CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2023-0809 FOR The CITY OF COLFAX WASTEWATER TREATMENT PLANT PLACER COUNTY

This Monitoring and Reporting Program (MRP), which is separately issued pursuant to Water Code section 13267, subdivision (b)(1), establishes monitoring and reporting requirements related to the waste discharges regulated under the General Order for Municipal Wastewater Dischargers That Meet Objectives/Criteria at the Point of Discharge to Surface Water, Order R5-2023-0025, NPDES Permit CAG585001, (Municipal General Order) and Notice of Applicability (NOA) R5-2023-0025-001 dated 17 October 2023 and effective 1 November 2023. The Findings set forth in the Municipal General Order, including those pertaining to the need for submission of reports, are hereby incorporated as part of this MRP.

The City of Colfax (Discharger) owns and operates the Wastewater Treatment Plant (Facility), subject to the Municipal General Order and NOA. The reporting required in this MRP is necessary to maintain the integrity of Pond 1, 2, and 3 liners and assess compliance with groundwater limitations within the Municipal General Order and NOA through inspection, monitoring, documentation, and reporting, along with the proper destruction of monitoring well RGW-003 since it is no longer necessary for groundwater monitoring. The burdens of these monitoring and reporting requirements bear a reasonable relationship to the need for the monitoring and reports and benefits to be obtained therefrom.

The Discharger shall not implement any changes to this MRP unless and until the Central Valley Regional Water Quality Control Board (Central Valley Water Board) adopts, or the Executive Officer issues, a revised MRP.

This Order is issued under authority delegated to the Executive Officer by the Central Valley Water Board pursuant to Resolution R5-2018-0057 and Water Code section 13223.

I. GENERAL MONITORING PROVISIONS

- A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitoring location. 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. 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; formerly the Department of Public Health), 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. In the event an accredited laboratory is not available to the Discharger for any onsite field measurements such as electrical conductivity, pH, and dissolved oxygen, such analyses performed by a non-accredited laboratory will be accepted provided a Quality Assurance-Quality Control Program is instituted by the laboratory. A manual containing the steps followed in this program for any onsite field measurements such as electrical conductivity, pH, and dissolved oxygen 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.

- **C**. 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.
- **D**. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this Monitoring and Reporting Program.
- E. 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 a pollutant/parameter where:
 - 1. The method minimum level (ML) is at or below the applicable water quality objective for the receiving water, or;
 - 2. 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;
 - 3. 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.
- **F**. The Discharger shall file with the Central Valley Water Board technical reports on selfmonitoring performed according to the detailed specifications contained in this Monitoring and Reporting Program.

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the groundwater limitations in the NOA and Municipal General Order.

Monitoring Location Name	Monitoring Location Description		
LNR-001	Upgradient groundwater monitoring location, representative of groundwater quality upstream of Ponds 1, 2, and 3.		
LNR-002	Dam seepage, natural seepage from the base of the dam beneath Pond 3, representative of groundwater quality downgradient of Ponds 1, 2 and 3.		
PND-001	Treatment Pond 1		
PND-002	Treatment Pond 2		
PND-003	Storage Reservoir (Pond 3)		
PZR-001	PVC standpipe for piezometer #1 in Dam embankment		
PZR-002	PVC standpipe for piezometer #2 in Dam embankment		

Table 1. Monitoring Station Locations

III. MONITORING REQUIREMENTS

A. Groundwater Monitoring (LNR-001, LNR-002, PZR-001, and PZR-002)

- Section IV.C.1 of this Order requires the Discharger to submit an Upgradient Groundwater Monitoring Location (LNR-001) Memorandum by 31 December 2023 requiring a description of the sample location for LNR-001 to be used as a background water quality monitoring location to determine if Ponds 1, 2 or 3 liners are impacting groundwater. Therefore, <u>sampling at LNR-001 shall commence, per Table 2 and Table 2 Notes, on 1 January 2024</u> until this Order is terminated.
- 2. **LNR-001 and LNR-002.** Groundwater monitoring upgradient and downgradient of the liners for Ponds 1, 2 and 3 at LNR-001 and LNR-002 shall include, at a minimum, the requirements in Table 2 and Table 2 Notes below:

