

STATE OF ARIZONA
AQUIFER PROTECTION PERMIT NO. P-105668
PLACE ID 108126, LTF 103584
SIGNIFICANT AMENDMENT

1.0 AUTHORIZATION

In compliance with the provisions of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2, Articles 1, 2, and 3, Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Articles 1 and 2, A.A.C. Title 18, Chapter 11, Article 4 and amendments thereto, and the conditions set forth in this permit, the Arizona Department of Environmental Quality (ADEQ) hereby authorizes the Global Water-Palo Verde Utilities Company, LLC to operate the Global Water-Palo Verde Campus 2 Water Reclamation Facility located at 46505 W. Peters & Nall Road, Town of Maricopa, Pinal County, Arizona, over the groundwater of the Maricopa-Stanfield groundwater basin, within the Pinal Active Management Area (AMA).

This permit becomes effective on the date of the Water Quality Division Deputy Director's signature and shall be valid for the life of the facility (operational, closure, and post-closure periods) unless suspended or revoked pursuant to A.A.C. R18-9-A213. The permittee shall construct, operate and maintain the permitted facilities:

1. Following all the conditions of this permit including the design and operational information documented or referenced below, and
2. Such that Aquifer Water Quality Standards (AWQS) are not violated at the applicable point(s) of compliance (POC) set forth below or if an AWQS for a pollutant has been exceeded in an aquifer at the time of permit issuance, that no additional degradation of the aquifer relative to that pollutant and as determined at the applicable POC occurs as a result of the discharge from the facility.

1.1. PERMITTEE INFORMATION

Facility Name: Palo Verde Utilities Company - Campus 2 Water Reclamation Facility (WRF)
Facility Address: 46505 W. Peters & Nall Road
Maricopa, Arizona 85139
County: Pinal County

Permitted Flow Rate: 100,000 gallons per day (gpd)

Permittee: Global Water - Palo Verde Utilities Company, LLC
Permittee Address: 21410 N 19th Ave, Suite 220
Phoenix, Arizona 85027

Facility Contact: Manager
Emergency Phone No.: (866) 940 – 1102

Latitude/Longitude: 32° 59' 56.3" N / 112° 04' 01.7" W
Legal Description: Township 05S, Range 03E, NE ¼, NE ¼ of Section 17, of the Gila and Salt River Baseline and Meridian

1.2. AUTHORIZING SIGNATURE

Randall Matas, Deputy Director
Water Quality Division
Arizona Department of Environmental Quality

Signed this _____ day of _____, 2024

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2.0 SPECIFIC CONDITIONS

[A.R.S. §§ 49-203(4), 49-241(A)]

2.1 FACILITY / SITE DESCRIPTION

[A.R.S. § 49-243(K)(8), and A.A.C. R18-5-114]

The permittee is authorized to operate the Palo Verde Utilities Company - Campus 2 Water Reclamation Facility (WRF), with a maximum average monthly flow of 50,000 gallons per day (gpd) for Commissioning Phase 1, and 100,000 gallons per day (gpd) upon completion of construction of Commissioning Phase 2. The Department has graded both permitted phases of this facility as a Grade 2 wastewater treatment plant. The facility shall have an operator in direct responsible charge who is certified for the class and grade of the facility and is available to the "onsite representative" and ensures an onsite operator visits the facility "weekly".

Pre-Operational Phase (Initial Start-Up): During the initial start-up of the plant, the facility is allowed to vault and haul up to 25,000 gallons per day (gpd). These vault and haul facilities were built as part of the previously constructed, but never operated, Phase 1 - 1.0-mgd WWTP (permitted under LTF No. 46866). Sewage enters an influent pump station (IPS), which includes two 340 gpm (7.5 hp) submersible pumps (1-duty; 1-standby) with a 3-inch discharge diameter, that deliver the sewage to an 85,000-gallon equalization tank (EQ tank), equipped with a Gridbee AP2000 air powered mixer. From the EQ tank, two 80.2-gpm (3.0-hp) pumps lift wastewater into the approved hauling trucks, which transport sewage to Global Water's - Palo Verde Utilities Company Campus 1 (APP No. P-105228). The IPS and EQ tank will continue to serve as the lift station and equalization for duration of this permit. The facility will monitor the influent flows at the influent lift station with a flowmeter located between the IPS and the EQ tank and by documenting the hauled sewage with a flowmeter located after the EQ tank pumps. The facility shall monitor flows per Section 4.1, Table 6: INITIAL START-UP PLAN. Currently there is enough flow to operate the Commissioning Phase 1 WWTP, therefore as soon as Commissioning Phase 1 is operable, and Section 3.0 COMPLIANCE SCHEDULE CSI No. 2 has been received by the Department, the facility shall commence the operation of the Commissioning Phase 1 WRF. The Commissioning Phase 1 WRF shall be completed as quickly as possible, as vault and haul operations are not permitted by the Department and typically, these operations do not commence until a facility is built and ready to receive flows.

Commissioning Phase 1 WRF: The Commissioning Phase 1 WRF is permitted to receive an Average Day Monthly Maximum (ADMM) flow of 50,000 gpd. The IPS and EQ tank pump station will continue to be used for Commissioning Phase 1, with a 9,200-gallon (2.05-ft) operating range in the EQ tank and two 80.2-gpm (3.0-hp) VFD controlled pumps (1-duty; 1-standby; +1 pump base for Commissioning Phase 2 to prevent sending too much flow to the package WWTP. From the EQ tank, influent will enter a pre-engineered Cloacina MEMPAC-R MBR package wastewater treatment plant (WWTP). Influent will pass through a flowmeter (used to report total flow) prior to the on-skid 2mm perforated fine rotary brush screen with washer and compactor. Screened solids will discharge into an endless bagger unit and then into a dumpster. A gravity emergency overflow with an alarm is connected on the side of the screen, which will divert flows back to the EQ tank, should the screen become fouled or inoperable. Screened influent enters a Modified Ludzack-Ettinger (MLE) process with a 4,317 gallon pre-anoxic chamber equipped with a 1.2-hp anoxic mixer (with a redundant shelf-spares mixer), a 7,910 gallon aeration chamber equipped with a level sensor and 22 fine-bubble disc diffusers, supplied continuous air via a 381-scfm (15-hp) aeration blower. Two 350-gpm (5.0-hp) VFD controlled forward activated sludge (FAS) pumps transfer mixed liquor from the aeration chamber to the membrane filtration chamber with two membrane cassettes (1-duty; 1-standby), each equipped with sixteen membranes with a separate blower utilized for jet aeration and air scour membrane cleaning. The FAS pumps operate in concert with their associated membrane chamber based on the permeate flow. The remaining flow from the FAS pumps overflows from the membrane chamber, where it is returned by gravity to the anoxic chamber. Two 50-gpm (3-hp) permeate pumps (1-duty; 1-standby) convey effluent to an attached clearwell for periodic back-pulsing and maintenance cleaning procedures, that are fully automated, and the excess effluent discharges from the clearwell by gravity. The effluent flows by gravity through a Norweco XT-4000-S tablet chlorinator disinfection system, prior to discharging into 100 ft of 24-inch diameter piping used for full pipe plug-flow chlorination. From the chlorine contact pipe, effluent flows through a Norweco 2000 model tablet de-chlorinator, and then the package WWTP ends and effluent is sampled prior to being sent to one of the two 0.4 mgd recharge basins.

