

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2022-XXXX
FOR
PILOT TRAVEL CENTERS, LLC
PILOT TRAVEL CENTER NO. 168
YOLO COUNTY

This Monitoring and Reporting Program (MRP) for Pilot Travel Centers, LLC (Discharger) is issued pursuant to Water Code section 13267. The Discharger owns and operates the Pilot Travel Center No. 168 Wastewater Treatment Facility. This MRP establishes monitoring and reporting requirements related to the waste discharges regulated under Waste Discharger Requirements Order R5-2022-XXXX (WDRs Order). Each of the Findings set forth in the WDRs Order, including those pertaining to the need for submission of reports, are hereby incorporated as part of this MRP.

Pilot Travel Centers, LLC owns and operates the Pilot Travel Center No. 168 wastewater treatment facility subject to WDRs Order R5-2022-XXXX. 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.

A glossary of terms used in this MRP is included on the last page.

This MRP may be separately revised by the Executive Officer, in accordance with their delegated authority under Water Code section 13223.

I. GENERAL MONITORING REQUIREMENTS

A. SAMPLING AND SAMPLE ANALYSIS

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. Except as specified otherwise in this MRP, grab samples will be considered representative of supply water, wastewater, soil, solids/sludges, and groundwater. The time, date, and location of each sample shall be recorded on the sample chain of custody form.

Field test instruments (such as those used to measure pH, electrical conductivity, dissolved oxygen, wind speed, and precipitation) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated at the frequency recommended by the manufacturer;
3. The instruments are serviced and/or calibrated at the manufacturer's recommended frequency; and

4. Field calibration reports are submitted as described in the “Reporting” section of the MRP.

All analyses shall be performed in accordance with the Standard Provisions and Reporting Requirements for Waste Discharge Requirements, 1 March 1991 ed. (SPRRs). Laboratory analytical procedures shall comply with the methods and holding times specified in the following (as applicable to the medium to be analyzed):

1. Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater (EPA);
2. Test Methods for Evaluating Solid Waste (EPA);
3. Methods for Chemical Analysis of Water and Wastes (EPA);
4. Methods for Determination of Inorganic Substances in Environmental Samples (EPA);
5. Standard Methods for the Examination of Water and Wastewater (APHA/AWWA/WEF); and
6. Soil, Plant, and Water Reference Methods for the Western Region (WREP 125).

Approved editions shall be those that are approved for use by the U.S. Environmental Protection Agency or the State Water Resources Control Board’s Environmental Laboratory Accreditation Program (ELAP). The Discharger may propose alternative methods for approval by the Executive Officer. Where technically feasible, laboratory reporting limits shall be lower than concentrations that implement applicable water quality objectives/limits for the constituents to be analyzed.

B. FLOW MONITORING

1. Hydraulic flow rates shall be measured at the monitoring points specified in this MRP.
2. The Central Valley Water Board Executive Officer shall approve any proposed changes to flow monitoring locations prior to implementation of the change.
3. All flow monitoring systems shall be appropriate for the conveyance system (i.e., open channel flow or pressure pipeline) and liquid type.
4. Unless otherwise specified, each flow meter shall be equipped with a flow totalizer to allow reporting of cumulative volume as well as instantaneous flow rate.

5. Flow meters shall be calibrated at the frequency recommended by the manufacturer; typically, at least once per year and records of calibration shall be maintained for review upon request.

C. MONITORING AND SAMPLING LOCATIONS

1. Samples shall be obtained at the monitoring points specified in this MRP. The Central Valley Water Board Executive Officer shall approve any proposed changes to sampling locations prior to implementation of the change. The Discharger shall monitor the following locations to demonstrate compliance with the requirements of this Order as shown in **Table 1** below.

