Average (VIII.N); and
- Reporting Requirements (**NOA, Appendix D, section X**).

#### **X. ANTI-BACKSLIDING REQUIREMENTS**

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

Effluent limitations for BOD<sub>5</sub>, TSS, pH, copper, zinc, and ammonia are less stringent than prescribed in previous Order R5-2015-0031. 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 provided in the federal anti-backsliding regulations.

#### **XI. ANTIDegradation REQUIREMENTS**

Antidegradation requirements are specified in the Municipal General Order, section V.D.4, Attachment F (Fact Sheet). This NOA does not allow an increase in flow or mass of pollutants to the receiving water and the relaxation of effluent limitations for BOD<sub>5</sub>, TSS, pH, copper, zinc, and ammonia is consistent with the antidegradation provisions of 40 C.F.R. 131.12 and State Water Board Resolution 68-16.

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

#### **XII. RATIONALE FOR LIMITATIONS AND MONITORING REQUIREMENTS**

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

#### **XIII. ENFORCEMENT**

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

#### **XIV. COMMUNICATION**

Until this NOA becomes effective on 1 April 2021 you will need to comply with the effluent limitations and requirements contained in your existing permit, Order R5-2015-0031. For your March 2021 monthly self-monitoring report, you will need to demonstrate compliance with existing Order R5-2015-0031 through 31 March 2021. For your April 2021 self-monitoring report, you will need to demonstrate compliance with this NOA beginning 1 April 2021.

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

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

- Attention: NPDES Compliance and Enforcement Section
- Discharger: Nevada County Sanitation District, No. 1
- Facility: Cascade Shores WWTP
- County: Nevada County
- CIWQS Place ID: 213432

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 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](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)) may be found on the Internet or will be provided upon request.



If you have any questions now that your NOA has been issued, the Central Valley Water Board's Compliance and Enforcement Section will take over management of your case, Paul Wadding of the Compliance and Enforcement section is your point of contact for any questions regarding this NOA. If you find it necessary to make a change to your permitted operations, you will be directed to the appropriate Permitting staff. You may contact Mr. Wadding at by phone at (916) 464-4826 or by [email](mailto:Paul.Wadding@waterboards.ca.gov) at Paul.Wadding@waterboards.ca.gov.

Patrick Pulupa  
Executive Officer

Appendices:

- Appendix A – Location Map
- Appendix B – Flow Schematic
- Appendix C – Supplemental Fact Sheet
- Appendix D – Monitoring and Reporting Program
- Appendix E – Determination of WQBEL's

Enclosures:

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

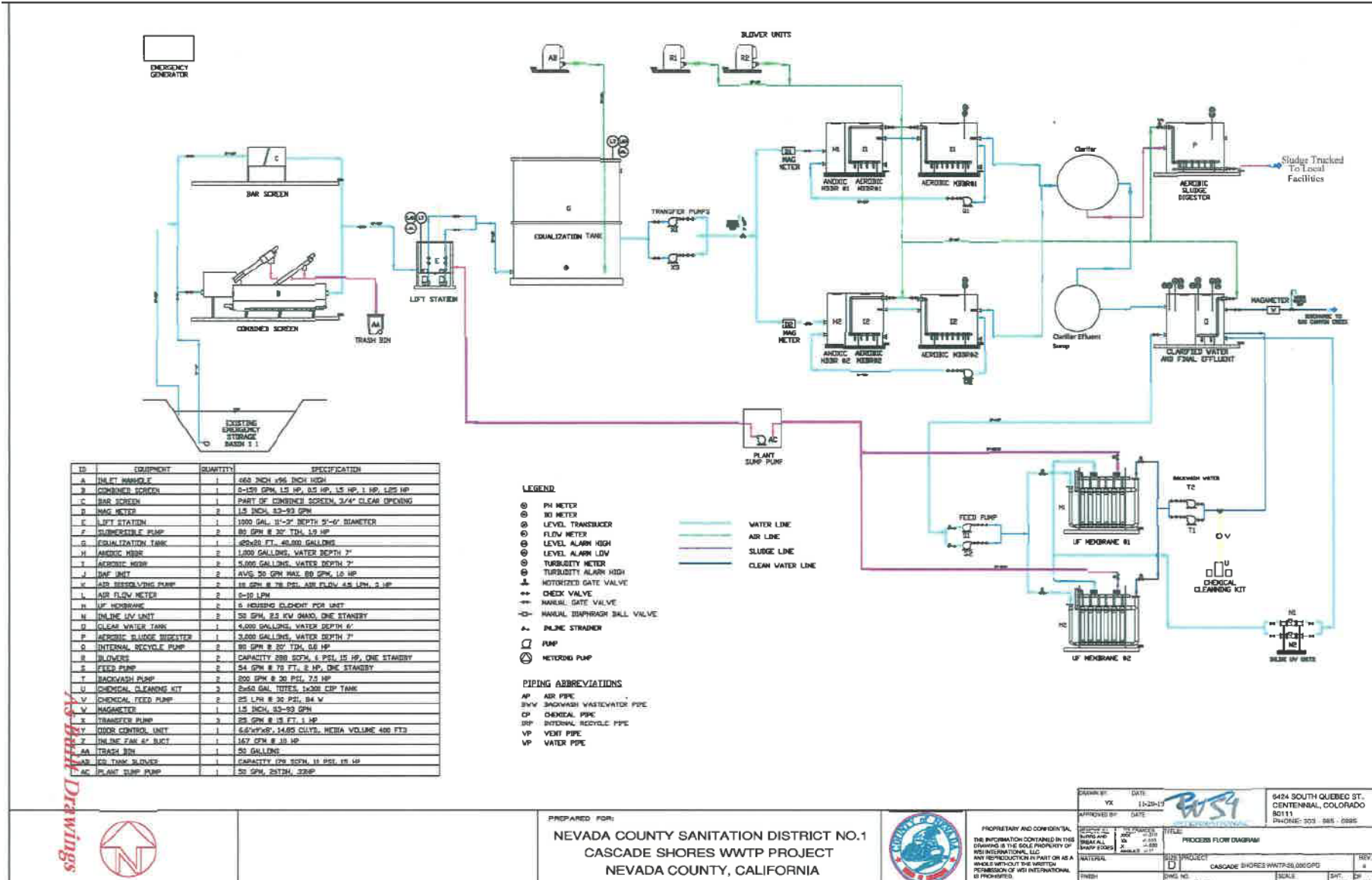
cc:

Elizabeth Sablad, U.S. EPA, Region IX, San Francisco (email only)  
Peter Kozelka, U.S. EPA, Region IX, San Francisco (email only)  
Afrooz Farsimadan, California State Water Resources Control Board (email only)  
Renan Jauregui, California State Water Resources Control Board (email only)  
Jarma Bennett, California State Water Resources Control Board, (email only)  
ICIS NPDES (Sarah Torres), PG Environmental (email only)

**APPENDIX A – LOCATION MAP**



APPENDIX B – FLOW SCHEMATIC



## APPENDIX C – SUPPLEMENTAL FACT SHEET

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

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

### II. FINAL EFFLUENT LIMITATION CONSIDERATIONS

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

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

The effluent limitations in this NOA are at least as stringent as the effluent limitations in the Facility's previous Order R5-2015-0031, with the exception of effluent limitations for pH, copper, zinc, ammonia, mass-based effluent limitations for BOD<sub>5</sub> and TSS, and maximum daily effluent limitations for BOD<sub>5</sub> and TSS. This relaxation and/or removal of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

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

Gas Canyon Creek is considered an attainment water for BOD<sub>5</sub>, TSS, pH, copper, zinc, and ammonia because the receiving water is not listed as impaired on the 303(d) list for these constituents. The exceptions in Section 303(d)(4) address both waters in attainment with water quality standards and those not in attainment, i.e. waters on the section 303(d) impaired waters list (State Water Resources Control Board Order WQ-2008-0006, Berry Petroleum Company, Poso Creek/McVan Facility). As discussed below, relaxation of the ammonia and pH effluent limitations and removal of the copper, zinc, and BOD<sub>5</sub> and TSS maximum daily and mass-based effluent limitations complies with federal and state antidegradation requirements. Thus, removal and/or relaxation of these effluent limitations meets the exception in CWA section 303(d)(4)(B).

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

Updated information that was not available at the time Order R5-2015-0031 was issued indicates that copper and zinc do not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water.

Additionally, updated information that was not available at the time Order R5-2015-0031 was issued indicates that less stringent effluent limitations for ammonia satisfy requirements in CWA section 402(o)(2). The updated information that supports the relaxation of effluent limitations for ammonia and the removal of the effluent limitations for copper and zinc includes the following:

- a. **Ammonia.** The ammonia effluent limitations have been revised 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 Order R5-2015-0031 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 Order R5-2015-0031 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.

Thus, relaxation of effluent limitations for ammonia and the removal of the effluent limitations for copper and zinc from this NOA is in accordance with CWA section 402(o)(2)(B)(i), which allows for the removal or relaxation of effluent limitations based on information that was not available at the time previous Order R5-2015-0031 was issued.

3. **Flow.** Order R5-2015-0031 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 Order. Flow as a discharge prohibition adequately regulates the Facility, does not allow for an increase in the discharge of pollutants, and does not constitute backsliding.

## **B. Antidegradation Policies**

This NOA does not allow for an increase in flow or mass of pollutants to the receiving water. Therefore, a complete antidegradation analysis is not necessary. This NOA requires compliance with applicable federal technology-based standards and with WQBEL's where the discharge could have the reasonable potential to cause or

contribute to an exceedance of water quality standards. The permitted discharge is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and the State Anti-Degradation Policy. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The impact on existing water quality will be insignificant.

This NOA relaxes effluent limitations for pH and ammonia and removes effluent limitations for copper and zinc. 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 maximum daily and mass-based effluent limitations for BOD<sub>5</sub>, TSS, and mass-based effluent limitations for ammonia based on 40 C.F.R. Part 122.45 (d)-(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 BOD<sub>5</sub>, TSS, and ammonia, as well as a prohibition (section V.D 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 EC data collected from 1 January 2017 through 31 December 2019, the maximum calendar annual average EC of the effluent was 432  $\mu\text{mhos/cm}$ . The Municipal General Order includes a screening level for EC 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 limitations for EC that are applicable to this Facility. 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 limitation of 625  $\mu\text{mhos/cm}$  for EC is applied limiting the discharge to current levels (thus ensuring that BPTC will continue to be met).

### **III. RATIONALE FOR RECEIVING WATER LIMITATIONS**

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., BOD<sub>5</sub> and TSS reduction requirements). The monitoring frequencies for flow (continuous), BOD<sub>5</sub>, and TSS (twice per month) have been retained from Order R5-2015-0031.

