

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

320 West 4th Street, Suite 200, Los Angeles, California 90013
(213) 576-6600 • Fax (213) 576-6640
<http://www.waterboards.ca.gov/losangeles/>

**MONITORING AND REPORTING PROGRAM NO. CI-5714
FOR
PIRU WASTEWATER TREATMENT PLANT
(FILE NO. 08-164)
ISSUED TO
VENTURA COUNTY WATERWORKS DISTRICT NO. 16**

This Monitoring and Reporting Program (MRP) No. CI-5714 is issued pursuant to California Water Code section 13267, which authorizes the Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) to require Ventura County Waterworks District No. 16 (Discharger), who discharges tertiary-treated wastewater generated from the Piru Wastewater Treatment Plant (Piru WWTP) to groundwater via two percolation ponds, to furnish technical or monitoring reports.

The reports required herein are necessary to assess treatment plant performance and identify operational problems for determining Discharger's compliance with Waste Discharge Requirements (WDRs) Order No. R4-2023-xxxx to ensure protection of the waters of the state and their beneficial uses. The evidence that supports the need for the reports is set forth in the WDRs and the Regional Water Board records.

I. SUBMITTAL OF REPORTS

- A. The Discharger shall submit the following reports to the State Water Resources Control Board's (State Water Board) GeoTracker database under Global ID WDR100000084 by the following due dates.
1. **Quarterly Self-Monitoring Reports (SMRs)** shall be received by the Regional Water Board by the 30th day of the month following the end of each quarterly monitoring period, according to Table 1. The Regional Water Board must receive the first Quarterly Monitoring Report under this program by **July 30, 2023**.

Table 1. Quarterly Monitoring Reporting Period and Due Date

Reporting Period	Reporting Due Date
January – March	April 30
April – June	July 30
July – September	October 30
October - December	January 30

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2. **Annual Summary Report** shall be received by the Regional Water Board by March 1 of each year. The first Annual Summary Report under this program must be received by the Regional Water Board no later than **March 1, 2024**.
- B. If there is no discharge during any reporting period, the report shall still be submitted and so state.
- C. The Discharger shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all reports required under the MRP, including electronic data format (EDF) groundwater monitoring data, discharge location data, and monitoring reports in Portable Document Format (pdf) to the State Water Board GeoTracker database under Global ID WDR100000084.

II. MONITORING REQUIREMENTS

- A. Monitoring shall be performed to determine compliance with the requirements of this Order and shall include, but is not limited to, implementation and documentation of the following.
 1. Locations of each groundwater well where representative samples can be obtained and the rationale for the selection. The Discharger must include a map, at a scale of 1 inch equals 1,200 feet or less, that clearly identifies the locations of the Piru WWTP and all groundwater monitoring wells.
 2. Sampling protocols (specified in 40 Code of Federal Regulations [CFR] Part 136 or American Water Works Association standards where appropriate) and chain of custody procedures.
 3. For groundwater monitoring, outline the methods and procedures to be used for measuring water levels; purging wells; collecting samples; decontaminating equipment; containing, preserving, and shipping samples; and maintaining appropriate documentation. Also include the procedures for handling, storing, testing, and disposing of purge and decontamination waters generated from the sampling events.
 4. Laboratory or laboratories which conducted the analyses. Include copy or copies of laboratory certifications by the Environmental Laboratory Accreditation Program (ELAP) of the State Water Board Division of Drinking Water (DDW) every year or when the Discharger changes their contract laboratory.
 5. Analytical test methods used and the corresponding Detection Limits for Purposes of Reporting (DLR) for unregulated and regulated chemicals. Please see the DDW's website at [Drinking Water Programs \(https://www.waterboards.ca.gov/drinking_water/programs/index.html\)](https://www.waterboards.ca.gov/drinking_water/programs/index.html).