A 7-gpm (1.0-hp) waste activated sludge (WAS) pump, pumps WAS through a flowmeter to an 11,000-gallon polyethylene sludge holding tank (SHT) with a sloped bottom, equipped with a GridBee AP500 mixer with its own compressor that supplies 4.5 scfm air flow for aeration. The SHT will have an overflow port that will gravity feed to an existing SBR tank, built for the 2008 permitted WWTP, for emergency storage. Sludge is hauled to Global Water’s – Palo Verde Utilities Company Campus 1 (APP No. P-105228) for processing. Two existing SBR tanks are available for emergency bypass with a total storage capacity of approximately 1 million gallons, for emergency operation and maintenance in lieu of treatment redundancy.

Commissioning Phase 2 WRF: The Commissioning Phase 2 WRF is permitted to receive an Average Day Monthly Maximum (ADMM) flow of 100,000 gpd. Commissioning of Phase 2 will commence operations when flows at the facility reach the permitted alert limit of 90 percent of the Commissioning Phase 1 design flow, or 45,000 gpd. The IPS and EQ tank pump station will continue to be used for Commissioning Phase 2, with a 16,700-gallon (5.24-ft) operating range in the EQ tank and three 80.2-gpm (3.0-hp) VFD controlled pumps (2-duty; 1-standby) to prevent sending too much flow to the package WWTPs. In Commissioning Phase 2, the facility will add an additional pre-engineered Cloacina MEMPAC-R MBR package wastewater treatment plant (WWTP), flowmeter (the sum of the flowmeters from both package WWTPs will be used to report total flow), chlorinator, 100-ft of 24-inch piping used for full pipe plug-flow chlorination, and de-chlorinator to operate in parallel to the Commissioning Phase 1 package plant. The effluent from the second package plant will then join the effluent from the first package plant prior to the discharge monitoring sampling point, and will discharge to one of the two 0.4 mgd recharge basins. The SHT, SHT overflow tank, two existing SBR overflow tanks, and all other facilities before and after the package plants, not described above, will remain the same. Sludge will continue to be hauled to Global Water’s – Palo Verde Utilities Company Campus 1 (APP No. P-105228) for processing.

Commissioning Phase 1 will provide 350 ft setback distances. For Commissioning Phase 2, odor control for the headworks and influent pump station are accomplished using single stage bio-trickling filtration system consisting of biologically active synthetic media with an automated water and nutrient injection spray system, recirculation system, and a layer of activated carbon to prevent untreated odors from exiting the unit. A 1,000-kW diesel generator will provide emergency back-up power for both phases.

All industrial hookups and other non-residential hookups to the treatment system shall be authorized according to the applicable federal, state or local regulations.

The site includes the following permitted discharging facilities:

Table 1: DISCHARGING FACILITIES		
Facility	Latitude (North)	Longitude (West)
Palo Verde Campus 2 WRF	32° 59' 56.3"	112° 04' 01.7"
Recharge Basin 1	32° 59' 48.6"	112° 04' 04.3"
Recharge Basin 2	32° 59' 48.6"	112° 04' 02.0"

2.1.1. Annual Registration Fee

[A.R.S. § 49-242 and A.A.C. R18-14-104]

The annual registration fee for this permit is payable to ADEQ each year. The annual registration fee flow rate is established by the permitted flow rate identified in Section 1.1. If the facility is not constructed or is incapable of discharge, the permittee may be eligible for reduced fees pursuant to A.A.C. R18-14-104(A), Table 2. Send all correspondence requesting reduced fees to the Groundwater Protection & Reuse Section. Please reference the permit number, LTF number, and the reason for requesting reduced fees under this rule.

2.1.2. Financial Capability

[A.R.S. § 49-243(N) and A.A.C. R18-9-A203]

The permittee has demonstrated financial capability under A.R.S. § 49-243(N) and A.A.C. R18-9-A203. The estimated dollar amount for facility closure is \$278,070. The financial capability was demonstrated through a Certificate of Deposit A.A.C. R18-9-A203(C)(3).

2.2. BEST AVAILABLE DEMONSTRATED CONTROL TECHNOLOGY (BADCT)

[A.R.S. § 49-243(B) and A.A.C. R18-9-A202(A)(5)]

The treatment facility shall be designed, constructed, operated, and maintained to meet the treatment performance criteria for new facilities as specified in A.A.C. R18-9-B204. The facility shall meet the performance requirement for industrial pre-treatment as per A.A.C. R18-9-B204(B)(6)(b).

The treatment facility shall not exceed a maximum seepage rate of 550 gallons per day per acre for all containment structures within the treatment works.

2.2.1. Engineering Design

The WRF was designed as per the design report and design plans signed, dated, and sealed by Brian P. McBride, P.E. (Civil#33441) with Wilson & Company on August 2, 2024 and May 31, 2024, respectively and subsequent sealed submittals that served as additions to the design report.

2.2.2. Site-Specific Characteristics

Site specific characteristics were not used to determine BADCT.

2.2.3. Pre-Operational Requirements

The permittee shall submit data in accordance with Table 6: INITIAL START-UP PLAN while vaulting and hauling influent while the Commissioning Phase 1 WWTP is being commissioned. Prior to initiating use of the WRF treatment components in Commissioning Phase 1 and Commissioning Phase 2, the permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion (ECOC) in a format approved by the Department per the compliance schedule in Section 3.0. The ECOC shall be submitted to the Groundwater Protection & Reuse Section. Commissioning of the Commissioning Phase 1 package plant shall occur as soon as possible, as daily vaulting and hauling volumes have already reached the manufacturers flows necessary for start-up operation.

2.2.4. Operational Requirements

1. The permittee shall maintain a copy of the up-to-date operations and maintenance manual at the treatment facility site at all times; the manual shall be available upon request during inspections by ADEQ personnel.
2. The pollution control structures shall be inspected for the items listed in Section 4.2, Table 10: FACILITY INSPECTION AND OPERATIONAL MONITORING
3. If any damage of the pollution control structures is identified during inspection, proper repair procedures shall be performed. All repair procedures and material(s) used shall be documented in the facility log book as per Section 2.7.2 and reported to ADEQ in the event of a violation or exceedance per Section 2.7.3.

2.2.5. Reclaimed Water Classification

[A.A.C. R18-9-B701(C)(2)(a), A.A.C. R18-11-303 through 307]

The facility BADCT will produce a high-quality effluent, however, the facility will not be discharging to reclaimed water under this permit.

2.2.6. Certified Areawide Water Quality Management Plan Conformance

[A.A.C. R18-9-A201(B)(6)(a)]

Facility operations must conform to the approved Certified Areawide Water Quality Management Plan according to the 208 consistency determination in place at the time of permit issuance.