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

1. Pursuant to the requirements of 40 C.F.R. section 122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations, assess the effectiveness of the treatment process, and to assess the impacts of the discharge on the receiving stream and groundwater.
2. This NOA includes effluent monitoring for dissolved organic carbon (quarterly) to calculate site-specific freshwater aluminum criteria in accordance with the 2018 United States Environmental Protection Agency (U.S. EPA) National Ambient Water Quality Criteria (NAWQC) for aluminum in freshwater for the next permit renewal.

3. Effluent monitoring frequencies for flow (continuous), BOD<sub>5</sub> (once per week), TSS (once per week), ammonia (total, as nitrogen) (once per month), nitrate (total, as nitrogen) (once per month), electrical conductivity @ 25°C (once per quarter), hardness, total (as CaCO<sub>3</sub>) (once per quarter), peracetic acid (once per day), temperature (once per week), and California Toxics Rule (CTR) priority pollutants (twice per permit term) have been retained from Order R5-2015-0031.
4. Effluent monitoring for nitrite (total, as nitrogen) and dissolved oxygen was not required in previous Order R5-2015-0031. Monthly monitoring of the effluent for nitrite is necessary to compare the concentration for nitrate plus nitrite (total, as nitrogen) to the effluent limitation. Monthly monitoring for dissolved oxygen will ensure that the effluent is not degrading Gas Canyon Creek below the Basin Plan objective of 7 mg/L for dissolved oxygen.
5. Calculations for the percent reduction between the influent and effluent for BOD<sub>5</sub> and TSS shall be calculated once per month. The addition of effluent nitrate plus nitrite shall be calculated once per month and reported as total nitrogen.
6. As discussed in Section I.B of this Appendix, the mass-based effluent limitations for ammonia, BOD<sub>5</sub>, and TSS and maximum daily effluent limitations for BOD<sub>5</sub> and TSS have not been retained from Order R5-2015-0031.
7. 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 Order R5-2015-0031.
8. Monitoring data collected over the previous permit term for pH indicated consistent compliance with effluent limitations. Thus, monitoring has been reduced from continuous to weekly monitoring as a grab sample.

### **C. Whole Effluent Toxicity Testing Requirements**

1. **Acute Toxicity.** Effluent monitoring frequency for acute toxicity 96-hour bioassay (once per permit term) has been retained from previous Order R5-2015-0031 to demonstrate compliance with the effluent limitation for acute toxicity.
2. **Chronic Toxicity.** Effluent monitoring frequency for chronic toxicity bioassay testing (once per year) has been increased from previous Order R5-2015-0031 (once per permit term). Chronic whole effluent toxicity testing is required when discharging to Gas Canyon Creek in order to demonstrate compliance with the Basin Plan's narrative toxicity objective.

### **D. Receiving Water Monitoring**

1. **Gas Canyon Creek**
  - a. As discussed in the Fact Sheet, section VII.D of previous Order R5-2015-0031, receiving water monitoring is not required because access to the upstream and downstream receiving water monitoring locations is difficult due to steep stream banks, cliffs, and poorly consolidated hydraulic mining debris. Despite several attempts the discharger was unable to obtain further downstream access from private property owners. In addition, the distance to the alternate downstream locations is only accessible by foot and would be prohibitive toward meeting



sample holding times. Furthermore, surface flow in Gas Canyon Creek is ephemeral and only occurs aboveground during storm events. Furthermore, Attachment E, section VIII.A.1 of the Municipal General Order excludes the Facility from receiving water monitoring. Therefore, this NOA does not require receiving water monitoring.

**2. Groundwater – Not Applicable**

**E. Biosolids Monitoring – Not Applicable**

**F. Water Supply Monitoring – Not Applicable**

**G. Filtration System Monitoring**

1. Filtration system monitoring for turbidity is required for Dischargers of tertiary treated wastewater that meet the eligibility criteria in section I.B.4 of the Municipal General Order to determine compliance with the filtration system operating specifications in section VII.C.4.a of the Municipal General Order.
2. The monitoring frequency for turbidity (continuous) is retained from previous Order R5-2015-0031 to evaluate compliance the turbidity operating specifications.

**H. UV Disinfection System Monitoring**

1. Monitoring frequencies for flow (continuous), UV dose (continuous), UV transmittance (continuous), number of UV banks in operation (continuous), and total coliform organisms (twice per week) have been retained from previous Order R5-2015-0031, to evaluate compliance with UV operating specifications.

**I. Pond Monitoring**

1. When any type of wastewater is directed to the emergency storage pond, this NOA requires the Discharger to keep a log for PND-001 to record the date, type of wastewater, volume, duration, and freeboard for the pond. Pond operating specifications contained in the Municipal General Order are applicable as specified in section VIII.1.C, Special Provisions, Table 3 of the NOA.
2. Section IX.B.1.b requires monitoring for dissolved oxygen (once per month), electrical conductivity @ 25°C (once per week), odors (once per month), and pH (once per month) at unlined ponds when wastewater is held for over 7 days. Monitoring for these parameters is necessary to ensure proper operation of the storage pond; therefore, monitoring for these parameters has been included in this NOA.

**J. 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.

**K. Effluent Characterization Monitoring**

1. Order R5-2015-0031 included semiannual effluent characterization monitoring for one year when discharging to Gas Canyon Creek. This NOA retains the semiannual effluent characterization monitoring for one year.
2. Order R5-2015-0031 did not include characterization monitoring of the upstream receiving water. This NOA does not include characterization of the receiving water due to issues discussed above regarding sample collection.

