

STATE OF ARIZONA
AQUIFER PROTECTION PERMIT NO. P-101324
PLACE ID 1378 LTF 100261
OTHER 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 City of Goodyear to operate the City of Goodyear 157th Avenue Water Reclamation Facility, located in Goodyear, Arizona, in Maricopa County, over groundwater of the Phoenix Active Management Area in Township 1N, Range 1W, Section 30, SW¹/₄, NE¹/₄, of the 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: City of Goodyear – 157th Avenue Water Reclamation Facility (WRF)
Facility Address: 5424 S 157th Ave
Goodyear, Arizona, 85338
County: Maricopa
Permitted Flow Rate: 7,500,000 gallons per day (gpd)
Permittee: City of Goodyear
Permittee Address: P.O. Box 5100
Goodyear, Arizona 85338
Facility Contact: Louie Gomez
Emergency Phone No.: (623) 204-9184
Latitude/Longitude: 33° 24' 02" N/ 112° 23' 54" W
Legal Description: Township 1N, Range 1W, Section 30, SW¹/₄, NE¹/₄ 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 City of Goodyear - 157th Avenue Water Reclamation Facility (WRF) with a maximum average daily monthly maximum flow of 6.83 million gallons per day (mgd) for Phase 1 re-rating, 7.50 mgd for Phase 2 expansion, and 6.73 mgd for Phase 3 derating after 1.14 mgd of RO brine and backwash flows from Goodyear Water Treatment Facility (GWTF) diversions. The Department has graded this facility as a Grade 4 wastewater treatment plant for all phases. 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 operator¹ and ensures an onsite operator visits the facility daily.

Phase 1 - 6.83 mgd Re-rating: The existing 6 mgd treatment train is being re-rated to 6.83 mgd Phase 1. The Phase 1 treatment process consists of an influent pump station with three (2-duty, 1-standby) 4,500-gpm (60-hp) VFD driven pumps, a headworks with two 6-mm mechanical fine screens (capacity 20-mgd step screen and 13-mgd perforated screen) each equipped with a washer/compactor, a 16-mgd grit chamber/classifier with a bypass channel for maintenance. From the headworks, continues to a Return Activated Sludge (RAS) mixing box before entering three (3) bioreactors for biological treatment, each with six zones. Bioreactor Zone 1 and 5 are anoxic, Zone 2, 3, and 6 are aerated, and Zone 4 is an anoxic zone that has been equipped with a mixer (installed to support Phase 2) to be operated manually as anoxic or aerated, dependent on the WRFs needs. Each bioreactor has two IMLR pumps (both duty, with a shelf spare IMLR pump [minimum of 2 total]), that return mixed liquors from Zone 5 back to Zone 1 for enhanced denitrification. Two 1,800-scfm (150-hp soft start driven), and two 5,100-scfm (350-hp soft start driven) blowers supply air to all three bioreactors. Five rectangular sedimentation basins (2-duty 2,000-sf, 2-duty 3,300-sf, and 1-standby 3,300-sf) provide secondary clarification.

RAS and Waste Activated Sludge (WAS) are removed from the sedimentation basin through a drywell. Three 2,355-gpm (15-hp) RAS pumps are connected to a header to serve all five sedimentation basins and pump to the RAS/influent mixing box located after grit removal and prior to the bioreactors and two 300-gpm (3-hp) WAS pumps, connected to the same header, deliver wasted sludge to two oxidation ditches that have been converted to aerated sludge holding tanks (SHTs) that also receive sludge from the Corgett WRF. A scum pump station with two constant speed 150-gpm (3-hp) submersible pumps also discharge to the converted SHTs. The SHTs are each equipped with 402 diffusers that are supplied air with two 600 scfm (30-hp) blowers, and when the sludge in the SHTs reach a certain level, mechanical rotors help supplement the air and mixing. A sludge pump station with two 925-gpm (10-hp) pumps delivers sludge from the SHTs to one of three (3) centrifuges. The WRF also receives the wasted sludge from the City of Goodyear – Corgett Wash WRF (APP No. P-102424) for treatment and dewatering. The facility has a residual handling tank (converting from a historic reclaimed water storage tank) to store the sludge from City of Goodyear Water Treatment Plant. The repurposed tank is divided into three sections: thickener, equalization basin and mixing/conditioning chamber. The thickened sludge is pumped to the existing centrifuges at the WRF for dewatering. All dewatered and/or dried sludge is hauled off-site for management and disposal in accordance with state and federal regulations.