2.3. DISCHARGE LIMITATIONS

[A.R.S. §§ 49-201(14), 49-243 and A.A.C. R18-9-A205(B)]

1. The permittee is authorized to operate the treatment facility with a maximum average monthly flow of 0.05 million gallons per day (mgd) for Commissioning Phase 1 and 0.10 mgd for Commissioning Phase 2.
2. The permittee shall notify all users that the materials authorized to be disposed of through the treatment facility are typical household sewage and pre-treated commercial wastewater and shall not include motor oil, gasoline, paints, varnishes, hazardous wastes, solvents, pesticides, fertilizers or other materials not generally associated with toilet flushing, food preparation, laundry facilities and personal hygiene.
3. The permittee shall operate and maintain all permitted facilities to prevent unauthorized discharges pursuant to A.R.S. § 49-201(12) resulting from failure or bypassing of applicable BADCT.
4. Specific discharge limitations are listed in Section 4.2, Table 9: ROUTINE DISCHARGE MONITORING.

2.4. POINT OF COMPLIANCE (POC)

[A.R.S. § 49-244]

The Points of Compliance (POCs) have been established at the following locations:

Table 2: POINT(S) OF COMPLIANCE			
POC #	POC Location	Latitude (North)	Longitude (West)
1 (Conceptual)	MW1 - Well installed at the southwest corner of the WRF	32° 59' 47.5"	112° 04' 06.8"

The direction of the groundwater is from the east to the west, and then to the southwest along regional groundwater flow gradients. The depth-to-groundwater at the site is approximately 83.5 feet (measured at the on-site exploratory borehole, ADWR Well ID No. 55-928186).

Groundwater monitoring is not required at the point of compliance well. POC #1 is a conceptual well, monitoring is not required except as a contingency action. The director may require an amendment of this permit to install a monitoring well if there is cause or concern that groundwater quality may be impacted at the POC. The Director may amend this permit to designate additional points of compliance if information on groundwater gradients or groundwater usage indicates the need

2.5. MONITORING REQUIREMENTS

[A.R.S. § 49-243(K)(1), A.A.C. R18-9-A206(A)]

Unless otherwise specified in this permit, all monitoring required in this permit shall continue for the duration of the permit, regardless of the status of the facility. Unless otherwise provided, monitoring shall commence the first full monitoring period following permit issuance. All sampling, preservation and holding times shall be in accordance with currently accepted standards of professional practice. Trip blanks, equipment blanks and duplicate samples shall also be obtained, and Chain-of-Custody procedures shall be followed, in accordance with currently accepted standards of professional practice. Copies of laboratory analyses and Chain-of-Custody forms shall be maintained at the permitted facility. Upon request, these documents shall be made immediately available for review by ADEQ personnel.

2.5.1. Pre-Operational Monitoring

During the initial start-up period, the permittee shall monitor the flow rate according to Section 4.1, Table 6: INITIAL START-UP PLAN. The flow rate shall be measured using both a flowmeter located between the IPS and the EQ tank, and the flowmeter after the EQ tank pumps. Monitoring under Section 4.1, Table 6: INITIAL START-UP PLAN shall continue until the permittee ceases to (vault and haul) and initiates routine discharge monitoring under Section 4.2, Table 9: ROUTINE DISCHARGE MONITORING.

2.5.2. Routine Discharge Monitoring

Upon cessation of the initial start-up period, the permittee shall monitor the effluent according to Section 4.2, Table 9: ROUTINE DISCHARGE MONITORING. Representative samples of the effluent shall be collected at the point downstream of the de-chlorination system after the effluent from the Commissioning Phase 1 and Commissioning Phase 2 package WWTPs have combined.

2.5.3. Reclaimed Water Monitoring

Not applicable.

2.5.4. Facility / Operational Monitoring

Operational monitoring inspections shall be conducted according to Section 4.2, Table 10: FACILITY INSPECTION AND OPERATIONAL MONITORING.

If any damage of the pollution control structures is identified during inspection, proper repair procedures shall be performed. All repair procedures and materials used shall be documented in the facility log book as per Section 2.7.2 and reported to ADEQ in case of a violation or exceedance as per Section 2.7.3.

2.5.5. Groundwater Monitoring and Sampling Protocols

Routine groundwater monitoring is not required under the terms of this permit.

2.5.6. Surface Water Monitoring and Sampling Protocols

Routine surface water monitoring is not required under the terms of this permit.

2.5.7. Analytical Methodology

All samples collected for compliance monitoring shall be analyzed using Arizona state-approved methods. If no state-approved method exists, then any appropriate EPA-approved method shall be used. Regardless of the method used, the detection limits must be sufficient to determine compliance with the regulatory limits of the parameters specified in this permit. If all methods have detection limits higher than the applicable limit, the permittee shall follow the applicable contingency requirements of Section 2.6 and may propose "other actions" including amending the permit to set higher limits. Analyses shall be performed by a laboratory licensed by the Arizona Department of Health Services, Office of Laboratory Licensure and Certification unless exempted under A.R.S. 36-495.02. For results to be considered valid, all analytical work shall meet quality control standards specified in the approved methods. A list of state-certified laboratories in Arizona can be obtained at the address below:

Arizona Department of Health Services
Office of Laboratory Licensure and Certification
250 North 17th Avenue
Phoenix, Arizona 85007
Phone: (602) 364-0720

2.5.8. Installation and Maintenance of Monitoring Equipment

Monitoring equipment required by this permit shall be installed and maintained so that representative samples required by the permit can be collected. If new groundwater wells are determined to be necessary, the construction details shall be submitted to the Groundwater Protection & Reuse Section for approval prior to installation and the permit shall be amended to include any new monitoring points.

2.6. CONTINGENCY PLAN REQUIREMENTS

[A.R.S. § 49-243(K)(3), (K)(7) and A.A.C. R18-9-A204, R18-9-A205 and R18-9-C305(A)(1)]

2.6.1. General Contingency Plan Requirements

At least one copy of this permit and the approved contingency and emergency response plan submitted in the application shall be maintained at the location where day-to-day decisions regarding the operation of the facility are made. The permittee shall be aware of and follow the contingency and emergency plans.

Any Alert Level (AL) exceedance, or violation of a Discharge Limit (DL), or other permit condition shall be reported to ADEQ following the reporting requirements in Section 2.7.3, unless more specific reporting requirements are set forth in Section 2.6.2 through 2.6.5.

Some contingency actions involve verification sampling. Verification sampling shall consist of the first follow-up sample collected from a location that previously indicated a violation or the exceedance of an AL. Collection and analysis of the verification sample shall use the same protocols and test methods to analyze for the pollutant or pollutants that exceeded an AL or violated a DL. Where verification sampling is specified in this permit, it is the option of the permittee to perform such sampling. If verification sampling is not conducted within the timeframe allotted, ADEQ and the permittee shall presume the initial sampling result to be confirmed as if verification sampling had been conducted. The permittee is responsible for compliance with contingency plans relating to the exceedance of an AL or violation of a DL, or any other permit condition. The permittee is subject to enforcement action for the failure to comply with any contingency actions in this permit.