**V. PRETREATMENT PROVISION – NOT APPLICABLE**

## VI. SUMMARY OF REASONABLE POTENTIAL ANALYSIS

### Abbreviations used in Table C-1:

- 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-1: 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	--	2.2	7.7	2.2	--	--	--	--	Yes
Nitrate Plus Nitrite (as N)	mg/L	26.4	--	10	--	--	--	--	--	10	Yes
Electrical Conductivity @ 25°C	µmhos/cm	520	--	--	--	--	--	--	--	1,600	No
Copper, total recoverable	µg/L	4.9	--	5.2	5.2	7.3	--	--	--	--	No
Zinc, total recoverable	µg/L	32	--	67	67	67	--	--	--	--	No

1. Table C-1 Notes:

- i. **CMC.** For ammonia, the CMC or criterion maximum concentration is based on the U.S. EPA National Recommended Ambient Water Quality Criteria Freshwater Aquatic Life Protection, 1-hour average. For copper and zinc, the CMC is based on the CTR, 1-hour average criterion.
- ii. **CCC.** For ammonia, the CCC or criterion continuous concentration is based on the U.S. EPA National Recommended Ambient Water Quality Criteria Freshwater Aquatic Life Protection, 30-day average. For copper and zinc, the CCC is based on the CTR, 4-day average criterion.
- iii. **Ammonia and Nitrate + 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).

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## **APPENDIX D – MONITORING AND REPORTING PROGRAM (MRP)**

The Municipal General Order contains monitoring and reporting requirements in Attachment E. Some of the monitoring and reporting requirements listed in the Municipal General Order are not applicable to the Facility. The monitoring and reporting requirements applicable to the Facility are contained in this Appendix 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 Order shall be conducted by a laboratory accredited for such analyses by the State Water Resources Control Board (State Water Board), Division of Drinking Water (DDW), in accordance with the provision of Water Code section 13176. Laboratories that perform sample analyses must be identified in all monitoring reports submitted to the Central Valley Water Board. Data generated from field measurements such as, pH, dissolved oxygen, electrical conductivity (EC), turbidity, 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 influent into the Facility can be collected prior to entering the treatment process.

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	A location where a representative sample of the effluent from the Facility can be collected after all treatment processes and prior to being discharged to Gas Canyon Creek. Latitude: 39° 15' 40" N, Longitude: 120° 54' 20" W
--	PND-001	Emergency Storage Pond
--	FIL-001	Monitoring of the filter effluent to be measured downstream of the filters prior to the ultraviolet light (UV) disinfection system.
--	UVS-001	A location where a representative sample of wastewater can be collected immediately downstream of the UV disinfection system.

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

### III. INFLUENT MONITORING REQUIREMENTS

#### A. Monitoring Location INF-001

1. The Discharger shall monitor influent to the Facility at Monitoring Location INF-001 as specified in Table D-2 and the testing 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	2/Month
Total Suspended Solids	mg/L	24-hour Composite	2/Month

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

#### IV. EFFLUENT MONITORING REQUIREMENTS

##### A. Monitoring Location EFF-001

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

**Table D-3. Effluent Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	MGD	Meter	Continuous
Biochemical Oxygen Demand (5-day @ 20° C)	mg/L	24-hr Composite	1/Week
Biochemical Oxygen Demand (5-day @ 20° C)	percent removal	Calculate	1/Month
pH	standard units	Grab	1/Week
Total Suspended Solids	mg/L	24-hr Composite	1/Week
Total Suspended Solids	percent removal	Calculate	1/Month
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Month
Dissolved Oxygen	mg/L	Grab	1/Month
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Quarter
Hardness, Total (as CaCO <sub>3</sub> )	mg/L	Grab	1/Quarter
Dissolved Organic Carbon (DOC)	mg/L	Grab	1/Quarter
Nitrate Plus Nitrite, Total (as N)	mg/L	Calculate	1/Month
Nitrate Nitrogen, Total (as N)	mg/L	Grab	1/Month
Nitrite Nitrogen, Total (as N)	mg/L	Grab	1/Month
Peracetic Acid	mg/L	Grab	1/Day
Temperature	°C	Grab	1/Week

2. Table D-3 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-3:
  - a. **Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.
  - b. **Applicable to all parameters.** Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.



- c. **Grab Sample.** A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.
- d. **Ammonia.** Samples for pH and temperature shall be recorded at the time of ammonia sample collection.
- e. **Field Meter.** A hand-held field meter may be used for **pH, electrical conductivity, temperature, and dissolved oxygen**, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.
- f. **Peracetic Acid.** Peracetic acid residual monitoring is only required when peracetic acid is used in the disinfection process.
- g. **Dissolved Organic Carbon.** Hardness, total (as CaCO<sub>3</sub>) and pH samples shall be taken concurrent with dissolved organic carbon samples.

## V. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

### A. Acute Toxicity Testing.

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

1. **Monitoring Frequency** – The Discharger shall perform acute toxicity testing **once** between **1 July 2022 and 30 September 2022**, while the Facility is discharging to Gas Canyon Creek and concurrent with effluent ammonia sampling.
2. **Sample Types** – The Discharger may use flow-through or static renewal testing. For static renewal testing, the samples shall be grab samples and shall be representative of the volume and quality of the discharge. The effluent samples shall be taken at Monitoring Location EFF-001.
3. **Test Species** – The test species shall be rainbow trout (*Oncorhynchus mykiss*).
4. **Test Duration** – Test duration shall be 96 hours.
5. **Methods** – The acute toxicity testing samples shall be analyzed using EPA-821-R-02-012, Fifth Edition. Temperature and pH shall be recorded at the time of sample collection. No pH adjustment may be made unless approved by the Executive Officer.
6. **Test Failure** – If an acute toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger must re-sample and re-test as soon as possible, not to exceed 7 days following notification of test failure.