Three Evoqua disc filter systems (2-duty; 1-standby) each with 15 disks and one Hydrotech disk filter system with 14 disks (installed to support Phase 2), provide tertiary treatment prior to the continuous turbidity sampling point. The effluent is chlorinated using sodium hypochlorite in a chlorine contact basin (CCB) with a stationary mixer for chlorination, and de-chlorinated using sodium bisulfite system. A spray aeration system to minimize TTHM formation is installed above the CCB (utilized as needed). At the end of the CCB is an effluent pump station with three VFD driven 4,200 gpm (250-hp) turbine pumps (2-duty; 1-standby) and a VFD driven 4,200 gpm (250-hp) submersible pump (installed to support Phase 2), that provide 75 PSI to the reclaimed water system. The WRF is classified to produce Class A+ reclaimed water according to A.A.C. R18-11, Article 3. An emergency effluent storage basin is authorized to receive any off-specification effluent from the filters, in lieu of chemical feed facilities required by R18-11-303(A) to ensure that filtered effluent before disinfection complies with the 24-hour average turbidity requirements. This off-specification water will be slowly sent back to headworks of the WRF. A plant drain pump station delivers the decant from sludge thickening, centrate from the centrifuges and filter backwash with two 466-gpm (10-hp) pumps to the headworks for treatment.

Up to 7.5-mgd of effluent may be discharged to the combination of the Gila River (at two different outfalls) or delivered to the Buckeye Irrigation District (BID) canal under AZPDES permit No AZ0022357. Effluent may also be discharged at the City of Goodyear Soil Aquifer Treatment (SAT) site for recharge under APP No. P-511440, which permits the discharge for up to 5.87-mgd, and permits discharge to the Vadose Injection Project wells as needed but not more than 0.13-mgd for a combined total of 6.0-mgd annual average. The City of Goodyear 157th Avenue WRF may accept reclaimed water from Liberty Utilities Palm Valley/Sarival WRFs (APP No P-100310 and No P-513981, respectively) for distribution to reclaimed water customers or discharge to the SAT site. Class A+ reclaimed water from City of Goodyear 157th Avenue WRF and Palm Valley/Sarival WRFs may be beneficially reused under a valid Recycled Water Permit, as per A.A.C. R18-9, Articles 7.

Phase 2 - 7.5 mgd Expansion: At the time this permit was issued, the three bioreactors had Zone 4 converted to swing zones by adding a mixer, the Hydrotech cloth media filter had been installed, and the submersible effluent pump had been installed. The City of Goodyear and their consultant were working to troubleshoot these items and submit ECOC's and as-builts to ADEQ. The Phase 2 Improvements will include the Department's acceptance of Zone 4 in the three bioreactors being converted to swing zones by adding a mixer, installation of a fifth 4,000-scfm (300-hp VFD driven) blower to serve with the other four bioreactor blowers listed above, complete installation of the Hydrotech cloth media disk filter system, complete installation of the 4,200 gpm (250-hp) submersible effluent pump located at the end of the CCB, installation of a booster pump station skid to distribute plant water with four (3-duty; 1-standby) 450-gpm (30-hp) VFD driven vertical multi-stage service water pumps, and installation of a third 600 scfm (30-hp) blower to serve the SHTs with the installation of 402 new diffusers per ditch, for a total of 804 diffusers per ditch.

For operation of the five rectangular sedimentation basins in Phase 2, the standby sedimentation basin will change from a large to a small basin (1-duty 2,000-SF, 3-duty 3,300-SF, and 1-standby 2,000-sf) to provide secondary clarification. The system pressure in the 16-in effluent line to the BID/River discharge will be utilized (as needed) for the TTHM recirculation and control system.

Phase 3 - 6.73 mgd Derating: Under this Phase 3, the facility will divert the 1.14 mgd of brine flow from the WRF and the treatment capacity will be de-rated to 6.73 mgd. The facility will continue to operate the existing treatment trains with Phase 1 and 2 components for this phase. This Phase will consist of the permittee notifying the Department of the 1.14 mgd of brine flow diversions from the facility in accordance with Section 3.0 compliance schedule item No. 6.

A single stage 2,400-scfm bio-scrubber treats foul air in the influent pump station. The headworks has a dispersion fan that blows foul odors upward, which could affect a park owned by the City located east of the headworks.

The backup power consists of a 650-kW rated diesel generator for the influent, CCB and effluent areas and a 180-kW rated diesel generator that supplies emergency power to the tertiary disc filter area.

