

STATE OF ARIZONA
AQUIFER PROTECTION PERMIT NO. P-100225
PLACE ID 6138, LTF 98003
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 Arizona Department of Corrections to operate the ASPC Yuma Wastewater Treatment Plant (WWTP) located at 7125 East Juan Sanchez Boulevard, in the City of San Luis, Yuma County, Arizona, over the groundwater of Yuma in Township 11 S, Range 23 W, Section 8, Gila and Salt River Baseline and Meridian.

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: ASPC Yuma Wastewater Treatment Plant
Facility Address: 7125 East Juan Sanchez Boulevard, San Luis, Arizona
County: Yuma County
Permitted Flow Rate: 1,220,000 gallons per day (1.22 mgd)
Permittee: Arizona Department of Corrections
Permittee Address: Division Director Support Services
1601 West Jefferson Street, Phoenix, Arizona 85007
Facility Contact: Warden Jerry Sternes
Emergency Phone No.: (928) 627 – 1500 Ext 2000
Latitude/Longitude: 32° 29' 24" N / 114° 38' 08" W
Legal Description: Township 11S, Range 23W, Section 8, 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 _____, 20_____

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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 ASPC Yuma Wastewater Treatment Plant (WWTP) (“new WWTP”), with an average daily maximum monthly flow (ADMMF) of 1,220,000 gallons per day (1.22 million gallons per day). Of the 1.22 mgd, 0.87 mgd may be domestic wastewater from the prison and up to 0.35 mgd may be evaporative cooler system blowdown water. The Department has graded this facility as a Grade 3 wastewater treatment plant. The facility shall have an operator in direct responsible charge who is certified for the grade of the facility and inspects the facility “Daily” for a Grade 3 WWTP¹.

The ASPC Yuma WWTP process consists of headworks with mechanical and manually cleaned screens, two aerobic basins with anoxic and aeration zones, two secondary clarifiers, chlorine disinfection using sodium hypochlorite and two aerobic digesters. The effluent from the new WWTP will be discharged to a lined storage pond (blended wastewater storage pond #1).

The former lagoon WWTP (herein referred to as “old WWTP”) operated with five settling basins and five aeration lagoons, a chlorine contact basin, two percolation ponds and effluent storage pond #1 (herein referred to as “blended wastewater storage pond #1”). The first settling basins and five aeration lagoons from old WWTP were converted to effluent storage ponds as part of a clean closure under LTF 53437. When the new WWTP was put into operation, use of the old WWTP settling basins and lagoons changed to eight blended wastewater storage ponds #2 through #9 under separate cover and two sludge aerobic digester ponds #1 and #2. The two original percolation ponds (herein referred to as blended wastewater percolation ponds #1 and #2) continue to operate as percolation ponds in the new WWTP. Four additional percolation basins were then constructed (blended wastewater percolation ponds #3 through #6) as part of the new WWTP. All remaining features of the old WWTP are now considered to be part of the new WWTP. The WWTP is designed and constructed according to plans approved by ADEQ.

The permittee is authorized to discharge 0.31 mgd of reject water from the reverse osmosis (RO) water treatment plant to blended wastewater storage pond #1. The facility will be blending up to 0.31 mgd of RO reject water with up to 1.22 mgd of effluent in blended wastewater storage pond #1. The total blended wastewater flow to be discharged from this pond is 1.53 mgd. Blended wastewater may also be discharged for reuse under a valid reclaimed water permit under A.A.C. R18-9, Article 7. The facility maintains a separate Individual Industrial Reclaimed Water Permit, R100225, for the discharge of blended wastewater for application to irrigated pasture and prison landscaped areas located on the prison property. The permittee may also discharge blended wastewater to the six blended wastewater percolation ponds under this Individual APP.

Sludge from the clarifiers shall be digested in the sludge aerobic digester ponds #1 and #2. Treated sludge meeting B quality biosolids will be land applied on-site on pasture land. Waste sludge may be disposed of in a state-approved landfill.

The depth-to-groundwater is approximately 110-130 feet below ground surface (bgs) at the WWTP and the direction of groundwater flow is generally to the south.

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:

¹ Daily = seven days a week. In the absence of the operator in direct responsible charge, the operator in charge of the facility is certified for the applicable class of facility and at a grade no lower than one grade below the grade of the facility.

Table 1: DISCHARGING FACILITIES		
Facility	Latitude	Longitude
Old Wastewater Treatment Plant	32° 29' 24.09"N	114° 38' 07.90"W
New Wastewater Treatment Plant	32° 29' 24.09"N	114° 38' 07.90"W
Blended Wastewater Percolation Pond #1	32° 29' 26.17"N	114° 38' 05.14"W
Blended Wastewater Percolation Pond #2	32° 29' 27.40"N	114° 38' 05.10"W
Blended Wastewater Percolation Pond #3	32° 29' 29.59"N	114° 38' 05.08"W
Blended Wastewater Percolation Pond #4	32° 29' 29.62"N	114° 38' 03.03"W
Blended Wastewater Percolation Pond #5	32° 29' 31.41"N	114° 38' 05.18"W
Blended Wastewater Percolation Pond #6	32° 29' 31.45"N	114° 38' 03.16"W
Blended Wastewater Storage Pond #1	32° 29' 28.86"N	114° 38' 09.32"W
Blended Wastewater Storage Pond #2	32° 29' 27.26"N	114° 38' 13.05"W
Blended Wastewater Storage Pond #3	32° 29' 26.14"N	114° 38' 13.10"W
Blended Wastewater Storage Pond #4	32° 29' 27.25"N	114° 38' 11.86"W
Blended Wastewater Storage Pond #5	32° 29' 26.17"N	114° 38' 11.88"W
Blended Wastewater Storage Pond #6	32° 29' 27.27"N	114° 38' 10.37"W
Blended Wastewater Storage Pond #7	32° 29' 26.15"N	114° 38' 10.39"W
Blended Wastewater Storage Pond #8	32° 29' 27.24"N	114° 38' 09.13"W
Blended Wastewater Storage Pond #9	32° 29' 26.10"N	114° 38' 09.07"W
Sludge Aerobic Digester Pond #1	32° 29' 26.12"N	114° 38' 07.80"W
Sludge Aerobic Digester Pond #2	32° 29' 27.21"N	114° 38' 07.83"W

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 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 \$1,280,100. The financial capability was demonstrated through A.A.C. R18-9-A203(B)(1)and(2).