## B. Chronic Toxicity Testing.

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

1. Monitoring Frequency – The Discharger shall perform **annual** chronic toxicity testing when discharging to Gas Canyon Creek. If the result of the routine chronic toxicity testing event exhibits toxicity, demonstrated by a result greater than 1.3 TUc (as 100/EC25) **AND** a percent effect greater than 25 percent at 100 percent effluent, the Discharger has the option of conducting two additional compliance monitoring chronic toxicity testing events in order to calculate a median. The optional compliance monitoring events shall occur at least one week apart, and the final monitoring event shall be initiated no later than 6 weeks from the routine monitoring event that exhibited toxicity. See Compliance Determination Section VIII.J of the Municipal General Order for procedures for calculating the 6-week median.
2. Sample Types – Effluent samples shall be flow proportional grab samples and shall be representative of the volume and quality of the discharge. The effluent samples shall be taken at Monitoring Location EFF-001.
3. Sample Volumes – Adequate sample volumes shall be collected to provide renewal water to complete the test in the event that the discharge is intermittent.
4. Test Species – Chronic toxicity testing measures sublethal (e.g., reduced growth, reproduction) and/or lethal effects to test organisms exposed to an effluent compared to that of the control organisms. The test species shall be as follows:
  - a. The cladoceran, water flea, *Ceriodaphnia dubia* (survival and reproduction test);
  - b. The fathead minnow, *Pimephales promelas* (larval survival and growth test); and
  - c. The green alga, *Selenastrum capricornutum* (growth test).
5. Most Sensitive Species Determination – Not Applicable
6. Methods – The presence of chronic toxicity shall be estimated as specified in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, EPA/821-R-02-013, October 2002.
7. Reference Toxicant – As required by the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP), all chronic toxicity tests shall be conducted with concurrent testing with a reference toxicant and shall be reported with the chronic toxicity test results.
8. Dilutions – For routine and compliance chronic toxicity monitoring, chronic toxicity testing shall be performed using the dilution series identified in Table

D-4, below. For TRE monitoring, chronic toxicity testing shall be performed using the dilution series identified, below, unless an alternative dilution series is detailed in the submitted TRE Action Plan. A receiving water control or laboratory water control may be used as the diluent.

**Table D-4. Chronic Toxicity Testing Dilution Series**

<b>Sample</b>	<b>100% Dilution</b>	<b>75% Dilution</b>	<b>50% Dilution</b>	<b>25% Dilution</b>	<b>12.5% Dilution</b>	<b>Control</b>
% Effluent	100%	75%	50%	25%	12.5%	0%
% Control Water	0%	25%	50%	75%	87.5%	100%

9. **Test Failure** – The Discharger must re-sample and re-test as soon as possible, but no later than fourteen (14) days after receiving notification of a test failure. A test failure is defined as follows:
  - a. The reference toxicant test or the effluent test does not meet all test acceptability criteria as specified in the Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, EPA/821-R-02-013, October 2002 (Method Manual), and its subsequent amendments or revisions; or
  - b. The percent minimum significant difference (PMSD) measured for the test exceeds the upper PMSD bound variability criterion in Table 6 on page 52 of the Method Manual. (A retest is only required in this case if the test results do not exceed the monitoring trigger specified in the Special Provision at section VII.C.2.a.iii of the Municipal General Order.)

**C. WET Testing Notification Requirements.**

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

**D. WET Testing Reporting Requirements.**

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

1. **Chronic WET Reporting.** Chronic toxicity monitoring results shall be reported to the Central Valley Water Board with the annual self-monitoring report, and shall contain, at minimum:
  - a. The results expressed in TUC, measured as 100/NOEC, and also measured as 100/LC50, 100/EC25, 100/IC25, and 100/IC50, as appropriate.
  - b. The percent effect at the instream waste concentration;
  - c. The statistical methods used to calculate endpoints;

- d. The statistical output page, which includes the calculation of the percent minimum significant difference (PMSD);
- e. The dates of sample collection and initiation of each toxicity test; and
- f. The results compared to the numeric toxicity monitoring trigger or effluent limitation.

Additionally, the annual SMR shall contain an updated chronology of chronic toxicity test results expressed in TUc (as 100/EC<sub>25</sub>) and percent effect at the instream waste concentration, and organized by type of test (survival, growth or reproduction), and monitoring frequency, i.e., either quarterly, monthly, monthly median, or TRE.

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

## **VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE**

## **VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE**

## **VIII. RECEIVING WATER MONITORING REQUIREMENTS – NOT APPLICABLE**

## **IX. OTHER MONITORING REQUIREMENTS**

### **A. Biosolids – Not Applicable**

### **B. Ponds**

#### **1. Monitoring Location PND-001**

- a. The Discharger shall keep a log regarding the use of the emergency storage pond. In particular, the Discharger shall record the following when any type of wastewater is directed to the pond
  - i. The date(s) when the wastewater is directed to the pond;

- ii. The type(s) of wastewater (e.g., untreated due to plant upset, tertiary treated, etc.) directed to the pond;
  - iii. The total volume of wastewater directed to the pond (volume may be estimated), and;
  - iv. The daily freeboard in the pond.
- a. The Discharger shall monitor the emergency storage pond at Monitoring Location PND-001, per Table D-5, when the emergency storage pond holds wastewater for over 7 consecutive days. When the emergency storage pond hold 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/Week
Odors	--	Observation	1/Month

**C. Municipal Water Supply – Not Applicable**

**D. Filtration System and Ultraviolet Light (UV) Disinfection System**

**1. Monitoring Location FIL-001 and UVS-001**

- a. The Discharger shall monitor the filtration system and UV disinfection system at Monitoring Locations FIL-001, and UVS-001 as follows: as specified in Table D-6 and the testing requirements in section IX.D.2.