2.6.2. Exceeding of Alert Levels and Performance Levels

2.6.2.1. Exceeding of Performance Levels Set for Operational Conditions

For freeboard performance levels, the permittee shall comply with the requirements as specified in Section 4.2, Table 10: FACILITY INSPECTION AND OPERATIONAL MONITORING to prevent the overtopping of a tank, or an impoundment. If a tank, or an impoundment is overtopped, the permittee shall follow the requirements in Section 2.6.5.3 and the reporting requirements of Section 2.7.3. This includes releases of more than 2,000 gallons of raw influent from the collection system or a treatment process prior to biological treatment that are contained onsite.

If a performance level set in Section 4.2, Table 10: FACILITY INSPECTION AND OPERATIONAL MONITORING has been exceeded the permittee shall:

1. Notify the Groundwater Protection & Reuse Section within five (5) days of becoming aware of the exceedance per Section 2.7.5.
2. Submit a written report to the Groundwater Protection & Reuse Section within thirty (30) days after becoming aware of the exceedance per Section 2.7.5. The report shall document all of the following:
 - a. A description of the exceedance and the cause of the exceedance;
 - b. The period of the exceedance, including exact date(s) and time(s), if known, and the anticipated time period during which the exceedance is expected to continue;
 - c. Any action taken or planned to mitigate the effects of the exceedance or spill, or to eliminate or prevent recurrence of the exceedance or spill;
 - d. Any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS; and
 - e. Any malfunction or failure of pollution control devices or other equipment or process.

3. The facility is no longer on alert status once the operational indicator no longer indicates that a performance level is being exceeded. The permittee shall, however, complete all tasks necessary to return the facility to its pre-alert operating condition.

2.6.2.2. Exceeding of Alert Levels (ALs) Set for Discharge Monitoring

1. If an AL set in Section 4.2, Table 9: ROUTINE DISCHARGE MONITORING has been exceeded, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:
 - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the exceedance;
 - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences; and
 - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the exceedance, the permittee shall sample individual waste streams composing the wastewater for the parameter(s) in question, if necessary to identify the cause of the exceedance.
2. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 5.0 and specific contingency measures identified in Section 2.6 to resolve any problems identified by the investigation which may have led to the AL exceedance. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6.
3. Within thirty (30) days of an AL exceedance, the permittee shall submit the laboratory results to the Groundwater Protection & Reuse Section per Section 2.7.5 along with a summary of the findings of the investigation, the cause of the exceedance, and actions taken to resolve the problem.
4. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions or other actions.

2.6.2.2.1. Exceeding Permit Flow Limit

1. If the AL for average monthly flow in Section 4.2, Table 7: ROUTINE FLOW MONITORING: Commissioning Phase 1 – 0.05 mgd has been exceeded, the permittee shall begin construction of the next phase, or submit a report to the ADEQ Groundwater Protection & Reuse Section detailing the reasons it is not necessary to begin the next phase of construction. Acceptance of the report instead of beginning the next phase of construction requires ADEQ approval.
2. If the AL for average monthly flow in Section 4.2, Table 8: ROUTINE FLOW MONITORING: Commissioning Phase 2 – 0.10 mgd has been exceeded, the permittee shall submit an application to the Groundwater Protection & Reuse Section for an APP amendment to expand the WRF, or submit a report detailing the reasons an expansion is not necessary. Acceptance of the report instead of an application for expansion requires ADEQ approval

2.6.2.3. Exceeding of Alert Levels in Groundwater Monitoring

2.6.2.3.1. Alert Levels for Indicator Parameters

No ALs have been established for indicator parameters.

2.6.2.3.2. Alert Levels for Pollutants with Numeric Aquifer Water Quality Standards

Not required at the time of permit issuance

2.6.2.3.3. Alert Levels to Protect Downgradient Users from Pollutants without Numeric Aquifer Water Quality Standards

Not required at the time of issuance.

2.6.2.3.4. Alert Level for Groundwater Level

Not applicable.

2.6.3. Discharge Limit Violation

1. If a DL set in Section 4.2, Table 9: ROUTINE DISCHARGE MONITORING has been violated, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:
 - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the violation;
 - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences;
 - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the violation, the permittee shall sample individual waste streams composing the wastewater for the parameters in violation, as necessary to identify the cause of the violation.

The permittee shall submit a report to the Groundwater Protection & Reuse Section according to Section 2.7.3, which includes a summary of the findings of the investigation, the cause of the violation, and actions taken to resolve the problem. The permittee shall consider and ADEQ may require corrective action that may include control of the source of discharge, cleanup of affected soil, surface water or groundwater, notification of downstream or downgradient users who may be directly affected by the discharge, and mitigation of the impact of pollutants on existing uses of the aquifer. Corrective actions shall either be specifically identified in this permit, included in an ADEQ-approved contingency plan, or separately approved according to Section 2.6.6.

2. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions, or other actions.

2.6.4. Aquifer Quality Limit Violation

Not required at the time of permit issuance.

2.6.5. Emergency Response and Contingency Requirements for Unauthorized Discharges

[A.R.S. § 49-201(12) and pursuant to A.R.S. § 49-241]

2.6.5.1. Duty to Respond

The permittee shall act immediately to correct any condition resulting from a discharge pursuant to A.R.S. § 49-201(12) if that condition could pose an imminent and substantial endangerment to public health or the environment.

2.6.5.2. Discharge of Hazardous Substances or Toxic Pollutants

In the event of any unauthorized discharge pursuant to A.R.S. § 49-201(12) of suspected hazardous substances (A.R.S. § 49-201(19)) or toxic pollutants (A.R.S. § 49-243(I)) on the facility site, the permittee shall promptly isolate the area and attempt to identify the discharged material. The permittee shall record information, including name, nature of exposure and follow-up medical treatment, if necessary, of persons who may have been exposed during the incident. The permittee shall notify the Groundwater Protection & Reuse Section within 24 hours of discovering the discharge of hazardous material which (a) has the potential to cause an AWQS exceedance, or (b) could pose an endangerment to public health or the environment.

2.6.5.3. Discharge of Non-Hazardous Materials

In the event of any unauthorized discharge pursuant to A.R.S. § 49-201(12) of non-hazardous materials from the facility, the permittee shall promptly attempt to cease the discharge and isolate the discharged material. Discharged material shall be removed and the site cleaned up as soon as possible. The permittee shall notify the Groundwater Protection & Reuse Section within 24 hours of discovering the discharge of non-hazardous material which has the potential to cause an AWQS exceedance, or could pose an endangerment to public health or the environment.

2.6.5.4. Reporting Requirements

The permittee shall submit a written report for any unauthorized discharges reported under Sections 2.6.5.2 and 2.6.5.3 to the Groundwater Protection & Reuse Section per Section 2.7.5 within thirty (30) days of the discharge or as required by subsequent ADEQ action. The report shall summarize the event, including any human exposure, and facility response activities and include all information specified in Section 2.7.3. If a notice is issued by ADEQ subsequent to the discharge notification, any additional information requested in the notice shall also be submitted within the time frame specified in the notice. Upon review of the submitted report, ADEQ may require additional monitoring or corrective actions.