6. Quality assurance and control measures.
 - B. The samples shall be analyzed using analytical methods described in 40 CFR Part 136. Where no methods are specified for a given pollutant by commercially available methods approved by the Regional Water Board and/or State Water Board, the Discharger shall select the analytical methods that provide DLRs lower than the limits prescribed in this Order.
 - C. The Discharger shall instruct its laboratories to establish calibration standards so that the DLRs (or its equivalent if there is a different treatment of samples relative to calibration standards) are the lowest. At no time shall the Discharger use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
 - D. Upon request by the Discharger, the Regional Water Board, in consultation with the State Water Board Quality Assurance Program, may establish DLRs in any of the following situations.
 1. When the pollutant has no established method under 40 CFR Part 136 (revised May 14, 1999, or subsequent revision);
 2. When the method under 40 CFR Part 136 for the pollutant has a DLR higher than the limit specified in this Order; or
 3. When the Discharger agrees to use a test method that is more sensitive than those specified in 40 CFR Part 136 and is commercially available.
 - E. Samples of influent and disinfected effluent must be analyzed within allowable holding time limits as specified in 40 CFR section 136.3. All quality assurance/quality control (QA/QC) analyses must be run on the same dates when samples were actually analyzed. The Discharger shall make available for inspection and/or submit the QA/QC documentation upon request by the Regional Water Board. Proper chain of custody procedures must be followed, and a copy of that documentation shall be submitted with the quarterly monitoring report.
 - F. Constituents of emerging concern (CECs): In recent years, the Regional Water Board has required monitoring of a select group of anthropogenic chemicals, particularly pesticides, pharmaceuticals and personal care products, known collectively as CECs, into monitoring and program requirements to better understand the propensity, persistence and effects of CECs in our environment. Recently adopted permits in this region contain requirements for CEC effluent monitoring, including identification of the CECs to be monitored in the effluent, sample type, sampling frequency, and sampling methodology.

1. The Discharger shall monitor a selective list of CECs identified in Attachment C in the Piru WWTP's effluent and in the groundwater. The reporting limits in Attachment C shall be used for these constituents.
 2. The Discharger shall select methods according to the following approach:
 - a. Use the United States Environmental Protection Agency (USEPA) drinking water methods, if available;
 - b. Use DDW-recommended methods for CECs, if available;
 - c. If there is no DDW-recommended drinking water method for a chemical, and more than a single USEPA-approved method is available, use the most sensitive USEPA-approved method;
 - d. If there is no USEPA-approved method for a chemical, and more than one method is available from the scientific literature and commercial laboratory, after consultation with DDW, use the most sensitive method; or
 - e. If no approved method is available for a specific chemical, the Discharger's laboratory may develop or use its own methods and should provide the analytical methods to DDW or the Regional Water Board for review and approval. Those methods may be used until DDW-recommended or USEPA-approved methods are available.
 - f. In the event that subsections II.F.2.a. or II.F.2.e. are applicable, the Discharger shall inform the Regional Water Board.
 3. CECs identified in Attachment C shall be monitored once every five years. The Regional Water Board Executive Officer may add or delete chemicals from Attachment C as new analytical methods become available and may also make revisions to approved analytical methods as needed. A revised CECs list will be made available to the Discharger when changes occur. The Discharger shall request (and submit a justification for) any deviation from the attached list for Executive Officer approval, if a change is required before collecting samples.
 4. Monitoring results shall be reported as part of the annual report. Analysis under this section is for monitoring purposes only as there are currently no standards for these constituents.
- G. The groundwater monitoring results shall be included in the quarterly monitoring reports and annual summary reports.
- H. All groundwater monitoring reports shall include, at minimum, the following.

1. Groundwater monitoring well identification number, date, and time of sampling;
2. Sampler identification, laboratory identification, and chain of custody;
3. Depth to groundwater measured to the nearest 0.01 foot and groundwater elevation to the nearest 0.01 foot mean sea level (MSL);
4. Calculation of vertical separation of the water table from the bottom of the disposal system; and
5. Groundwater contour map depicting the hydraulic gradient and direction of groundwater flow.

III. REPORTING REQUIREMENTS

The Discharger shall submit all reports to the Regional Water Board by the dates indicated in Section I. All quarterly and annual reports shall clearly list all non-compliance with WDRs, as well as all excursions of effluent limits. All quarterly and annual monitoring reports shall contain a separate section titled "Summary of Non-Compliance", which discusses the compliance records and corrective actions taken or planned that may be needed to bring the discharge into full compliance with WDRs.