**Table D-6. Filtration and UV Disinfection System Monitoring Requirements**

Parameter	Units	Sample Type	Monitoring Location	Sampling Frequency
Flow	MGD	Meter	UVS-001	Continuous
Turbidity	NTU	Meter	FIL-001	Continuous
Number of UV banks in operation	Number	Observation	--	Continuous
UV Transmittance	Percent	Meter	FIL-001	Continuous
UV Dose	mJ/cm <sup>2</sup>	Calculate	--	Continuous
Total Coliform Organisms	MPN/100 mL	Grab	UVS-001	2/Week

- 2. Table D-6 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-6:
  - a. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods that have been approved by the Central Valley Water Board or the State Water Board.

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

#### **E. Effluent Characterization**

The Discharger shall monitor the effluent at Monitoring Locations EFF-001 for the constituents listed in Table D-7, as described in this section.

##### **1. Monitoring Frequency**

- a. **Effluent Sampling.** Samples shall be collected from the effluent (Monitoring Location EFF-001) twice, **once** between **1 July 2022 and 30 September 2022** (dry season) and **once** between **1 January 2023 and 31 March 2023** (wet season).

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

- 3. **Sample Type.** Effluent samples shall be taken as described in Table D-7, below and the testing requirements in section IX.E.5.
- 4. **Analytical Methods Report Certification.** Prior to beginning the Effluent Characterization monitoring, the Discharger shall provide a certification acknowledging the scheduled start date of the Effluent Characterization monitoring and confirming that samples will be collected and analyzed as

described in the previously submitted Analytical Methods Report. If there are changes to the previously submitted Analytical Methods Report, the Discharger shall outline those changes. A one-page certification form will be provided by the Central Valley Water Board staff with this NOA that the Discharger can use to satisfy this requirement. The certification form shall be submitted electronically via CIWQS in accordance with the reporting requirements in Table D-9, Technical Reports.

**Table D-7. Effluent Characterization Monitoring**

Parameter	Units	Effluent Sample Type
2- Chloroethyl vinyl ether	µg/L	Grab
Acrolein	µg/L	Grab
Acrylonitrile	µg/L	Grab
Benzene	µg/L	Grab
Bromoform	µg/L	Grab
Carbon Tetrachloride	µg/L	Grab
Chlorobenzene	µg/L	Grab
Chloroethane	µg/L	Grab
Chloroform	µg/L	Grab
Chloromethane	µg/L	Grab
Dibromochloromethane	µg/L	Grab
Dichlorobromomethane	µg/L	Grab
Dichloromethane	µg/L	Grab
Ethylbenzene	µg/L	Grab
Hexachlorobenzene	µg/L	Grab
Hexachlorobutadiene	µg/L	Grab
Hexachloroethane	µg/L	Grab
Methyl bromide (Bromomethane)	µg/L	Grab
Naphthalene	µg/L	Grab
3-Methyl-4-Chlorophenol	µg/L	Grab
Tetrachloroethylene	µg/L	Grab
Toluene	µg/L	Grab
trans-1,2-Dichloroethylene	µg/L	Grab
Trichloroethene	µg/L	Grab
Vinyl chloride	µg/L	Grab
Methyl-tert-butyl ether (MTBE)	µg/L	Grab
1,1,1-Trichloroethane	µg/L	Grab
1,1,2- Trichloroethane	µg/L	Grab
1,1-dichloroethane	µg/L	Grab
1,1-dichloroethylene	µg/L	Grab
1,2-dichloropropane	µg/L	Grab
1,3-dichloropropylene	µg/L	Grab

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



Parameter	Units	Effluent Sample Type
Diethyl phthalate	µg/L	Grab
Dimethyl phthalate	µg/L	Grab
Fluoranthene	µg/L	Grab
Fluorene	µg/L	Grab
Hexachlorocyclopentadiene	µg/L	Grab
Indeno(1,2,3-c,d)pyrene	µg/L	Grab
Isophorone	µg/L	Grab
N-Nitrosodiphenylamine	µg/L	Grab
N-Nitrosodimethylamine	µg/L	Grab
N-Nitrosodi-n-propylamine	µg/L	Grab
Nitrobenzene	µg/L	Grab
Pentachlorophenol	µg/L	Grab
Phenanthrene	µg/L	Grab
Phenol	µg/L	Grab
Pyrene	µg/L	Grab
Aluminum	µg/L	24-hr Composite
Antimony	µg/L	24-hr Composite
Arsenic	µg/L	24-hr Composite
Asbestos	MFL	24-hr Composite
Beryllium	µg/L	24-hr Composite
Cadmium	µg/L	24-hr Composite
Chromium (Total)	µg/L	24-hr Composite
Chromium (VI)	µg/L	24-hr Composite
Copper	µg/L	24-hr Composite
Cyanide	µg/L	24-hr Composite
Iron	µg/L	24-hr Composite
Lead	µg/L	24-hr Composite
Mercury	µg/L	Grab
Manganese	µg/L	24-hr Composite
Nickel	µg/L	24-hr Composite
Selenium	µg/L	24-hr Composite
Silver	µg/L	24-hr Composite
Thallium	µg/L	24-hr Composite
Zinc	µg/L	24-hr Composite
4,4'-DDD	µg/L	Grab
4,4'-DDE	µg/L	Grab
4,4'-DDT	µg/L	Grab
alpha-Endosulfan	µg/L	Grab
alpha-Hexachlorocyclohexane (BHC)	µg/L	Grab