Parameter	Units	Sample Type	Minimum Sample Frequency
Depth to Groundwater	±0.01 feet	Grab	1/Quarter
Groundwater Elevation	±0.01 feet	Calculated	1/Quarter
Electrical Conductivity	µmhos/cm	Grab	1/Quarter
рН	Standard Units	Grab	1/Quarter
Fecal Coliform Organisms	MPN/100 mL	Grab	1/Quarter
Dissolved Oxygen	mg/L	Grab	1/Quarter
Ammonia, Total (as N)	mg/L	Grab	1/Quarter
Nitrate, Total Nitrogen	mg/L	Grab	1/Quarter
Total Nitrogen (as N)	mg/L	Grab	1/Quarter
Total Organic Carbon	mg/L	Grab	1/Quarter
Iron, Dissolved	µg/L	Grab	1/Quarter
Manganese, Dissolved	µg/L	Grab	1/Quarter
Arsenic, Dissolved	μg/L	Grab	1/Quarter
Hardness, Total (as CaCO3)	mg/L	Grab	1/Quarter
Standard Minerals	mg/L	Grab	1/Quarter

Table 2. Groundwater Monitoring Requirements for LNR-001 and LNR-002

Table 2 Notes:

- 1. **Applicable to all parameters.** Parameters shall be analyzed using the analytical methods described in 40 CFR 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 CFR part 136 allowed sample type.
- 2. Handheld Field Meter. A handheld field meter may be used for electrical conductivity, dissolved oxygen, and pH, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

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- 3. **Standard Minerals**. Standard Minerals shall include boron, calcium, magnesium, potassium, sodium, chloride, phosphorus, and total alkalinity (including alkalinity series: bicarbonate, carbonate and hydroxide). Verification that the analysis is complete (i.e., cation/anion balance) shall be included.
- 4. **Depth to Groundwater and Groundwater Elevation**. Monitoring for the depth to groundwater and groundwater elevation is only applicable to Monitoring Location **LNR-001**.
- 3. **PZR-001 and PZR-002.** Groundwater monitoring in the two piezometers adjacent to Pond 3 at PZR-001 and PZR-002 shall include, at a minimum, the requirements in Table 3 below:

Table 3. Groundwater Monitoring Requirements for PZR-001 and PZR-002

Parameter	Units	Sample Type	Minimum Sample Frequency
Depth to Groundwater	±0.01 feet	Grab	1/Quarter
Groundwater Elevation	±0.01 feet	Calculated	1/Quarter

B. Pond Monitoring (PND-001, PND-002, and PND-003)

 In addition to the Pond monitoring at PND-001, PND-002, and PND-003 in Municipal General Order NOA, R5-2023-0025-001, the Discharger shall monitor at PND-001 PND-002, and PND-003 as follows in Table 4 and the Table 4 Notes, below, when wastewater is retained in a respective pond for at least 7 consecutive days for each individual calendar quarter (1 January through 31 March, 1 April through 30 June, 1 July through 30 September, and/or 1 October through 31 December):

 Table 4. Pond Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sample Frequency
Electrical Conductivity	µmhos/cm	Grab	1/Quarter
рН	Standard Units	Grab	1/Quarter
Fecal Coliform Organisms	MPN/100 mL	Grab	1/Quarter
Dissolved Oxygen	mg/L	Grab	1/Quarter
Ammonia, Total (as N)	mg/L	Grab	1/Quarter
Nitrate, Total Nitrogen	mg/L	Grab	1/Quarter
Total Nitrogen (as N)	mg/L	Grab	1/Quarter
Total Organic Carbon	mg/L	Grab	1/Quarter
Iron, Dissolved	μg/L	Grab	1/Quarter
Manganese, Dissolved	μg/L	Grab	1/Quarter
Arsenic, Dissolved	µg/L	Grab	1/Quarter
Hardness, Total (as CaCO ₃)	mg/L	Grab	1/Quarter
Standard Minerals	mg/L	Grab	1/Quarter

Table 3 Notes:

- Applicable to all parameters. Parameters shall be analyzed using the analytical methods described in 40 CFR 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 CFR part 136 allowed sample type.
- 2. Handheld Field Meter. A handheld field meter may be used for electrical conductivity, dissolved oxygen, and pH, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.
- 3. **Standard Minerals**. Standard Minerals shall include boron, calcium, magnesium, potassium, sodium, chloride, phosphorus, and total alkalinity (including alkalinity series: bicarbonate, carbonate and hydroxide). Verification that the analysis is complete (i.e., cation/anion balance) shall be included.