2.6.6. Corrective Actions

Specific contingency measures identified in Section 2.6 have already been approved by ADEQ and do not require written approval to implement.

With the exception of emergency response actions taken under Section 2.6.5, the permittee shall obtain written approval from the Groundwater Protection & Reuse Section prior to implementing a corrective action to accomplish any of the following goals in response to exceedance of an AL, DL, or another permit condition:

1. Control of the source of an unauthorized discharge;
2. Soil cleanup;
3. Cleanup of affected surface waters;
4. Cleanup of affected parts of the aquifer;
5. Mitigation to limit the impact of pollutants on existing uses of the aquifer.

Within thirty (30) days of completion of any corrective action, the operator shall submit to the Groundwater Protection & Reuse Section per Section 2.7.5, a written report describing the causes, impacts, and actions taken to resolve the problem.

2.7. REPORTING AND RECORDKEEPING REQUIREMENTS

[A.R.S. § 49-243(K)(2), A.A.C. R18-5-104, R18-9-A206(B), and R18-9-A207]

2.7.1. Self-Monitoring Report Form

1. The permittee shall complete the Self-Monitoring Reporting Forms (SMRFs) provided by ADEQ, and submit the completed report through the myDEQ online reporting system per Section 2.7.5. The permittee shall use the format devised by ADEQ.
2. The permittee shall complete the SMRF to the extent that the information reported may be entered on the form. If no information is required during a reporting period, the permittee shall enter “not required” on the form, include an explanation, and submit the form to the Groundwater Protection & Reuse Section.
3. The tables contained in Section 4.0 list the monitoring parameters and the frequencies for reporting results on the SMRF:
 - a. Table 7: ROUTINE FLOW MONITORING: Commissioning Phase 1 – 0.05 mgd
 - b. Table 8: ROUTINE FLOW MONITORING: Commissioning Phase 2 – 0.10 mgd
 - c. Table 9: ROUTINE DISCHARGE MONITORING

The parameters listed in the above-identified tables from Section 4.0 are the only parameters for which SMRF reporting is required.

2.7.2. Operation Inspection / Log Book Recordkeeping

A signed copy of this permit shall be maintained at all times at the location where day-to-day decisions regarding the operation of the facility are made. A log book (paper copies, forms, or electronic data) of the inspections and measurements required by this permit shall be maintained at the location where day-to-day decisions are made regarding the operation of the facility. The log book shall be retained for ten years from the date of each inspection, and upon request, the permit and the log book shall be made immediately available for review by ADEQ personnel. The information in the log book shall include, but not be limited to, the following information as applicable:

1. Name of inspector;
2. Date and shift inspection was conducted;
3. Condition of applicable facility components;
4. Any damage or malfunction, and the date and time any repairs were performed;
5. Documentation of sampling date and time; and
6. Any other information required by this permit to be entered in the log book.
7. Monitoring records for each measurement shall comply with A.A.C. R18-9-A206(B)(2).
8. “Weekly” onsite operator site visit sign-in to comply with A.A.C. R18-5-104.

2.7.3. Permit Violation and Alert Level Status Reporting

1. The permittee shall notify the Groundwater Protection & Reuse Section per Section 2.7.5 within five (5) days (except as provided in Section 2.6.5) of becoming aware of an AL exceedance, or violation of any permit condition, or DL for which notification requirements are not specified in Sections 2.6.2 through 2.6.5.
2. The permittee shall submit a written report to the Groundwater Protection & Reuse Section per Section 2.7.5 within thirty (30) days of becoming aware of the violation of any permit condition, or DL. The report shall document all of the following:

- a. Identification and description of the permit condition for which there has been a violation and a description of the cause;
- b. The period of violation including exact date(s) and time(s), if known, and the anticipated time period during which the violation is expected to continue;
- c. Any corrective action taken or planned to mitigate the effects of the violation, or to eliminate or prevent a recurrence of the violation;
- d. Any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS;
- e. Proposed changes to the monitoring which include changes in constituents or increased frequency of monitoring; and
- f. Description of any malfunction or failure of pollution control devices or other equipment or processes.

2.7.4. Operational, Other or Miscellaneous Reporting

The permittee shall record the information as required in Section 4.2, Table 10: FACILITY INSPECTION AND OPERATIONAL MONITORING in the facility log book as per Section 2.7.2, and report to the Groundwater Protection & Reuse Section any violations or exceedances as per Section 2.7.3.

If the treatment facility is classified for reclaimed water under this permit, the permittee shall submit the reclaimed water monitoring results and flow volumes to any of the following in accordance with A.A.C. R18-9-B701(C)(2)(c):

1. Any reclaimed water agent who has contracted for delivery of reclaimed water from the permittee; and
2. Any end user who has not waived interest in receiving this information.

2.7.5. Reporting Location

All Self-Monitoring Report Forms (SMRFs) shall be submitted through the myDEQ portal accessible on the ADEQ website at: <https://www.azdeq.gov/mydeq>. Contact at 602-771-4571 for any inquiry related to the SMRFs.

5-day and 30-day contingency notification and reports, laboratory reports, and verification sampling results required by this permit should be submitted through the myDEQ portal accessible on the ADEQ website at: <https://www.azdeq.gov/mydeq>.

If the required reports cannot be submitted, or require further documentation that cannot be submitted on the myDEQ portal, then submit items to APPContingencyreports@azdeq.gov or the address listed below:

The Arizona Department of Environmental Quality
Groundwater Protection & Reuse Section
1110 West Washington Street
Phoenix, Arizona 85007
Phone (602) 771-4999

2.7.6. Reporting Deadline

The following table lists the quarterly report due dates:

Table 3: QUARTERLY REPORTING DEADLINES	
Monitoring Conducted During Quarter:	Quarterly Report Due By:
January-March	April 30
April-June	July 30
July-September	October 30
October-December	January 30

The following table lists the semi-annual and annual report due dates if applicable:

Table 4: (SEMI-)ANNUAL REPORTING DEADLINES	
Monitoring Conducted:	Report Due By:
Semi-annual: January-June	July 30
Semi-annual: July-December	January 30
Annual: January-December	January 30

2.7.7. Changes to Facility Information in Section 1.0 and Section 2.0

The Groundwater Protection & Reuse Section shall be notified per Section 2.7.5 within ten days of any change of facility information including Facility Name, Permittee Name, Mailing or Street Address, Facility Contact Person, Certified Operator in Direct Responsible Charge or Emergency Telephone Number.

2.8. Temporary Cessation

[A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A209(A)]

The permittee shall give written notice to the Groundwater Protection & Reuse Section per Section 2.7.5 before ceasing operation of the facility for a period of 60 days or greater. The permittee shall take the following measures upon temporary cessation:

1. If applicable, direct the wastewater flows from the facility to another state-approved wastewater treatment facility;
2. Correct the problem that caused the temporary cessation of the facility; and
3. Notify the Groundwater Protection & Reuse Section with a monthly facility status report describing the activities conducted on the treatment facility to correct the problem.
4. Submittal of Self-Monitoring Report Forms (SMRFs) is still required; report “temporary cessation” in the comment section.