<b>Parameter</b>	<b>Units</b>	<b>Effluent Sample Type</b>
Aldrin	µg/L	Grab
beta-Endosulfan	µg/L	Grab
beta-Hexachlorocyclohexane	µg/L	Grab
Chlordane	µg/L	Grab
delta-Hexachlorocyclohexane	µg/L	Grab
Dieldrin	µg/L	Grab
Endosulfan sulfate	µg/L	Grab
Endrin	µg/L	Grab
Endrin Aldehyde	µg/L	Grab
Heptachlor	µg/L	Grab
Heptachlor Epoxide	µg/L	Grab
Lindane (gamma-Hexachlorocyclohexane)	µg/L	Grab
PCB-1016	µg/L	Grab
PCB-1221	µg/L	Grab
PCB-1232	µg/L	Grab
PCB-1242	µg/L	Grab
PCB-1248	µg/L	Grab
PCB-1254	µg/L	Grab
PCB-1260	µg/L	Grab
Toxaphene	µg/L	Grab
2,3,7,8-TCDD (Dioxin)	µg/L	24-hr Composite
Ammonia (as N)	mg/L	Grab
Boron	µg/L	24-hr Composite
Chloride	mg/L	24-hr Composite
Flow	MGD	Meter
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab
Foaming Agents (MBAS)	µg/L	24-hr Composite
Mercury, Methyl	ng/L	Grab
Nitrate (as N)	mg/L	Grab
Nitrite (as N)	mg/L	Grab
pH	Std Units	Grab
Phosphorus, Total (as P)	mg/L	24-hr Composite
Specific conductance (Electrical Conductivity)	µmhos/cm	Grab
Sulfate	mg/L	24-hr Composite
Sulfide (as S)	mg/L	24-hr Composite
Sulfite (as SO <sub>3</sub> )	mg/L	24-hr Composite
Temperature	°C	Grab
Total Dissolved Solids (TDS)	mg/L	Grab

Parameter	Units	Effluent Sample Type
Dissolved Organic Carbon (DOC)	mg/L	Grab

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

- a. **Bis (2-ethylhexyl) phthalate.** In order to verify if bis (2-ethylhexyl) phthalate is truly present in the effluent discharge, the Discharger shall take steps to assure that sample containers, sampling apparatus, and analytical equipment are not sources of the detected contaminant.
- b. **Composite Sample.** All composite samples shall be collected from a 24-hour flow proportional composite.
- c. **Grab Sample.** A grab sample is defined as an individual discrete sample collected over a period of time not exceeding 15 minutes. It can be taken manually, using a pump, scoop, vacuum, or other suitable device.
- d. **Concurrent Sampling.** The Discharger is not required to conduct effluent monitoring for constituents that have already been sampled in a given month, as required in Table D-3, except for hardness, pH, and temperature, which shall be conducted concurrently with the effluent sampling.
- e. **Total Mercury and methylmercury.** Samples for total mercury and methylmercury shall be taken using clean hands/dirty hands procedures, as described in U.S. EPA method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels, for collection of equipment blanks (section 9.4.4.2), and shall be analyzed by U.S. EPA method 1630/1631 (Revision E) with a reporting limit of 0.05 ng/L for methylmercury and 0.5 nanograms per liter (ng/L) for total mercury.

## X. REPORTING REQUIREMENTS

### A. General Monitoring and Reporting Requirements

- 1. The Discharger shall comply with all Standard Provisions (Attachment D of the Municipal General Order) related to monitoring, reporting, and recordkeeping. Upon written request of the Central Valley Water Board, the Discharger shall submit a summary monitoring report. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year(s)
- 2. **Compliance Time Schedules - Not Applicable**
- 3. The Discharger shall report to the Central Valley Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.

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

**B. Self-Monitoring Reports**

1. The Discharger shall electronically submit SMR's 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 SMR's including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this MRP. SMR's are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this MRP, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall begin on 1 April 2021 and be completed according to the following:

**Table D-8. Monitoring Periods and Reporting Schedule**

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

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

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

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

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy ( $\pm$  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 SMR's in accordance with the following requirements:
  - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data are required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
  - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation. The cover letter must be uploaded directly into CIWQS and violations must be entered into CIWQS under the Violations tab for the reporting period in which the violation occurred in addition to them being identified in the cover letter.
  - c. The Discharger shall attach final laboratory reports for all contracted, commercial laboratories, including quality assurance/quality control information, with all its SMR's for which sample analyses were performed. Bench sheets are not required but should be available upon request by Regional Board staff.
7. The Discharger shall submit in the SMR's calculations and reports in accordance with the following requirements.
  - a. **Calendar Annual Average Limitations.** For Dischargers subject to effluent limitations specified as "calendar annual average" (e.g., electrical conductivity), the Discharger shall report the calendar annual average in the December SMR. The annual average shall be calculated as the average of the samples gathered for the calendar year.
  - b. **Mass Loading Limitations. – Not Applicable.**
  - c. **Removal Efficiency (BOD<sub>5</sub> and TSS).** The Discharger shall calculate and report the percent removal of BOD<sub>5</sub> and TSS in the SMR's. The percent removal shall be calculated as specified in section VIII.A of the Limitations and Discharge Requirements in the Municipal General Order.
  - d. **Total Coliform Organisms Effluent Limitations.** The Discharger shall calculate and report the 7-day median of total coliform organisms for the effluent. The 7-day median of total coliform organisms shall be calculated as specified in section VIII.E of the Limitations and Discharge Requirements in the Municipal General Order.