2.2. BEST AVAILABLE DEMONSTRATED CONTROL TECHNOLOGY (BADCT)

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

The new WWTP 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 RO reject water, not to exceed 0.31 mgd ADMMF, from the ASPC Yuma drinking water treatment plant, may be mixed with a maximum of 1.22 mgd ADMMF of effluent from the wastewater treatment plant. The maximum discharge limit of the combined effluent and RO reject water (blended wastewater) is 1.53 mgd ADMMF. The blended wastewater shall be required to meet the discharge limitations in Section 4.2, Table 8: ROUTINE DISCHARGE MONITORING - Blended Wastewater, prior to discharge. The blended wastewater percolation ponds shall be graded, scarified and maintained to provide sufficient percolation and disposal of blended wastewater.

The facility shall meet the performance requirement for industrial pre-treatment as per A.A.C. R18-9-B204(B)(6)(b).

2.2.1. Engineering Design

The applicant has demonstrated the technical competence necessary to carry out the terms and conditions of the permit in accordance with A.R.S. § 49-243(N) and A.A.C. R18-9-A202 (B).

The new WWTP was designed per the design report prepared and stamped, dated, and signed (sealed) by Andrew C. Gilmore, P.E. (Professional Engineer), Carollo Engineers, PC dated February 9, 2009 and subsequent sealed submittals that served as additions to the design report.

This facility has provided setback distance of 1000 feet for 1.22 mgd flow, and meets the required setback distance of 1000 feet for a facility with no odor, noise and aesthetic controls.

2.2.2. Site-Specific Characteristics

Site specific characteristics were not used to determine BADCT.

2.2.3. Pre-Operational Requirements

Not applicable.

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 14: FACILITY INSPECTION AND OPERATIONAL MONITORING

2.2.5. Reclaimed Water Classification

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

The entire WWTP is classified for Class B+ reclaimed water. Class B+ reclaimed water may be used for any allowable Class B or C use under a valid reclaimed water permit under A.A.C. R18-9, Article 7.

The WWTP discharges blended wastewater (Class B+ reclaimed water mixed with RO reject water) under Individual Industrial Reclaimed Water Permit No. R100225. Monitoring requirements from Individual Reclaimed Water Permit No. R100225 are included in Section 4.2, Table 9: INDUSTRIAL RECLAIMED WATER MONITORING.

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 new WWTP with a flow limit of 1.22 mgd (monthly average of daily flow values) (see Section 4.2, Table 7). All remaining features of the old WWTP are now considered to be part of the new WWTP.
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 7: ROUTINE DISCHARGE MONITORING - New WWTP, Table 8: ROUTINE DISCHARGE MONITORING - Blended Wastewater, Table 10: RO REJECT WATER QUALITY DISCHARGE MONITORING, and Table 11: ROUTINE DISCHARGE MONITORING - Blended Wastewater Storage Ponds.

2.3.1. Holding Capacity and Freeboard

A freeboard of two feet shall be maintained in all ponds at all times. The lined storage ponds shall be designed for a total maximum design holding capacity 4.7 million gallons with two feet of freeboard and occupy a surface area of 2.41 acres. Percolation ponds have a storage capacity of 2.58 million gallons with two feet of freeboard and a surface area of 4.3 acres. Total storage capacity of all ponds is 7.28 million gallons.

Storage pond maintenance and percolation pond maintenance shall be performed on a regular basis to maintain the blended wastewater holding capacity during all seasons and to maintain the percolation rate during all seasons. The condition of these ponds shall be reported annually (see Section 2.7.4.2) to ensure that the design capacity of the storage ponds and the percolation capacity of the percolation ponds is not exceeded.

2.3.2. Pond Maintenance

The permittee shall maintain the RO reject water pipeline and the blended wastewater ponds to the maximum extent practical to ensure that there are no unreasonable pipeline leaks or breaks, no excessive corrosion, liner failures, uncontrollable leaks, overtopping, berm breaches, accidental spills, or other unauthorized discharges into the environment. In the event of an unauthorized discharge or accidental spill, the permittee shall initiate the contingency requirements as described in Section 2.6.3 (Discharge Limit Violations). Flow monitoring equipment and pond depth measuring equipment shall be maintained to ensure accurate pond depths, flow monitoring, and reporting of discharges from the ponds.

2.3.3. Direct Reuse of Industrial Wastewater

Authorization for direct reuse of the industrial wastewater for beneficial purposes is maintained under Individual Industrial Reclaimed Water Permit (#R100225). Flow monitoring shall be conducted according to Section 4.2, Table 9.

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	Longitude
1	MW #1 [ADWR Well #55-911218] Located south of the percolation ponds	32° 29 '21.92" N	114° 38' 6.24"W

The depth-to-groundwater is approximately 110-130 feet below ground surface (bgs), and the direction of groundwater flow is to the generally to the south

Groundwater monitoring is required at the POC well (see Table 12).

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.

2.4.1. Upgradient Groundwater Monitoring

Groundwater monitoring at an upgradient monitoring well is required to monitor groundwater quality (see Table 13).

Table 3: UPGRAIDENT MONITORING WELLS			
MW #	POC Location	Latitude	Longitude
2	MW #2 [ADWR Well #55-219714] Located north of the percolation ponds	32° 29' 38.48" N	114° 38' 04.16"W

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

Not Applicable

2.5.2. Routine Discharge Monitoring

The permittee shall monitor the wastewater from the new WWTP according to Section 4.2 Table 7; Table 8 is for monitoring the blended wastewater (effluent/RO reject water); Table 9 is for monitoring the Industrial Reclaimed Water flow; Table 10 is for monitoring the RO reject water; and Table 11 is for monitoring the blended wastewater storage ponds.

2.5.3. Reclaimed Water Monitoring

Upon initiating use of industrial reclaimed water under a valid industrial reclaimed water permit, the permittee shall monitor the reclaimed water flow listed under Section 4.2, Table 9. Flow shall be measured at the reuse meter at the outflow structure at the point of discharge from blended wastewater storage pond #1. Reclaimed water quality monitoring is included in the individual industrial reclaimed water permit (#R100225).