At the time of notification the permittee shall submit for ADEQ approval a plan for maintenance of discharge control systems and for monitoring during the period of temporary cessation. Immediately following ADEQ approval, the permittee shall implement the approved plan. If necessary, ADEQ shall amend permit conditions to incorporate conditions to address temporary cessation. During the period of temporary cessation, the permittee shall provide written notice to the Groundwater Protection & Reuse Section of the operational status of the facility every three years. If the permittee intends to permanently cease operation of any facility, the permittee shall submit closure notification, as set forth in Section 2.9 below.

2.9. Closure

[A.R.S. §§ 49-243(K)(6), 49-252 and A.A.C. R18-9-A209(B)]

For a facility addressed under this permit, the permittee shall give written notice of closure to the Groundwater Protection & Reuse Section per Section 2.7.5 of the intent to cease operation without resuming activity for which the facility was designed or operated. Submittal of SMRFs is still required; report “closure in process” in the comment section.

2.9.1. Closure Plan

Within 90 days following notification of closure, the permittee shall submit for approval to the Groundwater Protection & Reuse Section per Section 2.7.5, a closure plan which meets the requirements of A.R.S. § 49-252 and A.A.C. R18-9-A209(B)(3).

If the closure plan achieves clean-closure immediately, ADEQ shall issue a letter of approval to the permittee. If the closure plan contains a schedule for bringing the facility to a clean-closure configuration at a future date, ADEQ may incorporate any part of the schedule as an amendment to this permit.

2.9.2. Closure Completion

Upon completion of closure activities, the permittee shall give written notice to the Groundwater Protection & Reuse Section per Section 2.7.5 indicating that the approved closure plan has been implemented fully and providing supporting documentation to demonstrate that clean-closure has been achieved (soil sample results, verification sampling results, groundwater data, as applicable). If clean-closure has been achieved, ADEQ shall issue a letter of approval to the permittee at that time. If any of the following conditions apply, the permittee shall follow the terms of post-closure stated in this permit:

1. Clean-closure cannot be achieved at the time of closure notification or within one year thereafter under a diligent schedule of closure actions;
2. Further action is necessary to keep the facility in compliance with the AWQS at the applicable POC or, for any pollutant for which the AWQS was exceeded at the time this permit was issued, further action is necessary to prevent the facility from further degrading the aquifer at the applicable POC with respect to that pollutant;
3. Remedial, mitigative or corrective actions or controls are necessary to comply with A.R.S. § 49-201(36) and Title 49, Chapter 2, Article 3;
4. Further action is necessary to meet property use restrictions.
5. SMRF submittals are required until Clean Closure is issued.

2.10. Post-closure

[A.R.S. §§ 49-243(K)(6), 49-252 and A.A.C. R18-9 A209(C)]

Post-closure requirements shall be established based on a review of facility closure actions and will be subject to review and approval by the Groundwater Protection & Reuse Section.

In the event clean-closure cannot be achieved pursuant to A.R.S. § 49-252, the permittee shall submit for approval to the Groundwater Protection & Reuse Section a post-closure plan that addresses post-closure maintenance and monitoring actions at the facility. The post-closure plan shall meet all requirements of A.R.S. §§ 49-201(30) and 49-252 and A.A.C. R18-9-A209(C). Upon approval of the post-closure plan, this permit shall be amended or a new permit shall be issued to incorporate all post-closure controls and monitoring activities of the post-closure plan.

2.10.1. Post-Closure Plan

A specific post-closure plan may be required upon the review of the closure plan.

2.10.2. Post-Closure Completion

Not required at the time of permit issuance.

3.0 COMPLIANCE SCHEDULE

[A.R.S. § 49-243(K)(5) and A.A.C. R18-9-A208]

Unless otherwise indicated, for each compliance schedule item listed below, the permittee shall submit the required information to the Groundwater Protection & Reuse Section per Section 2.7.5.

Table 5: COMPLIANCE SCHEDULE ITEMS			
No.	Description	Due By:	Permit Amendment Required?
1	Notification of vault and haul cessation.	Within 15 days of the date of the cessation of the vault and haul activity.	No
2	The permittee shall submit a signed, dated, and sealed Engineer’s Certificate of Completion in a format approved by the Department that confirms that the Commissioning Phase 1 WRF is constructed according to the Department-approved design report or plans and specifications, as applicable.	Prior to discharging under this permit and within 90 days of completion of construction.	No
3	Commissioning Phase 1 WRF performance testing, as-built plans, and confirmation that the facility has received a hard copy of the O&M Manual.	Within six months of issuance of this permit.	No
4	The permittee shall submit a signed, dated, and sealed Engineer’s Certificate of Completion in a format approved by the Department that confirms that the Commissioning Phase 2 WRF is constructed according to the Department-approved design report or plans and specifications, as applicable.	Prior to discharging under this permit and within 90 days of completion of construction.	No
5	Commissioning Phase 2 WRF performance testing, as-built plans, and confirmation that the facility has received a hard copy of the O&M Manual.	Within six months of issuance of this permit.	No
6	The permittee shall submit a demonstration that the financial assurance mechanism listed in Section 2.1, Financial Capability, is being maintained as per A.R.S. 49-243.N.4 and A.A.C. R18-9-A203(H) for all estimated closure and post-closure costs including updated costs submitted under Section 3.0, No. 7 below. The demonstration shall include a statement that the closure and post-closure strategy has not changed, the discharging facilities listed in the permit have not been altered in a manner that would affect the closure and post-closure costs, and discharging facilities have not been added. The demonstration shall also include information in support of a certificate of deposit as required in A.A.C. R18-9-A203(C)(3). NOTE: The financial assurance mechanism due on the date specified in CSI No. 7, may be provided following ADEQ’s approval of the closure and post-closure costs. When submitting the closure and post-closure costs, permittee may provide a statement for the type of mechanism intended to be provided.	By December 1, 2030 and every six (6) years thereafter, for the duration of the permit.	No
7	The permittee shall submit updated cost estimates for facility closure and post-closure, as per A.A.C. R18-9-A201(B)(5) and A.R.S. 49-243.N.2.a.	By December 1, 2030 and every six (6) years thereafter, for the duration of the permit.	Yes

4.0 TABLES OF MONITORING REQUIREMENTS

4.1. PRE-OPERATIONAL MONITORING (OR CONSTRUCTION REQUIREMENTS)

Table 6: INITIAL START-UP PLAN: Vault and Haul 0.025 mgd ¹					
Monitoring under this table shall continue until permittee ceases to vault and haul and initiates routine monitoring under Section 4.2, Table 9: ROUTINE DISCHARGE MONITORING. Notify the Groundwater Section within 15 days of making this transition (see Section 3.0, Compliance Schedule Item No. 1).					
Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
1	Influent Pump Station Flowmeter ²			32° 59' 56.4"	112° 04' 02.9" W
2	Pre-EQ Tank Pump Manifold Flowmeter			32° 59' 55.1"	112° 03' 59.6" W
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Total Flow ³ : Daily	Not Applicable ⁴	Not Applicable	mgd ⁵	Daily	Quarterly
Total Flow: Monthly Average ⁶	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
Total Flow Hauled: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Total Flow Hauled: Monthly Average	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly

4.2. COMPLIANCE OR OPERATIONAL MONITORING

Table 7: ROUTINE FLOW MONITORING: Commissioning Phase 1 – 0.05 mgd ⁷					
Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
3	Influent Flowmeter WWTP No. 1 ²			32° 59' 56.5"	112° 04' 01.7 "
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Total Flow ³ WWTP No. 1: Daily	Not Applicable ⁴	Not Applicable	mgd ⁵	Daily	Quarterly
Total Flow WWTP No. 1: Monthly Average ⁶	0.045	0.050	mgd	Monthly Calculation	Quarterly

¹ The monitoring under this table shall be continued until CSI No. 2 for Commissioning Phase 1 has been accepted by the Department and shall be discontinued and the monitoring under Table 7 shall commence upon operation of Commissioning Phase 1.