- e. **Total Calendar Annual Mass Loading Mercury Effluent Limitations. – Not Applicable.**
- f. **Temperature Effluent Limitation. – Not Applicable.**
- g. **Chlorpyrifos and Diazinon Effluent Limitations. – Not Applicable.**
- h. **Dissolved Oxygen Receiving Water Limitations. – Not Applicable.**
- i. **Turbidity Receiving Water Limitations. – Not Applicable.**
- j. **Temperature Receiving Water Limitations. – Not Applicable.**

#### **C. Discharge Monitoring Reports (DMR's)**

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

#### **D. Other Reports**

1. **Special Study Reports.** Special study reports required by section VIII.C, Provisions, in this NOA shall be submitted in accordance with the reporting requirements in Table D-9, Technical Reports.
2. **Analytical Methods Report.** The Discharger shall complete and submit an Analytical Methods Report, electronically via CIWQS submittal, by the due date specified in Table D-9 below. The Analytical Methods Report shall include the following for each constituent listed in tables D-2, D-3, and D-7 of this NOA: 1) applicable water quality objective, 2) reporting level (RL), 3) method detection limit (MDL), and 4) analytical method. The analytical methods shall be sufficiently sensitive with RL's consistent with the SSM Rule (see also General Monitoring Provision F in the Municipal General Order), and with the Minimum Levels (ML's) in the SIP, Appendix 4. The "Reporting Level or RL" is synonymous with the "Method Minimum Level" described in the SSM Rule. If an RL is greater than the applicable water quality objective for a constituent, the Discharger shall explain how the proposed analytical method complies with the SSM Rule. Central Valley Water Board staff will provide a tool with this NOA to assist the Discharger in completing this requirement. The tool will include the constituents and associated applicable water quality objectives to be included in the Analytical Methods Report.
3. **Annual Operations Report.** The Discharger shall submit in accordance with the reporting requirements in Table D-9, Technical Reports, a written report containing the following:
  - a. The names, certificate grades, and general responsibilities of all persons employed at the Facility.
  - b. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.

- c. A statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration.
  - d. A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.
  - e. The Discharger may also be requested to submit an annual report to the Central Valley Water Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.
4. **Annual Pretreatment Reporting Requirements. – Not Applicable.**
5. **Recycled Water Policy Annual Reports.** In accordance with Section 3 of the Water Quality Control Policy for Recycled Water (Recycled Water Policy) and as specified in this NOA, the Discharger shall electronically submit an annual report of monthly data to the State Water Board by 30 April annually covering the previous calendar year using the State Water Board’s [GeoTracker website](https://geotracker.waterboards.ca.gov/) (<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) ([https://www.waterboards.ca.gov/ust/electronic\\_submittal/index.html](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](https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_oal.pdf)). A PDF of the upload confirmation from GeoTracker for the Recycled Water Policy Annual Report shall be uploaded into CIWQS to demonstrate compliance with this reporting requirement.
6. **Technical Report Submittals.** The Municipal General Order, as specified in this NOA, includes requirements to submit various reports and documents that may include, a Notice of Intent, special study technical reports, progress reports, and other reports identified in the MRP (hereafter referred to collectively as “technical reports”). The Technical Reports Table D-9 below summarizes the technical reports that are applicable to this discharge and required by this NOA, and the due dates for each submittal. All technical reports shall be submitted electronically via CIWQS submittal. Technical reports should be uploaded as a PDF, Microsoft Word, or Microsoft Excel file attachment.



**Table D-9. Technical Reports**

<b>Report #</b>	<b>Technical Report</b>	<b>Due Date</b>	<b>CIWQS Report Name</b>
1	Notice of Intent	28 February 2025	NOI
2	Analytical Methods Report	1 May 2021	MRP X.D.2
3	Analytical Methods Report Certification	1 May 2022	MRP IX.E.4
4	Annual Operations Report #1	1 February 2021	MRP X.D.3
5	Annual Operations Report #2	1 February 2022	MRP X.D.3
6	Annual Operations Report #3	1 February 2023	MRP X.D.3
7	Annual Operations Report #4	1 February 2024	MRP X.D.3
8	Annual Operations Report #5	1 February 2025	MRP X.D.3
9	Recycled Water Policy Annual Report Submittal Confirmation	30 April 2021	MRP X.D.5
10	Recycled Water Policy Annual Report Submittal Confirmation	30 April 2022	MRP X.D.5
11	Recycled Water Policy Annual Report Submittal Confirmation	30 April 2023	MRP X.D.5
12	Recycled Water Policy Annual Report Submittal Confirmation	30 April 2024	MRP X.D.5
13	Recycled Water Policy Annual Report Submittal Confirmation	30 April 2025	MRP X.D.5

**APPENDIX E – DETERMINATION OF WATER QUALITY-BASED EFFLUENT LIMITATIONS (WQBEL’S)**

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

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

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

**Table E-1. Human Health WQBEL’s Calculations**

Parameter	Units	Criteria	CV	Effluent Limit Table in Municipal General Order	AMEL	AWEL
Nitrate Plus Nitrite (as N)	mg/L	10	0.9	19B	10	20

**Table E-2. Aquatic Life WQBEL’s Calculations**

Parameter	Units	CMC	CCC	CV	Effluent Limit Table in Municipal General Order	AMEL	AWEL
Ammonia, Total (as N)	mg/L	5.62	2.22	1.8	18A	1.9	4.1