Table 1 – Monitoring Location Designations

Monitoring Location Name	Monitoring Location Description
INF-001	Location where wastewater flow from the Travel Center can be measured prior to discharge to the ponds.
INF-002	Location where wastewater flow from the stand-alone restaurant can be measured prior to discharge to the ponds.
INF-003	Location where wastewater flow from the Truck Care Service Building can be measured prior to discharge to the ponds. Flow estimated based on flow metered measurements of water from the supply well into the building is acceptable.
WW-001	Location where a representative combined wastewater sample from the travel center and stand-alone restaurant can be collected prior to discharge to the ponds.
WW-002	Location where a representative wastewater sample from the truck care service building can be collected prior to discharge to the ponds.
POND 1, POND 2, POND 3, POND 4	Treatment and disposal ponds
ATC-1D, ATC-2D, ATC-3D, ATC-4D	Groundwater monitoring wells used to evaluate groundwater quality underlying the treatment and disposal ponds.
SW-001	Source water supply from Water Supply Well (WSW), primary well.
SW-002	Source water supply from Truck Wash Well (TWW).

II. SPECIFIC MONITORING REQUIREMENTS

A. WASTEWATER MONITORING

1. Wastewater shall be monitored and reported for the parameters listed in **Table 2** below.

Table 2 - Wastewater Monitoring

Constituent/ Parameter	Units	Sample Type	Monitoring Frequency	Reporting Frequency
Total daily flow rate	gpd	Meter	Daily (total daily flow)	Quarterly
Monthly average flow rate	gpd	Calculation	Monthly	Quarterly
Annual flow	MG	Calculation	Annual	Annual
pH	pH units	Grab	Weekly	Quarterly
BOD ₅	mg/L	Grab	Monthly	Quarterly
EC	µmhos/cm	Grab	Monthly	Quarterly
TDS	mg/L	Grab	Monthly	Quarterly
Nitrate as N	mg/L	Grab	Monthly	Quarterly
TKN	mg/L	Grab	Monthly	Quarterly

2. Wastewater influent flows shall be measured at a location representative of flows from each waste source (travel center, stand-alone restaurant, and truck care service building) discharged to the ponds.
3. Wastewater samples shall be considered representative of wastewater quality that is discharged to the ponds.
4. Wastewater sampling is only required when wastewater is present in the ponds. If no discharges occur or if any pond is empty, the monitoring report shall so state.

B. POND MONITORING

1. The Discharger shall monitor all ponds used for treatment, storage, or disposal of wastewater for the parameters listed in **Table 3** below.
2. Sampling and monitoring shall be conducted from permanent locations that will provide reasonable samples and observations of the ponds.
3. Precipitation data obtained from the nearest National Weather Service rain gauge is acceptable.

- Freeboard shall be measured vertically from the water surface to the lowest elevation of pond berms (or spillway/overflow pipe invert) and shall be measured to the nearest 0.10 feet. Samples shall be collected at a depth of one foot, opposite the inlet. If any pond is dry, the monitoring report shall so state.

Table 3 - Pond Monitoring

Constituent/ Parameter	Units	Sample Type	Monitoring Frequency	Reporting Frequency
Presence/Absence of Water	--	Observation	Weekly	Quarterly
Local Precipitation	inches	Rain gauge	Daily	Quarterly
Freeboard	0.1 feet	Measurement	Weekly	Quarterly
Odors	--	Observation	Weekly	Quarterly
Berm Condition	--	Observation	Weekly	Quarterly
Dissolved Oxygen	mg/L	Grab	Weekly	Quarterly

C. WATER SUPPLY MONITORING (SW-001, SW-002)

- The Discharger shall monitor the supply water wells WSW and TWS. Monitoring requirements may duplicate existing requirements from their Division of Drinking Water (DDW) Domestic Water Permit. Duplication of sampling and monitoring activities are not required if the monitoring activity satisfies the requirements of this Order.
- At a minimum, the supply water shall be sampled and analyzed for the parameters listed in **Table 4** below. Data shall be reported in the corresponding annual monitoring report. Units are mg/L unless specified otherwise.

Table 4 – Water Supply Monitoring

Constituent	Sample Type	SW-001 and SW-002 Sampling and Reporting Frequency
EC, μ mhos/cm	Grab	Every 3 years
TDS	Grab	Every 3 years
Nitrate as N	Grab	Every 3 years

D. GROUNDWATER MONITORING (ATC-1D THROUGH ATC-4D AND FUTURE MONITORING WELLS ADDED)

- The Discharger shall maintain the groundwater monitoring well network. If a groundwater monitoring well is dry or has insufficient water for sampling for more than four consecutive sampling events or is damaged, the

Discharger shall submit to the Central Valley Water Board a workplan and proposed time schedule for its replacement, and the well shall be replaced following approval of the workplan. Alternatively, the Discharger shall submit a report with supporting evidence that a replacement well is not needed.