² All wastewater flow measurement devices must be calibrated prior to the first year of reporting and recalibrated either biennially (every 2 years) or at the minimum frequency specified by the manufacturer. Wastewater flow measurement devices must be calibrated using the procedures specified by the device manufacturer.

³ Total Flow shall be measured using a continuous recording flowmeter that totals the flows daily.

⁴ Not Applicable means that monitoring is required, but no limits have been specified at the time of permit issuance.

⁵ mgd = million gallons per day

⁶ Monthly Average means the calculated average of daily flow values in each calendar month

⁷ The monitoring under this table shall be continued until CSI No. 4 for Commissioning Phase 2 has been accepted by the Department and shall be discontinued and the monitoring under Table 8 shall commence upon operation of Commissioning Phase 2.

Table 8: ROUTINE FLOW MONITORING: Commissioning Phase 2 – 0.10 mgd ⁸					
Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
3	Influent Flowmeter WWTP No. 1			32° 59' 56.5"	112° 04' 01.7"
4	Influent Flowmeter WWTP No. 2			32° 59' 56.5"	112° 04' 02.0"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Total Flow ³ : Daily	Not Applicable ⁴	Not Applicable	mgd ⁵	Daily	Quarterly
Total Flow: Monthly Average ⁶	0.090	0.100	mgd	Monthly Calculation	Quarterly
Total Flow WWTP No. 1: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Total Flow WWTP No. 1: Monthly Average	Not Applicable	0.05	mgd	Monthly Calculation	Quarterly
Total Flow WWTP No. 2: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Total Flow WWTP No. 2: Monthly Average	Not Applicable	0.05	mgd	Monthly Calculation	Quarterly

⁸ The monitoring under this table shall not be commenced until CSI No. 4 has been accepted by the Department for Commissioning Phase 2 and shall be continued thereafter for the life of this permit.

Table 9: ROUTINE DISCHARGE MONITORING (Commissioning Phase 1 and Commissioning Phase 2)

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
5	Sampling Port After De-Chlorination			32° 59' 54.9"	112° 04' 02.3"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
<i>E. coli</i> : Single sample maximum	Not Applicable ⁴	15	MPN ⁹	Daily ¹⁰	Quarterly
<i>E. coli</i> : four (4) of seven (7) samples in a week ¹¹	Not Applicable	Non-detect ¹²	MPN	Weekly Evaluation	Quarterly
Total Nitrogen ¹³ : Five-sample rolling geometric mean ¹⁴	8	10	mg/L ¹⁵	Monthly Calculation	Quarterly
Cyanide (as free cyanide)	0.16	0.2	mg/L	Quarterly	Quarterly
Fluoride	3.2	4.0	mg/L	Quarterly	Quarterly
Metals (Total)					
Antimony	0.0048	0.006	mg/L	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/L	Quarterly	Quarterly
Barium	1.6	2	mg/L	Quarterly	Quarterly
Beryllium	0.0032	0.004	mg/L	Quarterly	Quarterly
Cadmium	0.004	0.005	mg/L	Quarterly	Quarterly
Chromium	0.08	0.1	mg/L	Quarterly	Quarterly
Lead	0.04	0.05	mg/L	Quarterly	Quarterly
Mercury	0.0016	0.002	mg/L	Quarterly	Quarterly
Nickel	0.08	0.1	mg/L	Quarterly	Quarterly
Selenium	0.04	0.05	mg/L	Quarterly	Quarterly
Thallium	0.0016	0.002	mg/L	Quarterly	Quarterly

⁹ MPN = Most Probable Number / 100 ml sample. For MPN, a value of <2.2 shall be considered to be non-detect

¹⁰ For *E. coli*, “daily” sampling means every day in which a sample can practicably be obtained and delivered in sufficient time for proper analysis, provided that no less than four samples in each week are obtained and analyzed

¹¹ Week means a seven-day period starting on Sunday and ending on the following Saturday. The reporting form for this parameter consists of 13 weeks per quarter

¹² *E. coli* 4 of 7 samples requires entering “Compliance” or “Non-compliance” on the SMRF for each week of the reporting period. Evaluate the daily fecal coliform results for that week (Sunday through Saturday). If, of these seven days, four or more of the daily fecal coliform results are non-detect, report “Compliance” for that week’s entry on the SMRF. If three or fewer of the daily *E. coli* results are non-detect, report “Non-compliance” for that week’s entry on the SMRF

¹³ Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

¹⁴ The five-sample rolling geometric mean is determined by multiplying the five (5) most recent monthly sample values together then taking the fifth root of the product. Example: $GM_5 = \sqrt[5]{(m_1)(m_2)(m_3)(m_4)(m_5)}$; For the first four samples enter “Not Required” on SMRFs

¹⁵ mg/L = milligrams per liter

Table 9: ROUTINE DISCHARGE MONITORING (Continued)

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
5	Sampling Port After De-Chlorination			32° 59' 55.14"	112° 04' 01.56"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs)					
Benzene	0.004	0.005	mg/L	Semi-Annually	Semi-Annually
Carbon tetrachloride	0.004	0.005	mg/L	Semi-Annually	Semi-Annually
o-Dichlorobenzene	0.48	0.6	mg/L	Semi-Annually	Semi-Annually
para-Dichlorobenzene	0.06	0.075	mg/L	Semi-Annually	Semi-Annually
1,2-Dichloroethane	0.004	0.005	mg/L	Semi-Annually	Semi-Annually
1,1-Dichloroethylene	0.0056	0.007	mg/L	Semi-Annually	Semi-Annually
cis-1,2-Dichloroethylene	0.056	0.07	mg/L	Semi-Annually	Semi-Annually
trans-1,2-Dichloroethylene	0.08	0.1	mg/L	Semi-Annually	Semi-Annually
Dichloromethane	0.004	0.005	mg/L	Semi-Annually	Semi-Annually
1,2-Dichloropropane	0.004	0.005	mg/L	Semi-Annually	Semi-Annually
Ethylbenzene	0.56	0.7	mg/L	Semi-Annually	Semi-Annually
Hexachlorobenzene	0.0008	0.001	mg/L	Semi-Annually	Semi-Annually
Hexachlorocyclopentadiene	0.04	0.05	mg/L	Semi-Annually	Semi-Annually
Monochlorobenzene	0.08	0.1	mg/L	Semi-Annually	Semi-Annually
Styrene	0.08	0.1	mg/L	Semi-Annually	Semi-Annually
Tetrachloroethylene	0.004	0.005	mg/L	Semi-Annually	Semi-Annually
Toluene	0.8	1	mg/L	Semi-Annually	Semi-Annually
Trihalomethanes (total) ¹⁶	0.08	0.10	mg/L	Semi-Annually	Semi-Annually
1,2,4 - Trichlorobenzene	0.056	0.07	mg/L	Semi-Annually	Semi-Annually
1,1,1-Trichloroethane	0.16	0.20	mg/L	Semi-Annually	Semi-Annually
1,1,2 - Trichloroethane	0.004	0.005	mg/L	Semi-Annually	Semi-Annually
Trichloroethylene	0.004	0.005	mg/L	Semi-Annually	Semi-Annually
Vinyl Chloride	0.0016	0.002	mg/L	Semi-Annually	Semi-Annually
Xylenes (Total)	8	10	mg/L	Semi-Annually	Semi-Annually