The permittee shall monitor the reclaimed water according to Section 4.2, Table 9: INDUSTRIAL RECLAIMED WATER MONITORING in addition to the routine discharge monitoring parameters listed in Table 7: ROUTINE DISCHARGE MONITORING - New WWTP, Table 8: ROUTINE DISCHARGE MONITORING - Blended Wastewater, Table 10: RO REJECT WATER QUALITY DISCHARGE MONITORING, and Table 11: ROUTINE DISCHARGE MONITORING - Blended Wastewater Storage Ponds. Representative samples of the reclaimed water shall be collected at the point of discharge from the effluent pump station.

2.5.4. Facility / Operational Monitoring

Operational monitoring inspections shall be conducted according to Section 4.2, Table 14: 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

Groundwater monitoring is required at the POC (MW #1) as indicated in Table 12, and at an up-gradient monitoring well (MW #2) as indicated in Table 13. This monitoring is required to track upgradient ambient groundwater conditions, support setting AQLs and ALs in the POC well, and to determine whether future potential detections of TDS and other pollutants are caused by the facility or from other sources. Reserved groundwater monitoring parameters in Table 12 shall be established in the future based on the results of on-going groundwater monitoring.

The blended wastewater shall meet an interim total dissolved solids (TDS) concentration which protects downgradient uses of the aquifer. The interim TDS limit was established based on a hydrological study conducted by the applicant which employed a fate and transport model to evaluate long-term (20- and 40-year model runs) effects of 1.53 mgd discharges from the ASPC Yuma WWTP.

Groundwater monitoring parameters can be found in Section 4.2, Table 12: GROUNDWATER MONITORING – MW# 1 and Table 13: GROUNDWATER MONITORING – MW# 2.

Static water levels shall be measured and recorded prior to sampling. Wells shall be purged of at least three borehole volumes (as calculated using the static water level) or until field parameters (pH, temperature, conductivity) are stable, whichever represents the greater volume. If evacuation results in the well going dry, the well shall be allowed to recover to 80 percent of the original borehole volume, or for 24 hours, whichever is shorter, prior to sampling. If after 24 hours there is not sufficient water for sampling, the well shall be recorded as “dry” for the monitoring event. An explanation for reduced pumping volumes, a record of the volume pumped, and modified sampling procedures shall be reported and submitted with the SMRF.

2.5.5.1. POC and Upgradient Monitoring Well Replacement

In the event that one or more of the designated POC or upgradient wells should become unusable or inaccessible due to damage, insufficient water in the well(s) for more than two (2) sampling events, or any other event, a replacement well shall be constructed and installed upon approval of location and design by ADEQ. If the replacement well is fifty feet or less from the original well, the ALs and AQLs established for the previously designated POC well shall apply to the replacement well.

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
150 North 18th Avenue
Phoenix, Arizona 85007
Phone: (602) 542-1025

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 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 and R18-9-A205]

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 AL exceedance, or violation of an AQL, 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 an AQL or 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, AQL 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 14: 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 14: FACILITY INSPECTION AND OPERATIONAL MONITORING has been exceeded the permittee shall:

1. Notify the Groundwater Section within five (5) days of becoming aware of the exceedance per Section 2.7.5.

2. Submit a written report to the Groundwater 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 7: ROUTINE DISCHARGE MONITORING - New WWTP, Table 8: ROUTINE DISCHARGE MONITORING - Blended Wastewater, Table 10: RO REJECT WATER QUALITY DISCHARGE MONITORING, and Table 11: ROUTINE DISCHARGE MONITORING - Blended Wastewater Storage Ponds 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 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 DISCHARGE MONITORING - New WWTP, Table 8: ROUTINE DISCHARGE MONITORING - Blended Wastewater, or Table 10: RO REJECT WATER QUALITY DISCHARGE MONITORING has

been exceeded, the permittee shall submit an application to the Groundwater 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. If freeboard requirements for the blended wastewater percolation ponds as shown in Section 4.2 Table 14: FACILITY INSPECTION AND OPERATIONAL MONITORING are exceeded, the permittee shall submit an application for an APP amendment to expand the WWTP blended wastewater percolation ponds or submit a report detailing the reasons that expansion is not necessary. Acceptance of the report instead of an application for expansion requires ADEQ approval.

2.6.2.3. Exceeding Alert Levels for Wastewater Containment Structure Monitoring

If any operational level set in Section 4.2, Table 14: FACILITY INSPECTION AND OPERATIONAL MONITORING, has been exceeded, the permittee shall within 5 (five) days of exceedance implement a corrective action plan which proposes the following as applicable:

1. Actions to reduce or cease discharge to the holding pond;
2. Implementing necessary repair or maintenance works on structures or equipment to restore it to proper operational or working conditions;
3. Clearing up the holding pond and its vicinity of any excessive growth of vegetation which may cause cracks or damage to the pollutant control structures; and
4. A log of all repair works shall be maintained on site for inspection by the ADEQ.

2.6.2.4. Exceeding of Alert Levels for Total Dissolved Solids

If an AL for Total Dissolved Solids (TDS) concentration exceeds the AL of the interim ambient TDS level of 1450 mg/l in Section 4.2, Table 11: ROUTINE DISCHARGE MONITORING - Blended Wastewater Storage Ponds, the facility shall notify the Department within five days of the AL exceedance and provide a plan and schedule of work within 15 days to reduce the AL exceedance for TDS to a level that can be maintained under the 1450 mg/l (Table 11) alert level for this facility. If necessary, provide a plan to change the delivery of the RO reject water rates, volumes or levels to manageable levels or provide a different method for handling the RO reject water.

2.6.2.5. Exceeding of Alert Levels in Groundwater Monitoring

Not applicable. At permit issuance groundwater monitoring is required for the purpose of acquiring ambient groundwater data; no ALs have been established.

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

The blended effluent must meet an interim total dissolved solids (TDS) concentration which protects downgradient uses of the aquifer. The interim TDS limit was established based on a hydrological study conducted by the applicant which employed a fate and transport model to evaluate long-term (20- and 40-year model runs) effects of 1.53 mgd discharges from the WWTP.

Ten years of TDS data has been collected for MW-1 (POC well), which ranges from 1,100 mg/L to 1,500 mg/L (monthly sampling).