2. Prior to construction of any additional groundwater monitoring wells, the Discharger shall submit plans and specifications to the Central Valley Water Board for review and approval. Once installed, all new monitoring wells shall be appropriately incorporated into monitoring conducted under this MRP.
3. The groundwater monitoring program applies to groundwater monitoring wells ATC-1D, ATC-2D, ATC-3D, and ATC-4D and any wells subsequently installed under approval of the Central Valley Water Board.
4. Prior to sampling, depth to groundwater measurements shall be measured in each monitoring well to the nearest 0.01 feet.
5. Groundwater elevations shall then be calculated to determine groundwater gradient and flow direction. Groundwater elevation shall be determined based on depth-to-water measurements using a surveyed measuring point elevation on the well and a surveyed reference elevation.
6. Sampling activities shall be conducted in accordance with an approved Sampling and Analysis Plan. Samples shall be collected and analyzed using standard EPA methods.
7. Groundwater monitoring shall include, at a minimum, the parameters and constituents listed in **Table 5** below. Samples shall be filtered with a 0.45-micron filter for standard minerals, including at a minimum dissolved iron and dissolved manganese.

Table 5 - Groundwater Monitoring

Constituent/ Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Depth to Groundwater	0.01 feet	Measurement	Quarterly	Quarterly
Groundwater Elevation	feet	Calculated	Quarterly	Quarterly
Gradient	feet/feet	Calculated	Quarterly	Quarterly
Gradient Direction	degrees	Calculated	Quarterly	Quarterly
EC	µmhos/cm	Grab	Quarterly	Quarterly
TDS	mg/L	Grab	Quarterly	Quarterly
Nitrate as N	mg/L	Grab	Quarterly	Quarterly

Constituent/ Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
TKN	mg/L	Grab	Quarterly	Quarterly
Iron, dissolved	mg/L	Grab	Quarterly	Quarterly
Manganese, dissolved	mg/L	Grab	Quarterly	Quarterly
Total coliform organisms	MPN/100 mL	Grab	Quarterly	Quarterly

8. If monitoring consistently shows no significant variation in a constituent concentration or parameter after at least eight consecutive groundwater monitoring events, the Discharger may request this MRP be revised to reduce monitoring frequency, constituent analyses, or monitoring parameters. The proposal must include adequate technical justification for a reduction in monitoring frequency. The Discharger shall not implement any changes to this MRP unless and until the Central Valley Water Board adopts, or the Executive Officer issues, a revised MRP.
9. The 7-day median total coliform organism value shall be calculated as the median concentration of the results for the last 7 calendar days. If only one sample is collected within a 7-day period, then that one sample becomes the 7-day median value.
10. If total coliform is detected during a sampling period, the Discharger shall disinfect the well in accordance with their *Groundwater Monitoring Well Disinfection Workplan* during the next sampling period.

E. SLUDGE/SOLIDS MONITORING

1. Sludge and/or biosolids monitoring shall be conducted as required in Title 40 of the Code of Federal Regulations (40 CFR), Part 503.8(b)(4) at the following frequency, depending on volume of sludge generated and removed from the wastewater treatment system for disposal or treated for beneficial reuse as biosolids as shown in **Table 6** below.
2. For the purpose of this MRP, “generated” means produced as a separate waste stream by sludge wasting or pond cleanout. It does not apply to sludge that accumulated in treatment or storage ponds until the sludge is removed for treatment or disposal. If no sludge is removed from the ponds, the monitoring report shall so state.