¹⁶ Total Trihalomethanes (TTHMs) are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane

Table 10: FACILITY INSPECTION AND OPERATIONAL MONITORING			
The permittee shall record the inspection performance levels in a log book as per Section 2.7.2, and report any violations or exceedances as per Section 2.7.3. In the case of an exceedance, identify which structure exceeds the performance level in the log book.			
Pollution Control Structure/Parameter	Performance Level	Inspection Frequency	Reporting Frequency
Bioreactor Tank Freeboard	One (1) Linear Foot	Weekly	See Section 2.7.3
Sludge Holding Tank Freeboard	One (1) Linear Foot	Weekly	
Recharge Basin Freeboard	Two (2) Linear Foot	Weekly	
Pump Integrity	Good working condition	Weekly	
Pump/Lift Station Containment Structures	No cracks or spalling in concrete that results in leaks or impairs structural integrity. Structural steel shall not be showing.	Weekly	
Treatment Plant Components	Good working condition	Weekly	
Surface Impoundment Vegetation Removal	No vegetation present in the impoundment or within five feet of the impoundment	Monthly	
Biofilters and/or Activated Carbon systems	Good working condition H ₂ S and flow	Monthly	

5.0 REFERENCES AND PERTINENT INFORMATION

The terms and conditions set forth in this permit have been developed based upon the information contained in the following, which are on file with the Department:

APP Application, dated: 08/02/2024

Contingency Plan, dated: (GWR is updating and will be reviewed/approved by the Department prior to granting permit)

6.0 NOTIFICATION PROVISIONS

6.1. Annual Registration Fees

The permittee is notified of the obligation to pay an Annual Registration Fee to ADEQ. The Annual Registration Fee is based on the amount of daily influent or discharge of pollutants in gallons per day (gpd) as established by A.R.S. § 49-242.

6.2. Duty to Comply

[A.R.S. §§ 49-221 through 263]

The permittee is notified of the obligation to comply with all conditions of this permit and all applicable provisions of Title 49, Chapter 2, Articles 1, 2 and 3 of the Arizona Revised Statutes, Title 18, Chapter 9, Articles 1 through 4, and Title 18, Chapter 11, Article 4 of the Arizona Administrative Code. Any permit non-compliance constitutes a violation and is grounds for an enforcement action pursuant to Title 49, Chapter 2, Article 4 or permit amendment, suspension, or revocation.

6.3. Duty to Provide Information

[A.R.S. §§ 49-243(K)(2) and 49-243(K)(8)]

The permittee shall furnish to the Director, or an authorized representative, within a time specified, any information which the Director may request to determine whether cause exists for amending or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

6.4. Compliance with Aquifer Water Quality Standards

[A.R.S. §§ 49-243(B)(2) and 49-243(B)(3)]

The permittee shall not cause or contribute to a violation of an Aquifer Water Quality Standard (AWQS) at the applicable point of compliance (POC) for the facility. Where, at the time of issuance of the permit, an aquifer already exceeds an AWQS for a pollutant, the permittee shall not discharge that pollutant so as to further degrade, at the applicable point of compliance for the facility, the water quality of any aquifer for that pollutant.

6.5. Technical and Financial Capability

[A.R.S. §§ 49-243(K)(8) and 49-243(N) and A.A.C. R18-9-A202(B) and R18-9-A203(E) and (F)]

The permittee shall have and maintain the technical and financial capability necessary to fully carry out the terms and conditions of this permit. Any bond, insurance policy, trust fund, or other financial assurance mechanism provided as a demonstration of financial capability in the permit application, pursuant to A.A.C. R18-9-A203(C), shall be in effect prior to any discharge authorized by this permit and shall remain in effect for the duration of the permit.

6.6. Reporting of Bankruptcy or Environmental Enforcement

[A.A.C. R18-9-A207(C)]

The permittee shall notify the Director within five days after the occurrence of any one of the following:

1. the filing of bankruptcy by the permittee; or
2. the entry of any order or judgment not issued by the Director against the permittee for the enforcement of any environmental protection statute or rule.

6.7. Monitoring and Records

[A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A206]

The permittee shall conduct any monitoring activity necessary to assure compliance with this permit, with the applicable water quality standards established pursuant to A.R.S. §§ 49-221 and 49-223 and §§ 49-241 through 49-252.

6.8. Inspection and Entry

[A.R.S. §§ 49-1009, 49-203(B), and 49-243(K)(8)]

In accordance with A.R.S. §§ 41-1009 and 49-203(B), the permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to enter and inspect the facility as reasonably necessary to ensure compliance with Title 49, Chapter 2, Article 3 of the Arizona Revised Statutes, and Title 18, Chapter 9, Articles 1 through 4 of the Arizona Administrative Code and the terms and conditions of this permit.

6.9. Duty to Modify

[A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A211]

The permittee shall apply for and receive a written amendment before deviating from any of the designs or operational practices authorized by this permit.

6.10. Permit Action: Amendment, Transfer, Suspension, and Revocation

[A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]

This permit may be amended, transferred, suspended, or revoked for cause, under the rules of the Department. The permittee shall notify the Groundwater Protection & Reuse Section in writing within 15 days after any change in the owner or operator of the facility. The notification shall state the permit number, the name of the facility, the date of property transfer, and the name, address, and phone number where the new owner or operator can be reached. The operator shall advise the new owner or operators of the terms of this permit and the need for permit transfer in accordance with the rules.

7.0 ADDITIONAL PERMIT CONDITIONS

7.1. Other Information

[A.R.S. § 49-243(K)(8)]

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, the permittee shall promptly submit the correct facts or information.

7.2. Severability

[A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. The filing of a request by the permittee for a permit action does not stay or suspend the effectiveness of any existing permit condition.

7.3. Permit Transfer

This permit may not be transferred to any other person except after notice to and approval of the transfer by the Department. No transfer shall be approved until the applicant complies with all transfer requirements as specified in A.A.C. R18-9-A212(B) and (C).