2.6.2.5.2. Alert Level for Groundwater Level

Not applicable

2.6.3. Discharge Limit Violation

1. If a DL set in Section 4.2, Table 7: ROUTINE DISCHARGE MONITORING - New WWTP, Table 8: ROUTINE DISCHARGE MONITORING - Blended Wastewater, Table 10: RO REJECT WATER QUALITY DISCHARGE MONITORING, Table 11: ROUTINE DISCHARGE MONITORING - Blended Wastewater Storage Ponds, or Table 9: INDUSTRIAL RECLAIMED WATER 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 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. The permittee shall comply with the freeboard requirements as specified in Section 4.2, Table 14: FACILITY INSPECTION AND OPERATIONAL MONITORING to prevent the overtopping of an impoundment or aerobic digester. If an impoundment or aerobic digester is overtopped, the permittee shall follow the requirements in Section 2.6.5.3 and the reporting requirements of Section 2.7.3.
3. Immediately upon exceeding the TDS DL of 1,500 mg/l for Blended Wastewater Storage Pond No. 1, the RO reject water delivery to this pond shall cease entirely until the TDS concentration in the pond is returned to a level of 1,450 mg/l or lower.

Within 24 hours of a TDS concentration higher than 1,500 mg/l and ceasing the delivery to the storage pond, the facility shall send a written report to the ADEQ Water Quality Compliance Section describing the conditions and actions that have occurred. If RO reject water is still being produced, the permittee shall provide the bills of lading for hauling and the locations of the delivery of the RO reject water off site.

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, ceasing of the discharge of RO reject water to Blended Wastewater Storage Pond #1, or other actions in view of this preliminary exceedance.

2.6.4. Aquifer Quality Limit Violation

Not applicable. At permit issuance groundwater monitoring is required for the purpose of acquiring ambient groundwater data; no AQLs have been established.

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, on persons who may have been exposed during the incident. The permittee shall notify the Groundwater Section within 24 hours of discovering the discharge of hazardous material which (a) has the potential to cause an AWQS or AQL 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 Section within 24 hours of discovering the discharge of non-hazardous material which has the potential to cause an AQL or 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 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 Section prior to implementing a corrective action to accomplish any of the following goals in response to exceedance of an AL, AQL, 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 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 Section.
3. The tables contained in Section 4.0 list the monitoring parameters and the frequencies for reporting results on the SMRF. Monitoring and analytical methods shall be recorded on the SMRF.
 - a. Table 7: ROUTINE DISCHARGE MONITORING - New WWTP
 - b. Table 8: ROUTINE DISCHARGE MONITORING - Blended Wastewater
 - c. Table 9: INDUSTRIAL RECLAIMED WATER MONITORING
 - d. Table 10: RO REJECT WATER QUALITY DISCHARGE MONITORING
 - e. Table 11: ROUTINE DISCHARGE MONITORING - Blended Wastewater Storage Ponds
 - f. Table 12: GROUNDWATER MONITORING – MW# 1
 - g. Table 13: GROUNDWATER MONITORING – MW# 2
 - h. Table 14: FACILITY INSPECTION AND OPERATIONAL MONITORING
4. In addition to the SMRF, the information contained in A.A.C. R18-9-A206(B)(1) shall be included for exceeding an AL or violation of an AQL, DL, or any other permit condition being reported in the current reporting period.

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. "Daily" for a Grade 3 WWTP operator in direct responsible charge site visit sign-in to comply with R18-5-104.

2.7.3. Permit Violation and Alert Level Status Reporting

1. The permittee shall notify the Groundwater 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, AQL, 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 Section per Section 2.7.5 within thirty (30) days of becoming aware of the violation of any permit condition, AQL, 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 14: FACILITY INSPECTION AND OPERATIONAL MONITORING in the facility log book as per Section 2.7.2, and report to the Groundwater 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.

2.7.4.1. Annual Operation and Management

The permittee shall submit on an annual basis the following reports:

1. Management of Disposal Volumes
 - a. Report previous year's disposal volumes of effluent, RO reject water, and blended wastewater for each month and explain the seasonal and annual differences.

- b. Based upon management forecasts (anticipated prison populations, etc.) for the coming year, plus equipment condition and efficiency at the time of reporting, provide the projected monthly disposal volumes for the coming year for the blended wastewater storage ponds, blended wastewater percolation ponds, and reuse of industrial reclaimed water. Report any changes in disposal volumes, planned or otherwise, or that occurred in the previous year, the reasons for those changes, and reasons for the projected changes in the future year(s). Describe actual efficiency of the present disposal operations as related to the planned efficiency of the original plans for the quantities of effluent and reject water originally designed for disposal.
 - c. Report any exceedances of flow volumes, the causes, and the containment procedures enacted to prevent these occurrences. Report any reoccurring problems and provide a recommendation for the solution of these problems. That recommendation should include a description of the work necessary to solve the problem, the cost of enacting the solution, and a possible scheduled timeframe it would take to accomplish the solution.
2. Management of Percolation Rates
- a. Basin percolation quantities and calculated percolation rates per month of past years operation(s) shall be reported per pond and per month, so individual pond problems can be isolated, recognized, described and managed. Provide major anion/cation analytical results compared over the past year of this permit for the RO reject water stream (Table 10), the effluent stream (Table 7), the blended wastewater stream (Table 8) and the annual blended wastewater storage pond sampling (Table 11).
 - b. Based upon past performance and/or described improved performance, provide the projected quantities and qualities of percolation waters and rates of percolation for the coming year. Report any changes to percolation rates or volumes, planned or otherwise, that occurred in the previous year, or that are anticipated for the future year. Percolation rates for blended wastewater percolation pond(s) shall be compared to past percolation rates over the life of this facility.
 - c. Provide projected costs for accomplishing any improvements and the expected results of those improvements.
3. Management of Blended Wastewater Production
- a. Report volumes of monthly blended effluent produced for the previous year.
 - b. Project monthly changes for the coming year based upon management decisions, RO unit efficiency, seasonal usage, and WWTP efficiency. Note any changes in the quality of the effluent over time. Please note that when the effluent production is at or near the design limit, that additions or subtractions to the prison population should require a new annual report.
 - c. Projected costs for improvements in the volumes or quality of the effluent and the expected results of those changes.
4. Management of Reject Water Volumes
- a. Report the current year's monthly RO reject water volumes received for disposal. Include RO reject water major anion/cation sampling analytical annual results compared over the life of this permit for the RO reject water stream (Table 10), and the annual blended wastewater storage pond sampling (Table 11).
 - b. Project next year's planned reject water monthly quantities and qualities based upon projected monthly water treatment needs per population or other uses. Provide a statement from the Water Treatment Department at the Yuma Prison describing the efficiency of the RO unit's operations for the previous year and the projected efficiency of operations for the coming year based upon the design and usage for the plant's operations. Report any changes of the quantities or qualities, planned or otherwise, that occurred in the past year, or that are anticipated or projected for the future year.
 - c. Project costs for improvements in the volumes or quality which are necessary for the coming year and the expected results of those changes.