IV. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

- 1. The Discharger shall comply with all Standard Provisions (Attachment D, Municipal General Order) related to monitoring, reporting, and recordkeeping.
- 2. 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).
- 3. The Reporting Requirements from the NOA, Appendix D, are applicable to this MRP.

B. Self-Monitoring Reports (SMRs)

- The Discharger shall electronically submit SMRs using the State Water Board's <u>California Integrated Water Quality System (CIWQS) Program website</u> (http://www.waterboards.ca.gov/water_issues/programs/ciwqs/). The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
- 2. The Discharger shall report in the SMR the results for all monitoring specified in this Order from Tables 2, 3 and 4. The Discharger shall submit quarterly SMRs including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR. Quarterly SMRs are required even if there is no water in a respective pond or groundwater monitoring location. If a pond or groundwater monitoring report must be submitted stating that the pond or groundwater monitoring report must be submitted stating that the pond or groundwater monitoring location did not contain water to conduct a sample.
- 3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
1/Quarter	Order effective date	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
1/Year	Order effective date	1 January through 31 December	1 February of following year

 Table 5. Monitoring Periods and Reporting Schedule

- 4. **Reporting Protocols.** The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current laboratory's Method Detection Limit (MDL), as determined by the procedure in 40 C.F.R. part 136. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
 - a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
 - b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
 - c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
 - d. Dischargers are to instruct laboratories to establish calibration standards so that the Minimum Level (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. The Discharger shall submit SMRs in accordance with the following requirements:
 - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is 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

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time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

c. The Discharger shall attach all final laboratory reports from all contracted commercial laboratories, including quality assurance/quality control information, with all its SMRs for which sample analyses were performed.

C. Other Reports

- Upgradient Groundwater Monitoring Location (LNR-001) Report. The Discharger shall submit, by 31 December 2023, a description of the sample location for LNR-001 to be used as a background water quality monitoring location to determine if Ponds 1, 2 or 3 liners are impacting groundwater. The report shall include, at minimum:
 - a. A Location and Site Map that shows the monitoring location
 - b. Monitoring location coordinates,
 - b. Type of monitoring location (seep, well, sump, or other type),
 - c. Depth to groundwater (if the sample location is below surface),
 - d. Discussion of why the sample location is representative of groundwater quality upstream of Ponds 1, 2, and 3, and
 - e. Any other pertinent information about the sampling location.
- 2. Pond 1, Pond 2, and Pond 3 Liner Leak Detection Assessment. The Discharger shall submit, by 1 February of each year until this Order is terminated, a leak detection assessment. The assessment shall include, at minimum:
 - a. A description of the monthly usage of each pond in the previous calendar year including duration water (days) was retained in each pond, the volume (gallons) retained in each pond, and the description of the water in each pond.
 - b. A performance test at each pond (e.g., seepage/leak test, water balance, liner leak detection testing, or geologic evaluation) evaluating that each pond is operating with minimal leaking and if the pond meets the hydraulic conductivity standard of 1 x 10⁻⁶ cm/s or less,
 - c. A description of the performance test methodology and/or instrumentation used,
 - d. Pond liner characteristics and conditions (including, but not limited to, liner thickness, hydraulic conductivity in terms of centimeter per second, and leakage rate in terms of gallons per acre per day, and any other technical information that pertains to the ability of the liner to compromise the infiltration of wastewater into soil and underlying groundwater),
 - e. Visual observations,
 - f. If liner modifications or repairs are needed to continue pond operations:
 - i. A summary of all future improvement projects,
 - ii. A summary of maintenance performed,
 - iii. Any required repairs including a schedule to complete the repair or a date the repairs were completed as well as current Operations and Maintenance projects (including but not limited to liner repairs) of the liners for Pond 1, Pond 2, and Pond 3 liners,
 - g. Test results and conclusions, and

- h. The results of the Annual Instrumentation Survey, as submitted to the California Division of Safety of Dams (a subdivision of the California Department of Water Resources), for the previous calendar year.
- **3. RGW-003 Destruction Report.** The Discharger shall submit a report documenting the destruction of Well RGW-003. The RGW-003 Destruction Report shall contain the completed Placer County well destruction documentation.

A transmittal/cover letter shall be submitted with each report and shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$1,000 per day pursuant to the Water Code section 13268. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

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

(http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided on request.

Patrick Pulupa Executive Officer