A. Quarterly Self-Monitoring Reports

1. The SMRs shall include, at a minimum, the following information:
 - a. The volume of the effluent used for land disposal via percolation;
 - b. The volume of wastewater discharged to the evaporation tanks since the submittal of the last report;
 - c. The date and time of sampling and analyses on the influent, effluent, brine and groundwater;
 - d. All analytical results of samples collected during the monitoring period of the influent, effluent, brine, and groundwater;
 - e. A summary and discussion of any violations that occurred during the reporting period, and all actions taken or planned to correct these violations.
 - f. A description and graphical presentation (e.g., arrow on a map) of the direction of ground water flow under the facility, based on water level elevations taken during the collection of the water quality samples;

- g. Documentation of all QA/QC procedures that were followed during sampling and laboratory analyses;
 - h. Records of any operational problems, plant upset and equipment breakdowns or malfunctions, and any discharge(s) used for land disposal via percolation;
 - i. Discussion of compliance, non-compliance, or violation of waste discharge requirements; and
 - j. All corrective and/or preventive action(s) taken or planned with a schedule of implementation, if any violation occurs.
2. For the purpose of reporting compliance with numerical limitations, analytical data shall be reported using the following reporting protocols.
- a. Sample results greater than or equal to the DLR must be reported “as measured” by the laboratory (i.e., the measured chemical concentration in the sample);
 - b. Sample results less than the DLR, but greater than or equal to the laboratory’s method detection limit (MDL), must be reported as “Detected, but Not Quantified,” or DNQ. The laboratory must write the estimated chemical concentration of the sample next to DNQ as well as the words “Estimated Concentration” (may be shortened to Est. Conc.); or
 - c. Sample results less than the laboratory’s MDL must be reported as “None-Detected,” or ND.
3. If the Discharger samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any sample more frequently than required in this MRP using approved analytical methods, the results of those analyses shall be included in the report. These results shall be included in the calculation of the average used in demonstrating compliance with average effluent limits, receiving groundwater limits, etc.
4. The Regional Water Board may request supporting documentation, such as daily logs of operations.

B. Annual Summary Reports

The Annual Summary Report shall include, at a minimum, the following information.

1. Tabular and graphical summaries of the monitoring data obtained during the previous calendar year.
2. Discussion of the compliance record and corrective and/or preventive action(s) taken or planned that may be needed to bring the treated effluent into full compliance with the requirements in this Order.
3. In-depth discussion of the results of the final effluent monitoring and groundwater monitoring conducted during the previous year includes:
 - a. Any change of receiving groundwater resulting from effluent discharges at percolation ponds; and
 - b. Any change of groundwater flow pattern resulting from discharge via percolation ponds.

Temporal and spatial trends in the data shall be analyzed, with particular reference to comparisons between stations with respect to distances from the monitoring wells and comparisons to data collected during previous years.

4. The total volume of wastewater discharged to the evaporation tanks;
5. The total volume of concentrated brine or salt disposed offsite, the offsite disposal facility, location and facility contact information.
6. Description of any changes and anticipated changes, including any impacts on the operation of any unit processes or facilities.
7. List of the analytical methods employed for each test and associated laboratory QA/QC procedures. The report shall restate the laboratories used by the Discharger to monitor compliance with the accompanying Order, their status of certification, and provide a summary of analyses.
8. Confirmation of the operator's certification and a list of current operating personnel, their responsibilities, and their corresponding grade of certification.
9. Operation and maintenance report. The information to be contained in the report shall include, at a minimum, the following:
 - a. The name and address of the person or company responsible for the operation and maintenance of the facility;
 - b. Type of maintenance (preventive or corrective action performed);
 - c. Frequency of maintenance, if preventive; and

- d. Maintenance record of percolation ponds and waste sludge drying beds, including the results of at least monthly observations in the areas for any overflow.
10. Summary of any change of the Operation, Maintenance, and Monitoring Plan (OMM Plan) due to the optimization of the existing Piru WWTP operation.
11. Annual water quality report, also referred to as a Consumer Confidence Report (CCR) issued by a drinking water purveyor, for drinking water to the town of Piru.

IV. WATER QUALITY MONITORING REQUIREMENTS

A. Influent Monitoring

1. Samples for influent biochemical oxygen demand (BOD) and total suspended solids analysis shall be obtained on the same day that the effluent BOD and total suspended solids samples are obtained in order to demonstrate percent removal. Similarly, sampling for other constituents in the influent shall also be coordinated with effluent sampling.
2. The Discharger shall monitor influent to the Piru WWTP at the influent pump station located in the mainstream of the influent channel prior to the headworks as specified in Table 2 below.

Table 2. Influent Monitoring

Constituent	Unit ^[1]	Type of Sample	Minimum Frequency of Analysis
Total waste flow	gpd	Recorder	Continuous ^[2]
BOD _{5@20°C}	mg/L	Grab	Quarterly
Total suspended solids	mg/L	Grab	Quarterly
Total dissolved solids	mg/L	Grab	Quarterly
Sulfate	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly
Boron	mg/L	Grab	Quarterly

Table notes:

[1] gpd: gallons per day; mg/L: milligrams per liter.