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)
City of Goodyear 157th Avenue WRF	33° 24' 01"	112° 23' 54"
Gila River Outfall 001 – At Bridge	33° 23' 33"	112° 23' 33"
Buckeye Irrigation District Canal 002	33° 23' 53"	112° 23' 32"
Gila River Outfall 003	33° 23' 39"	112° 23' 32"
Emergency Effluent Storage Basin	33° 24' 02"	112° 23' 59"
SAT and VIP Recharge Facility (APP P-511440)	33° 26' 14"	112° 23' 42"

¹ 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.

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 and post-closure is \$2,063,000. 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 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 157th Avenue WRF Phased Expansion Phase 2 Design Report prepared, stamped, dated, and signed (sealed) by Arizona Registrant Rob D. Bryant (Civil #42726) with Waterworks Engineers on September 9, 2024 and miscellaneous submittals and attachments that accompanied the report.

The upgrades at the WRF was designed as per the design report prepared and stamped, dated, and signed (sealed) by Rob Bryant, P.E., Waterworks Engineers dated March 15, 2018 and subsequent sealed submittals that served as additions to the design report.

The new units at the WRF were designed as per the design report prepared and sealed by Rob Bryant, P.E., Water Works Engineers dated December 11, 2015.

The modification of the filtration system under this amendment was designed as per the design report prepared and sealed by John Matta, P.E., of Water Works Engineers, LLC, dated June 23, 2014. Subsequent submittals that served as additions to the design report were also sealed by Mr. Matta.

The effluent management facilities included in the 2011 permit amendment were designed as per the design report prepared and sealed by Jessica Anne Dresang, P.E., of Malcolm Pirnie, Inc., dated May 2009. Subsequent submittals that served as additions to the design report were also sealed by Ms. Dresang.

The WRF was designed as per the design report prepared and stamped, dated, and signed (sealed) by James P. Albu, P.E. (Professional Engineer), of Malcolm Pirnie, Inc., dated September 13, 2005, and subsequent sealed submittals that served as additions to the design report.

2.2.2. Site-Specific Characteristics

Monthly flow submittals to determine monthly peaking factors, and sampling analysis were utilized to help determine site specific characteristics for the BADCT.

2.2.3. Pre-Operational Requirements

During a site visit on September 5, 2024, ADEQ found that the Hydrotech cloth media disk filter system was in continuous backwash and the 4,200 gpm (250-hp) submersible effluent pump located at the end of the CCB was experiencing cavitation. Final acceptance and installation of these two items, and an increase to Phase 2 Capacity will require a sealed engineering memo to serve as an addendum to the September 2, 2024 “157th Avenue WRF Phased Expansion Phase 2 Design Report” listed in Section 2.2.1 and as-builts that document the final and correct operation for these two items as provided by Section 3.0; Compliance Schedule Item No. 3.

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
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 treatment facility is rated as producing reclaimed water meeting the Class A+ Reclaimed Water Quality Standards (A.A.C. R18-11, Article 3) which may be used for any allowable Class A, B, or C use under a valid reclaimed water permit (A.A.C. R18-9, Article 7).

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. Specific flow monitoring limitations are listed in Section 4.2, The permittee is authorized to operate the treatment facility with an average daily monthly maximum (ADMM) flow according to Table 8: ROUTINE FLOW MONITORING: Phase 1 – 6.83 mgd for the Phase 1 re-rating, Table 9: ROUTINE FLOW MONITORING: Phase 2 – 7.50 mgd for the Phase 2 expansion, and Table 10: ROUTINE FLOW MONITORING: Phase 3 – 6.73 mgd for Phase 3 after 1.14 mgd of brine flow diversions.
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 11: 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)	MW-1, located at the southwest boundary of the WRF site	33° 23' 59.0"	112° 24' 00.0"
2	Approximately 1,300 feet southwest of Gila River Outfall 001	33° 23' 32.9"	112° 23' 46.7"
3 (contingency)	Approximately 800 feet west of Gila River Outfall 003	33° 23' 39.0"	112° 24' 56.0"

The depth to groundwater is approximately 20 feet below ground surface (bgs), and the direction of groundwater flow is to the west.

Groundwater monitoring is not required at POC No. 1 at the time of permit issuance. Groundwater monitoring at POC No. 2 is only required if effluent is discharged to Outfall 001 for seven (7) or more consecutive days within a 30-day period. The outfall to the BID canal is exempt from APP requirements as per A.R.S. § 49-250.B.6. It is not considered to be a discharging facility. Therefore, a Point of Compliance (POC) has not been designated for this outfall. In the event that a discharge to the Gila River at Outfall 003 exceeds 250,000 gallons per day (gpd) for at least three (3) consecutive months, a well shall be installed at POC No. 3, and begin monitoring as per Section 3.0, Compliance Schedule Items. The Director may amend this permit to designate additional points of compliance if information on groundwater gradients or groundwater usage indicates the need.