- d. Report any actions needed to maintain a balance between production and disposal of both reject water and effluent. Describe the specific actions and conditions needed to solve the problem and an estimate of the cost of carrying out those actions.
5. Management of Groundwater Quality
 - a. Provide any water quality changes /effect(s) that may have occurred in groundwater as the result of discharge of the blended wastewater, over the past year and for the life of the permit, for any parameters listed in Section 4.2, Table 12.
 - b. Describe any water quality changes/effects from upgradient sources (including other area sources), including direction of flow, depth of water levels, and changes in monitored pollutants, which could have any effect on the groundwater under the facility.
 - c. Relate any changes to any known differences in the upgradient groundwater and/or the differences in the blended wastewater injected into the aquifer.
 - d. Provide a plan to prevent Aquifer Water Quality Standard violations and/or any further degradation of aquifer water quality. Describe the specific actions and conditions needed to solve the problem, an estimate of the cost of carrying out those actions and a projected cost to solve those problems.
 6. Updated O&M Manual

The annual reports should indicate whether the operations prescribed in the O&M manual are providing or adequately maintaining the disposal of RO reject water and effluent in the originally designed manner, and that the disposal capabilities are maintained or adequate for next year's operations. Adequately maintaining involves, but is not limited to, the following examples: (1) maintaining scarification of the recharge ponds, removing clogging materials from the basins, and when necessary, building a new recharge pond to provide for adequate percolation quantities to maintain the designed disposal capacity; (2) providing an adequate amount of reuse to optimally dispose of the designed quantities of blended wastewater through all seasons, balanced with blended wastewater percolation pond disposal. Or, if necessary, corrected O&M procedures will be provided in the report that would lead to the restoration of safe disposal operations. If the latter is the case, the report should state what actions will take place, along with a compliance schedule to correct any deficiencies as the planned actions to meet the needs of the system. If the permit contingencies need to be changed and placed in the permit to rectify problems that could cause violations to the permit conditions or danger to the environment or human health, the permittee shall submit an application for a permit amendment to change those contingencies or permitted procedures.

2.7.5. Reporting Location

All Self-Monitoring Report Forms (SMRFs) shall be submitted through the myDEQ portal accessible on the ADEQ website at: <http://www.azdeq.gov/welcome-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: <http://www.azdeq.gov/welcome-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 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 4: 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 5: (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 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 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 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 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 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 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 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 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 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 Section per Section 2.7.5.

Table 6: COMPLIANCE SCHEDULE ITEMS			
No.	Description	Due By:	Permit Amendment Required?
1	The permittee shall provide an Annual Operation and Management Report per the requirements found in Section 2.7.4.2.	June 1, 2024, and annually thereafter	No
2	The permittee shall submit an operations and maintenance plan for the upgraded chlorination equipment. The plan shall include equipment calibration and maintenance instructions plus contingency actions to address TTHM exceedances.	No more than 60 days after permit issuance	No
3	The permittee shall submit documentation that the upgraded chlorination equipment has been properly installed and calibrated.	No more than 60 days after permit issuance	No

4.0 TABLES OF MONITORING REQUIREMENTS

4.1. PRE-OPERATIONAL MONITORING (OR CONSTRUCTION REQUIREMENTS)

Not applicable.

4.2. COMPLIANCE OR OPERATIONAL MONITORING

Table 7: ROUTINE DISCHARGE MONITORING² - New WWTP

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
1	WWTP Effluent Inflow Structure to Blended Wastewater Storage Pond #1			33° 29' 30"	114° 38' 7"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
pH (field)	Monitor ³	Monitor	SU ⁴	Quarterly	Quarterly
Total Flow ⁵ : Daily ⁶	Not Applicable ⁷	Not Applicable	mgd ⁸	Daily	Quarterly
Total Flow: Monthly Average ⁹	1.16	1.22 ¹⁰	mgd	Monthly Calculation	Quarterly
Fecal Coliform: Single sample maximum	Not Applicable	23.0	CFU ¹¹	Daily ¹²	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week ¹³	Not Applicable	Non-detect ¹⁴	CFU	Weekly Evaluation	Quarterly
Total Nitrogen ¹⁵ : Five-sample rolling geometric mean ¹⁶	8	10	mg/l ¹⁷	Monthly Calculation	Quarterly
Total Dissolved Solids (TDS)	Monitor	Monitor	mg/l	Quarterly	Quarterly
Cyanide (as free cyanide)	0.16	0.2	mg/l	Annual	Annual
Fluoride	3.2	4.0	mg/l	Annual	Annual
Metals (Total)					
Antimony	0.0048	0.006	mg/l	Semi-annually	Semi-annually
Arsenic	0.04	0.05	mg/l	Semi-annually	Semi-annually
Barium	1.60	2.00	mg/l	Semi-annually	Semi-annually
Beryllium	0.0032	0.004	mg/l	Semi-annually	Semi-annually
Cadmium	0.004	0.005	mg/l	Semi-annually	Semi-annually
Chromium	0.08	0.1	mg/l	Semi-annually	Semi-annually
Lead	0.04	0.05	mg/l	Semi-annually	Semi-annually
Mercury	0.0016	0.002	mg/l	Semi-annually	Semi-annually
Nickel	0.08	0.1	mg/l	Semi-annually	Semi-annually
Selenium	0.04	0.05	mg/l	Semi-annually	Semi-annually
Thallium	0.0016	0.002	mg/l	Semi-annually	Semi-annually
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

Table 7: ROUTINE DISCHARGE MONITORING² - New WWTP

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
1	WWTP Effluent Inflow Structure to Blended Wastewater Storage Pond #1			33° 29' 30"	114° 38' 7"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
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	1.0	mg/l	Semi-annually	Semi-annually
Trihalomethanes (total) ¹⁸	0.08	0.1	mg/l	Monthly	Quarterly
1,1,1-Trichloroethane	0.16	0.2	mg/l	Semi-annually	Semi-annually
1,2,4 - Trichlorobenzene	0.056	0.07	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)	8.0	10.0	mg/l	Semi-annually	Semi-annually

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 (40 CFR § 98.354.e).