Table 6 - Sludge/Solids Monitoring

Volume Generated (dry metric tons/year)	Monitoring Frequency	Reporting Frequency
0 to 290	Annually	Annually
290 to 1,500	Quarterly	Annually
1,500 to 15,000	Bimonthly	Annually
Greater than 15,000	Monthly	Annually

3. At a minimum, sludge/biosolids samples shall be analyzed to determine the total concentration in mg/Kg for arsenic, lead, nickel, cadmium, mercury, selenium, copper, molybdenum, zinc, total nitrogen, and total solids.
4. Sludge and/or biosolids monitoring records shall be retained for a minimum of five years in accordance with 40 CFR, Part 503.17. A log shall be kept of sludge quantities generated and of handling, application, and disposal activities (e.g. land application, landfill, etc). The frequency of entries is discretionary; however, the log should be complete enough to serve as a basis to report sludge monitoring.
5. The Discharger shall demonstrate that treated sludge (i.e., biosolids) meets Class A or Class B pathogen reduction levels by one of the methods listed in 40 CFR, Part 503.32, and shall maintain records of the operational parameters used to comply with the Vector Attraction Reduction requirements in 40 CFR, Part 503.33(b), as well as records of offsite disposal (quantity, date, disposal site).

III. REPORTING REQUIREMENTS

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleysacramento@waterboards.ca.gov.

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board
ECM Mailroom
11020 Sun Center Drive, Suite 200
Rancho Cordova, California 95670

To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any correspondence used to transmit documents to this office:

Facility: Pilot Travel Center No. 168 Wastewater Treatment Facility, Yolo County
Program: Non-15 Compliance
Order Number: R5-2022-XXXX
CIWQS Place ID: 248404

A transmittal letter shall accompany each monitoring report. The letter shall include a discussion of all violations of the WDRs and this MRP during the reporting period and actions taken or planned for correcting each violation. If the Discharger has previously submitted a report describing corrective actions taken and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. Pursuant to Section B.3 of the SPRRs, the transmittal letter shall contain a statement by the Discharger or the Discharger's authorized agent certifying under penalty of perjury that the report is true, accurate and complete to the best of the signer's knowledge.

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported to the Central Valley Water Board.

Laboratory analysis reports do not need to be included in the monitoring reports; however, all laboratory reports must be retained for a minimum of three years in accordance with Section C.3 of the SPRRs. For a Discharger conducting any of its own analyses, reports must also be signed and certified by the chief of the laboratory.

In addition to the requirements of Section C.3 of the SPRRs, monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated.

As required by the Business and Professions Code sections 6735, 7835, and 7835.1, all monitoring reports that involve planning, investigation, evaluation or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared under the direct supervision of a Registered Professional Engineer or Professional Geologist and signed by the registered professional.

A. MONITORING REPORT DUE DATES

Quarterly and annual monitoring reports are due as described in **Table 7** below.

Table 7 - Monitoring Report Due Dates

Monitoring Report	Monitoring Period	Report Due Date
First Quarter	1 January to 31 March	1 May
Second Quarter	1 April to 30 June	1 August
Third Quarter	1 July to 30 September	1 November
Fourth Quarter	1 October to 31 December	1 February
Annual	1 January to 31 December	1 February
State Water Board Volumetric Annual Reporting	1 January to 31 December	30 April

B. QUARTERLY MONITORING REPORTS

Daily, weekly, and monthly monitoring data shall be reported in the quarterly monitoring report. At a minimum, the quarterly report shall include:

1. Results of Wastewater Monitoring in tabular format during the reported quarter including the following:
 - a. Calculation of the total combined flow and average daily flow for each month, and total combined annual flow to date.
2. Results of Pond Monitoring in tabular format for each week of the month during the reported quarter including the following;
 - a. Calculation of total monthly precipitation.
3. Results of Groundwater Monitoring including the following:
 - a. A narrative description of all preparatory, monitoring, sampling, handling, and analytical testing for groundwater monitoring.
 - b. A field log for each well documenting depth to groundwater; method of purging, parameters measured before, during, and after purging; sample preparation (e.g., filtering); and sample preservation.
 - c. Data in tabular format during the reported quarter.
 - d. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any.

- e. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal trends, with reference to summary data tables, graphs, and appended analytical reports (as applicable).
 - f. A scaled map showing relevant structures and features of the Facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to an appropriate datum (e.g., NGVD).
4. A comparison of monitoring data to the flow limitations, effluent limitations, and discharge specifications and an explanation of any violation of those requirements.
 5. Copies of the laboratory analytical data reports shall be maintained by the Discharger and submitted to the Central Valley Water Board.
 6. Facility progress reports regarding BPTC evaluation and facilities system improvements in accordance with Provision H.1.b of the WDRs.