[2] The Discharger shall report the daily minimum, maximum, and average values.

B. Effluent Monitoring

1. The Discharger shall monitor its discharge of tertiary-treated effluent downstream of all treated effluent passing through the effluent sampling station, including the final disinfection process.
2. The following shall constitute the effluent monitoring program, specified in Table 3 below.

Table 3. Effluent Monitoring

Constituent	Unit ^[1]	Type of Sample	Minimum Frequency of Analysis
Total flow	gpd	Recorder	Continuous ^[2]
Turbidity	NTU	Recorder	Continuous
pH	pH units	Grab	Monthly
Total suspended solids	mg/L	Grab	Monthly
BOD _{5@20°C}	mg/L	Grab	Monthly
Oil and grease	mg/L	Grab	Monthly
Total nitrogen ^[3]	mg/L	Calculated	Monthly
Ammonia as nitrogen	mg/L	Grab	Monthly
Nitrite as nitrogen	mg/L	Grab	Monthly
Nitrate as nitrogen	mg/L	Grab	Monthly
Organic nitrogen	mg/L	Grab	Monthly
Total dissolved solids	mg/L	Grab	Monthly
Sulfate	mg/L	Grab	Monthly
Chloride	mg/L	Grab	Monthly
Boron	mg/L	Grab	Monthly
Total coliform	MPN/100mL	Grab	Monthly
Fecal coliform	MPN/100mL	Grab	Monthly
Enterococcus	MPN/100mL	Grab	Monthly
Bromate	mg/L	Grab	Monthly
Methylene blue active substances (MBAS)	mg/L	Grab	Quarterly
Total phosphorus	mg/L	Grab	Quarterly

Constituent	Unit ^[1]	Type of Sample	Minimum Frequency of Analysis
Constituents listed in Attachment A-1 to A-4	various	Grab	Annually
CECs in Attachment C	various	Grab	Every 5 years
Remaining priority pollutants in Attachment D	µg/L	Grab	Annually

Table notes:

[1] NTU: Nephelometric Turbidity Unit; MPN/100mL: most probable number per 100 milliliter; µg/L: micrograms per liter

[2] The Discharger shall report the daily minimum, maximum, and average values.

[3] Total nitrogen is the sum of ammonia as nitrogen, nitrite as nitrogen, nitrate as nitrogen, and organic nitrogen.

C. Groundwater Monitoring

1. The Discharger shall continue to conduct groundwater monitoring from all existing wells, including MW-1, MW-2, MW-3, and MW-4.
2. The required groundwater monitoring of constituents/parameters with sample type and frequencies is specified in Table 4.

Table 4. Groundwater Monitoring

Constituents	Units	Type of Sample	Minimum Frequency of Analysis
Water level elevation	feet	Recorder	Quarterly
pH	pH units	Grab	Quarterly
Total nitrogen	mg/L	Calculated	Quarterly
Ammonia as nitrogen	mg/L	Grab	Quarterly
Nitrite as nitrogen	mg/L	Grab	Quarterly
Nitrate as nitrogen	mg/L	Grab	Quarterly
Organic nitrogen	mg/L	Grab	Quarterly
Total dissolved solids	mg/L	Grab	Quarterly
Sulfate	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly
Boron	mg/L	Grab	Quarterly

Constituents	Units	Type of Sample	Minimum Frequency of Analysis
Total coliform	MPN/100mL	Grab	Quarterly
Fecal coliform	MPN/100mL	Grab	Quarterly
Enterococcus	MPN/100mL	Grab	Quarterly
Constituents listed in Attachments A-1 to A-4	various	Grab	Annually
Remaining priority pollutants in Attachment D	µg/L	Grab	Annually

V. EVAPORATION TANK MONITORING REQUIREMENTS

A. Evaporation Tank

1. On a weekly basis, the Discharger shall conduct observation of the evaporation tanks, including water levels and freeboard, integrity of the exterior structure and liner of the tanks for cracking and leakage and record the findings in a permanent log. Any unusual appearance of the tank's exterior structure such as a leak or crack, and any indication of liner leakage, shall be reported immediately to the Supervisor of the Groundwater Permitting Unit at (213) 576-6600. A written report must be submitted within 5 days, and must include the following:
 - a. Description of discharge;
 - b. Possible cause of discharge;
 - c. Period of discharge, including date and time; and
 - d. Steps taken to identify and resolve the problem.
2. When an evaporation tank is cleaned, residual sludge removed from the bottom of the evaporation tank shall be analyzed for the constituents specified in Table 5 below.