³ Monitoring required, but no limits established.

⁴ Standard Units

⁵ Total flow for all methods of disposal (reuse and recharge)

⁶ Total Daily Flow shall be measured using a continuous recording flow meter that totals the flows daily.

⁷ Not Applicable means that monitoring is required, but no limits have been specified at the time of permit issuance

⁸ mgd = million gallons per day

⁹ Monthly Average means the calculated average of daily flow values in a month

¹⁰ Total may contain up to 0.87 mgd of domestic sewage effluent, and up to 0.35 mgd of cooling system blow-down water.

¹¹ CFU = Colony Forming Units / 100 ml sample. For CFU, a value of <1.0 shall be considered to be non-detect.

¹² For fecal coliform, "daily" sampling means every day in which a sample can practically be obtained and delivered in sufficient time for proper analysis, provided that no less than four samples in each week are obtained and analyzed

¹³ 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

¹⁴ Fecal coliform 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 fecal coliform results are non-detect, report "Non-compliance" for that week's entry on the SMRF

¹⁵ Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

¹⁶ 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: $GM_5 = \sqrt[5]{(m_1)(m_2)(m_3)(m_4)(m_5)}$

¹⁷ mg/l = milligrams per liter

¹⁸ Total Trihalomethanes are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

Table 8: ROUTINE DISCHARGE MONITORING¹⁹ - Blended Wastewater²⁰

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
2	Parshall flume located at the outflow structure from blended wastewater storage pond #1 immediately upstream of the blended wastewater percolation ponds			33° 29' 30"	114° 38' 07"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
pH (field)	Monitor ²¹	Monitor	SU ²²	Quarterly	Quarterly
Specific Conductivity (field)	Monitor	Monitor	µmhos/cm	Annual	Annual
Total Flow ²³ : Daily ²⁴	Not Applicable ²⁵	Not Applicable	mgd ²⁶	Daily	Quarterly
Total Flow: Monthly Average ²⁷	1.16	1.22 ²⁸	mgd	Monthly Calculation	Quarterly
Flow – Percolation Ponds: Daily	Monitor	Monitor	mgd	Daily	Quarterly
Flow – Percolation Ponds: Monthly Average	1.45	1.53	mgd	Monthly Calculation	Quarterly
Fecal Coliform: Single sample maximum	Not Applicable	800	CFU ²⁹	Daily ³⁰	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week ³¹	Not Applicable	200 ³²	CFU	Weekly Evaluation	Quarterly
Total Nitrogen ³³ : Five-sample rolling geometric mean ³⁴	8	10	mg/l ³⁵	Monthly Calculation	Quarterly
Alkalinity	Monitor	Monitor	mg/l	Annual	Annual
Hydroxide	Monitor	Monitor	mg/l	Annual	Annual
Sulfate	Monitor	Monitor	mg/l	Annual	Annual
Total Dissolved Solids (TDS)	1450	1500	mg/l	Weekly	Quarterly
Total Organic Carbon	Monitor	Monitor	mg/l	Annual	Annual
Chloride	Monitor	Monitor	mg/l	Annual	Annual
Cyanide (as free cyanide)	0.16	0.2	mg/l	Annual	Annual
Fluoride	3.2	4.0	mg/l	Annual	Annual
Metals (Total)					
Antimony	0.0048	0.006	mg/l	Semi-annually	Semi-annually
Arsenic	0.04	0.05	mg/l	Semi-annually	Semi-annually
Barium	1.60	2.00	mg/l	Semi-annually	Semi-annually
Beryllium	0.0032	0.004	mg/l	Semi-annually	Semi-annually
Calcium	Monitor	Monitor	mg/l	Semi-annually	Semi-annually
Cadmium	0.004	0.005	mg/l	Semi-annually	Semi-annually
Chromium	0.08	0.1	mg/l	Semi-annually	Semi-annually
Iron	Monitor	Monitor	mg/l	Semi-annually	Semi-annually
Lead	0.04	0.05	mg/l	Semi-annually	Semi-annually
Magnesium	Monitor	Monitor	mg/l	Semi-annually	Semi-annually
Manganese	Monitor	Monitor	mg/l	Semi-annually	Semi-annually
Mercury	0.0016	0.002	mg/l	Semi-annually	Semi-annually
Nickel	0.08	0.1	mg/l	Semi-annually	Semi-annually
Potassium	Monitor	Monitor	mg/l	Semi-annually	Semi-annually
Selenium	0.04	0.05	mg/l	Semi-annually	Semi-annually
Sodium	Monitor	Monitor	mg/l	Semi-annually	Semi-annually

¹⁹ 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 (40 CFR § 98.354.e).

²⁰ Blended wastewater = a mixture of WWTP Effluent and RO Reject Water

²¹ Monitoring required, but no limits established.

²² Standard Units

²³ Total flow for all methods of disposal (reuse and recharge)

²⁴ Total Daily Flow shall be measured using a continuous recording flow meter that totals the flows daily.

²⁵ Not Applicable means that monitoring is required, but no limits have been specified at the time of permit issuance

²⁶ mgd = million gallons per day

²⁷ Monthly Average means the calculated average of daily flow values in a month

²⁸ Total may contain up to 0.87 mgd of domestic sewage effluent, and up to 0.35 mgd of cooling system blow-down water.

²⁹ CFU = Colony Forming Units / 100 ml sample. For CFU, a value of <1.0 shall be considered to be non-detect.