C. ANNUAL MONITORING REPORTS

The Annual Report due by **1 February** each year may include the requirements of the Fourth Quarter Monitoring Report and the following:

1. Groundwater Monitoring

- a. Summary data tables of historical and current water table elevations and analytical results, comparison with previous flow direction and gradient data, and discussion of seasonal trends if any.
- b. An evaluation of the groundwater quality beneath the site and determination of compliance with the Groundwater Limitations per WDRs Order R5-2022-XXXX, based on statistical analysis for each constituent monitored for each well. Include all calculations and data input/analysis tables derived from use of statistical software, as applicable.

2. Influent Monitoring

- a. Total annual combined influent flow and determination of compliance with the annual flow limitation of the WDRs.

3. Wastewater Monitoring

- a. Evaluation of the Facility's annual average EC to the Salinity Action Level specified in the WDRs.

4. Supply Water Monitoring.

- a. Analytical data of the supply water. A narrative description of changes in water quality over time, if any, and the potential impact on the wastewater quality.

5. Sludge/Solids Monitoring

- a. Annual sludge/solids monitoring sludge when pond sludge is removed for treatment or disposal. If no sludge is removed from the ponds, the monitoring report shall so state.
- b. Progress report on sludge accumulation in the ponds. Provide a discussion on procedural operations to maintain adequate storage capacity. If estimated volume of sludge in the ponds exceeds the approved percentage of permitted capacity, provide a time schedule to complete sludge cleanout.

6. Additional Reporting

- a. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the WDRs.
- b. Monitoring equipment maintenance and calibration records, as described in Section C.4 of the SPRRs, shall be maintained by the Discharger and provided upon request by the Central Valley Water Board. Calibration records shall verify calibration of all handheld monitoring instruments and devices used to comply with the prescribed monitoring program.
- c. A discussion of the following:
 - i. Waste constituent reduction efforts implemented in accordance with any required workplan.
 - ii. Other treatment or control measures implemented during the calendar year either voluntarily or pursuant to the WDRs, this MRP, or any other Order.
 - iii. Based on monitoring data, an evaluation of the effectiveness of the treatment or control measures implemented to date.
- d. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring network or reporting program.

D. STATE WATER BOARD VOLUMETRIC ANNUAL REPORTING

Per [State Water Resources Control Board's Water Quality Control Policy](https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/) (https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/), amended in December 2018, dischargers of treated wastewater and recycled water are required to report annually monthly volumes of influent, wastewater produced, and effluent, including treatment level and discharge type. Based on current wastewater flows, the Discharger is not required to submit volumetric annual reporting at this time.

A letter transmitting the self-monitoring reports shall accompany each report. The letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or Facility modifications. If the submitting Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the submitting Discharger, or its authorized agent, as described in the Section B.3 of the SPRRs (General Reporting Requirements).

The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

I, PATRICK PULUPA, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of the Monitoring and Reporting Program adopted by the California Regional Water Quality Control Board, Central Valley Region on XX Month 2022.

PATRICK PULUPA, Executive Officer

GLOSSARY

BOD ₅	Five-day biochemical oxygen demand
EC	Electrical conductivity at 25° C
EPA	Environmental Protection Agency
ELAP	State Water Resources Control Board's Environmental Laboratory Accreditation Program
FDS	Fixed dissolved solids
MRP	Monitoring and Reporting Program
MW	Monitoring Well
MCL	Maximum Contaminant Level per Title 22
N	Nitrogen
TKN	Total kjeldahl nitrogen
TDS	Total dissolved solids
TSS	Total suspended solids
Daily	Every day except weekends or holidays
Weekly	Once per week
Monthly	Once per calendar month
Quarterly	Once per calendar quarter
Semiannually	Once every six calendar months (i.e., two times per year) during non-consecutive quarters
Annually	Once per year
gpd	Gallons per day
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter
mg[d]	Million gallons [per day]