Table 5. Residual Sludge Monitoring

Constituents	Units	Type of Sample	Frequency of Analysis
Antimony	mg/L	Grab	When evaporation tank is cleaned
Arsenic	mg/L	Grab	When evaporation tank is cleaned
Beryllium	mg/L	Grab	When evaporation tank is cleaned
Cadmium	mg/L	Grab	When evaporation tank is cleaned

Constituents	Units	Type of Sample	Frequency of Analysis
Chromium	mg/L	Grab	When evaporation tank is cleaned
Copper	mg/L	Grab	When evaporation tank is cleaned
Lead	mg/L	Grab	When evaporation tank is cleaned
Mercury	mg/L	Grab	When evaporation tank is cleaned
Nickel	mg/L	Grab	When evaporation tank is cleaned
Selenium	mg/L	Grab	When evaporation tank is cleaned
Silver	mg/L	Grab	When evaporation tank is cleaned
Thallium	mg/L	Grab	When evaporation tank is cleaned
Zinc	mg/L	Grab	When evaporation tank is cleaned

B. Brine Monitoring

1. The Discharger shall sample brine in the evaporation tank for analysis of the constituents specified in Table 6 below.

Table 6. Brine Monitoring

Constituents	Units	Type of Sample	Minimum Frequency of Analysis
Total dissolved solids	mg/L	Grab	Semiannually
Sulfate	mg/L	Grab	Semiannually
Total nitrogen	mg/L	Calculated	Semiannually
Ammonia as nitrogen	mg/L	Grab	Semiannually
Nitrite as nitrogen	mg/L	Grab	Semiannually
Nitrate as nitrogen	mg/L	Grab	Semiannually
Chloride	mg/L	Grab	Semiannually
Boron	mg/L	Grab	Semiannually
Sodium	mg/L	Grab	Semiannually
Potassium	mg/L	Grab	Semiannually
Calcium	mg/L	Grab	Semiannually
Magnesium	mg/L	Grab	Semiannually
Silicon	mg/L	Grab	Semiannually

Constituents	Units	Type of Sample	Minimum Frequency of Analysis
Strontium	mg/L	Grab	Semiannually
Antimony	mg/L	Grab	Semiannually
Arsenic	mg/L	Grab	Semiannually
Beryllium	mg/L	Grab	Semiannually
Cadmium	mg/L	Grab	Semiannually
Chromium	mg/L	Grab	Semiannually
Copper	mg/L	Grab	Semiannually
Lead	mg/L	Grab	Semiannually
Mercury	mg/L	Grab	Semiannually
Nickel	mg/L	Grab	Semiannually
Selenium	mg/L	Grab	Semiannually
Silver	mg/L	Grab	Semiannually
Thallium	mg/L	Grab	Semiannually
Zinc	mg/L	Grab	Semiannually

VI. GENERAL MONITORING AND REPORTING REQUIREMENTS

- A. The Discharger shall comply with all Standard Provisions (Attachment B) related to monitoring, reporting, and recordkeeping.
- B. Monitoring reports shall be signed by either the principal Executive Officer or ranking elected official.
- C. Each monitoring report shall contain the following completed declaration:

"I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment."

Executed on the ____ day of ____ at ____

_____ Signature

_____ Title

- E. The Discharger shall retain records of all monitoring information, including all calibration and maintenance, monitoring instrumentation, and copies of all reports required by this Order, for a period of at least three (3) years from the date of sampling measurement, or report. This period may be extended by request of the Regional Water Board at any time and shall be extended during the course of any unresolved administrative proceeding or judicial litigation regarding the regulated activity.

VII. WASTE HAULING REPORTING

In the event that waste sludge, septage, brine slurry or other wastes are hauled off offsite, the name and address of the hauler shall be reported, along with types and quantities hauled during the reporting period and the location of final point of disposal. In the event that no wastes are hauled off during the reporting period, a statement to that effect shall be submitted in the quarterly monitoring report.

VIII. MONITORING FREQUENCIES

The Regional Water Board Executive Officer is delegated authority to revise this Monitoring and Reporting Program, including monitoring frequencies and parameters. The Discharger may make a request for modifying the monitoring frequency or the list of monitoring parameters with justification. The Discharger shall not make any adjustment until the Executive Officer provides a written approval after determining that the request is adequately justified.

These records and reports are public documents and shall be made available for inspection during normal business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

Ordered by

Date: June 22, 2023

Susana Arredondo
Executive Officer