³⁰ For fecal coliform, "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

³¹ 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

³² Fecal coliform 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 fecal coliform results are non-detect, report "Non-compliance" for that week's entry on the SMRF

³³ Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

³⁴ 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: $GM_5 = \sqrt[5]{(m_1)(m_2)(m_3)(m_4)(m_5)}$

³⁵ mg/l = milligrams per liter

Table 8: ROUTINE DISCHARGE MONITORING¹⁹ - Blended Wastewater²⁰

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
2	Parshall flume located at the outflow structure from blended wastewater storage pond #1 immediately upstream of the blended wastewater percolation ponds			33° 29' 30"	114° 38' 07"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Thallium	0.0016	0.002	mg/l	Semi-annually	Semi-annually
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	1.0	mg/l	Semi-annually	Semi-annually
Trihalomethanes (total) ³⁶	0.08	0.10	Mg/l	Quarterly	Quarterly
1,1,1-Trichloroethane	0.16	0.2	mg/l	Semi-annually	Semi-annually
1,2,4 - Trichlorobenzene	0.056	0.07	mg/l	Semi-annually	Semi-annually
1,1,2 - Trichloroethane	0.004	0.005	mg/l	Semi-annually	Semi-annually
Vinyl Chloride	0.0016	0.002	mg/l	Semi-annually	Semi-annually
Xylenes (Total)	8.0	10.0	mg/l	Semi-annually	Semi-annually

³⁶ Total Trihalomethanes are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

Table 9: INDUSTRIAL RECLAIMED WATER MONITORING³⁷

Reclaimed water monitoring under Table 9 shall be performed in addition to routine discharge monitoring required under Section 4.2

Sampling Point Number	Sampling Point Identification	Latitude (North)	Longitude (West)	
3	Reuse meter at the outflow structure at the point of discharge from Blended Wastewater Storage Pond #1	32° 29' 28" N	114° 38' 07" W	
Parameter	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Total Industrial Reclaimed Water Flow: Daily	Monitor ³⁸	mgd ³⁹	Daily	Quarterly
Total Industrial Reclaimed Water Flow: Average Monthly	Monitor	mgn ⁴⁰	Monthly	Quarterly
Total Industrial Reclaimed Water Flow: Total Quarterly ⁴¹	Quarter 1: 8.29 Quarter 2: 11.29 Quarter 3: 14.60 Quarter 4: 7.33	mgq ⁴²	Quarterly	Quarterly

³⁷ Monitoring required by Individual Reclaimed Water Permit No. R100225 not contained in other tables

³⁸ Monitoring required but no limits established.

³⁹ MGD = million gallons per day

⁴⁰ MGM = million gallons per month

⁴¹ The quarterly discharge limit for total industrial reclaimed water flow varies by quarter.

⁴² MGQ = million gallons per quarter

Table 10: RO REJECT WATER QUALITY DISCHARGE MONITORING

RO reject water monitoring under Table 10 shall be performed in addition to routine discharge monitoring required under Section 4.2					
Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
4	Point of discharge of RO reject water to Blended Wastewater Storage Pond #1			32° 29' 28.91" N	114° 38' 11.44" W
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
pH (field)	Monitor ⁴³	Monitor	SU ⁴⁴	Monthly	Quarterly
Total Flow ⁴⁵ : Daily ⁴⁶	Not Applicable ⁴⁷	Not Applicable	mgd ⁴⁸	Daily	Quarterly
Total Flow: Monthly Average ⁴⁹	Not Applicable	0.31 ⁵⁰	mgd	Monthly Calculation	Quarterly
Total Dissolved Solids (TDS) ⁵¹	Monitor	Monitor	mg/l	Monthly	Quarterly
Specific Conductivity (field)	Monitor	Monitor	µmhos/cm	Annual	Annual
Total Organic Carbon	Monitor	Monitor	mg/l	Annual	Annual
Alkalinity	Monitor	Monitor	mg/l	Annual	Annual
Hydroxide	Monitor	Monitor	mg/l	Annual	Annual
Chloride	Monitor	Monitor	mg/l	Annual	Annual
Sulfate	Monitor	Monitor	mg/l	Annual	Annual
Metals (Total)					
Antimony	Monitor	Monitor	mg/l	Semi-annually	Semi-annually
Calcium	Monitor	Monitor	mg/l	Semi-annually	Semi-annually
Iron	Monitor	Monitor	mg/l	Semi-annually	Semi-annually
Magnesium	Monitor	Monitor	mg/l	Semi-annually	Semi-annually
Potassium	Monitor	Monitor	mg/l	Semi-annually	Semi-annually
Sodium	Monitor	Monitor	mg/l	Semi-annually	Semi-annually

⁴³ Monitoring required, but no limits established.

⁴⁴ Standard Units

⁴⁵ Total flow for all methods of disposal (Reuse and recharge)

⁴⁶ Total Daily Flow shall be measured using a continuous recording flow meter that totals the flows daily.

⁴⁷ Not Applicable means that monitoring is required, but no limits have been specified at the time of permit issuance

⁴⁸ mgd = million gallons per day

⁴⁹ Monthly Average means the calculated average of daily flow values in a month

⁵⁰ Total of 0.31 mgd of RO reject water may be discharged to blended wastewater storage pond #1.

⁵¹ The AL and DL for interim TDS is based on anticipated values for incorporation of RO reject water into the wastewater blend. The Director reserves the right to establish alternative ALs and DLs for this parameter and to adjust the volume limit of RO reject water into the wastewater blend.

Table 11: ROUTINE DISCHARGE MONITORING⁵² - Blended Wastewater Storage Ponds⁵³

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
5	Blended Wastewater Storage Pond #1			32° 29' 28.82" N	114° 38' 9.54" W
6	Blended Wastewater Storage Pond #2			32° 29' 27.20" N	114° 38' 13.02" W
7	Blended Wastewater Storage Pond #3			32° 29' 26.15" N	114° 38' 13.15" W
8	Blended Wastewater Storage Pond #4			32° 29' 27.20" N	114° 38' 11.83" W
9	Blended Wastewater Storage Pond #5			32° 29' 26.20" N	114° 38' 11.88" W
10	Blended Wastewater Storage Pond #6			32° 29' 27.24" N	114° 38' 10.48" W
11	Blended Wastewater Storage Pond #7			32° 29' 26.13" N	114° 38' 10.43" W
12	Blended Wastewater Storage Pond #8			32° 29' 27.20" N	114° 38' 9.15" W
13	Blended Wastewater Storage Pond #9			32° 29' 26.17" N	114° 38' 9.06" W
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
pH (field)	Monitor ⁵⁴	Monitor	SU ⁵⁵	Annual ⁵⁶	Annual
Specific Conductivity (field)	Monitor	Monitor	µmhos/cm	Annual	Annual
Total Organic Carbon	Monitor	Monitor	mg/l ⁵⁷	Annual	Annual
Total Dissolved Solids (TDS) ⁵⁸	Monitor	Monitor	mg/l	Quarterly	Quarterly
Chloride	Monitor	Monitor	mg/l	Annual	Annual
Sulfate	Monitor	Monitor	mg/l	Annual	Annual
Alkalinity	Monitor	Monitor	mg/l	Annual	Annual
Metals (Total)					
Iron	Monitor	Monitor	mg/l	Annual	Annual
Sodium	Monitor	Monitor	mg/l	Annual	Annual
Potassium	Monitor	Monitor	mg/l	Annual	Annual
Calcium	Monitor	Monitor	mg/l	Annual	Annual
Magnesium	Monitor	Monitor	mg/l	Annual	Annual
Manganese	Monitor	Monitor	mg/l	Annual	Annual

⁵² 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 (40 CFR § 98.354.e).

⁵³ Blended wastewater = a mixture of WWTP Effluent and RO Reject Water

⁵⁴ Monitoring required, but no limits established.

⁵⁵ Standard Units

⁵⁶ Once per year, monitoring shall be performed two months prior to the due date of the annual report as referenced in Section 2.7.4.2.

⁵⁷ mg/l = milligrams per liter

⁵⁸ The AL and DL for interim TDS is based on anticipated values for incorporation of RO reject water into the wastewater blend. The Director reserves the right to establish alternative ALs and DLs for this parameter and to adjust the volume limit of RO reject water into the wastewater blend.

Table 12: GROUNDWATER MONITORING – MW# 1

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
14	MW #1			33° 21' 00"	112° 34' 55"
Parameter	Alert Level	Aquifer Quality Limit	Units	Sampling Frequency	Reporting Frequency
Groundwater Level	Monitor	Monitor	feet bgs ⁵⁹	Annual	Annual
pH (field)	Monitor ⁶⁰	Monitor	SU ⁶¹	Annual ⁶²	Annual
Total Nitrogen ⁶³ :	Reserved ⁶⁴	Reserved	mg/l ⁶⁵	Annual Calculation	Annual
Nitrate-Nitrite as N	Reserved	Reserved	mg/l	Annual Calculation	Annual
Total Coliform	Reserved	Reserved	MPN ⁶⁶	Annual	Annual
Total Dissolved Solids (TDS)	Reserved	Reserved	mg/l	Annual	Annual
Cyanide (as free cyanide)	Reserved	Reserved	mg/l	Annual	Annual
Fluoride	Reserved	Reserved	mg/l	Annual	Annual
Metals (Dissolved)					
Antimony	Reserved	Reserved	mg/l	Annual	Annual
Arsenic	Reserved	Reserved	mg/l	Annual	Annual
Barium	Reserved	Reserved	mg/l	Annual	Annual
Beryllium	Reserved	Reserved	mg/l	Annual	Annual
Cadmium	Reserved	Reserved	mg/l	Annual	Annual
Chromium	Reserved	Reserved	mg/l	Annual	Annual
Lead	Reserved	Reserved	mg/l	Annual	Annual
Mercury	Reserved	Reserved	mg/l	Annual	Annual
Nickel	Reserved	Reserved	mg/l	Annual	Annual
Selenium	Reserved	Reserved	mg/l	Annual	Annual
Thallium	Reserved	Reserved	mg/l	Annual	Annual

Table 13: GROUNDWATER MONITORING – MW# 2

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
15	MW #2			32° 29' 38.48"	114° 38' 4.16"
Parameter	Alert Level	Aquifer Quality Limit	Units	Sampling Frequency	Reporting Frequency
Groundwater Level	Monitor	Monitor	feet bgs ⁶⁷	Annual ⁶⁸	Annual
Total Dissolved Solids (TDS)	Monitor	Monitor	mg/l	Annual	Annual

⁵⁹ bgs = below ground surface

⁶⁰ Monitoring required, but no limits established.

⁶¹ Standard Units

⁶² Once per year, monitoring shall be performed two months prior to the due date of the annual report as referenced in Section 2.7.4.2.

⁶³ Total Nitrogen is the sum of Nitrate as N, Nitrite as N, and Total Kjeldahl Nitrogen (TKN)

⁶⁴ Reserved = Monitoring required, but no limits have been established at permit issuance. Limits shall be established based on groundwater monitoring data.

⁶⁵ Mg/l = milligrams per liter

⁶⁶ MPN = Most Probable Number per 100 ml. For MPN, a value of <2.2 shall be considered to be non-detect

⁶⁷ bgs = below ground surface

⁶⁸ Once per year, monitoring shall be performed two months prior to the due date of the annual report as referenced in Section 2.7.4.2.

Table 14: 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
Pump Integrity	Good working condition	Weekly	See Section 2.7.3
Treatment Plant Components	Good working condition	Weekly	
Pond Berm Integrity	No visible structural damage, breach or erosion of embankment	Weekly	
Pond Freeboard	Two (2) Linear Foot	Weekly	
All Pond Liners	No visible structural damage or tears	Weekly	
All meters used in the discharge of RO Reject water, Effluent, Reclaimed Water and Blended Water.	Calibrated at least annually, or sooner as required by the meter manufacturer's O&M manual.	Annually	
POC and Monitoring Wells	Well cap and seals are intact. No discernable corrosion or deterioration of the well(s). No discernable materials accumulating in the well. Any dedicated well equipment are functional and intact.	Monthly	See Section 2.7.3 and 2.5.5.1

Note: For Pond Freeboard, Pond Liners, and Pond Berm Integrity: In the case of an exceedance, identify which pond exceeded the performance level on the SMRF.

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: 7/13/2023

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 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).

7.4. Prohibited Agency Actions

[A.R.S. § 49-243(K)(8)]

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).