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

Not Applicable

2.5.2. Routine Discharge Monitoring

The permittee shall monitor the effluent according to Section 4.2, Table 11: ROUTINE DISCHARGE MONITORING. Representative samples of the effluent shall be collected at the point of discharge from the Effluent Sampler at the End of the CCB.

2.5.3. Reclaimed Water Monitoring

The permittee shall monitor the reclaimed water according to the Class A+ Reclaimed Water Monitoring Table in Section 4.2, Table 12: RECLAIMED WATER MONITORING in addition to the routine discharge monitoring parameters listed in Table 11: ROUTINE DISCHARGE MONITORING. Representative samples of the reclaimed water shall be collected at the point of discharge from the Effluent Sampler at End of CCB. Continuous turbidity monitoring, shall be performed after filtration and immediately before disinfection in accordance with A.A.C R18-11-303(B)(1).

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

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.

The permittee may conduct the sampling using low-flow purging methods in accordance with EPA, USGS, or DOD protocols. The well must be purged until indicator parameters stabilize. Indicator parameters shall include dissolved oxygen, turbidity, pH, temperature, and conductivity.

2.5.5.1. POC Well Replacement

In the event that one or more of the designated POC wells should become unusable or inaccessible due to damage, or any other event, a replacement POC well shall be constructed and installed upon approval by ADEQ. If the replacement well is fifty feet or less from the original well, the ALs and/or aquifer quality limits (AQLs) calculated for the designated POC well may 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
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 by the City of Goodyear on **The City still needs to submit an acceptable Contingency Plan**, 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 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 11: 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 8: ROUTINE FLOW MONITORING: Phase 1 – 6.83 mgd has been exceeded while operating under Phase 1 of this permit, 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 9: ROUTINE FLOW MONITORING: Phase 2 – 7.50 mgd has been exceeded while operating under this table, the permittee shall submit monthly status updates on the brine flow projects (to remove 1.14 mgd of brine flows) and move to Phase 3 or, 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.
3. If the AL for average monthly flow in Section 4.2, Table 10: ROUTINE FLOW MONITORING: Phase 3 – 6.73 mgd has been exceeded, while the permittee is operating under this phase, 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

1. In the case of an exceedance of an AL for a pollutant set in Section 4.2, Table 13: GROUNDWATER MONITORING, the permittee may conduct verification sampling for those pollutant(s) that exceeded their respective AL(s) within five (5) days of becoming aware of the exceedance. The permittee may use results of another sample taken between the date of the last sampling event and the date of receiving the result as verification.
2. If verification sampling confirms the AL exceedance or if the permittee opts not to perform verification sampling, then the permittee shall increase the frequency of monitoring for each pollutant exceeding its' respective AL(s) as follows:

Table 3: ACCELERATED MONITORING - ALERT LEVEL EXCEEDANCE	
Specified Monitoring Frequency	Monitoring Frequency for AL Exceedance
Daily	Daily
Weekly	Daily
Monthly	Weekly
Quarterly	Monthly
Semi-annually	Quarterly
Annually	Quarterly

In addition, the permittee shall immediately initiate an investigation of the cause of the AL exceedance, including inspection of all discharging units and all related pollution control devices, review of any operational and maintenance practices that might have resulted in an unexpected discharge, and hydrologic review of groundwater conditions including upgradient water quality.

3. 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 an AL exceedance. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6. Alternatively, the permittee may submit a technical demonstration, subject to written approval by the Groundwater Protection & Reuse Section, that although an AL has been exceeded, the pollutant(s) that exceeded their respective AL(s) are not reasonably expected to cause a violation of an AQL or AWQS. The demonstration may propose a revised AL or monitoring frequency, for those pollutant(s) that exceeded their respective AL(s), for approval in writing by the Groundwater Protection & Reuse Section.
4. Within thirty (30) days after confirmation of an AL exceedance, for each pollutant that exceeded an AL, 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.
5. 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.
6. For each pollutant that exceeded an AL, the increased monitoring required as a result of an AL exceedance may be reduced to the monitoring frequency in Section 4.2, Table 13: GROUNDWATER MONITORING if the results of four sequential sampling events of those pollutants demonstrate that they did not exceed the AL.
7. If the increased monitoring required as a result of an AL exceedance continues for more than six (6) sequential sampling events, the permittee shall submit to Groundwater Protection & Reuse Section per Section 2.7.5 a second report documenting an investigation of each pollutant which continued to exceed an AL. This report is due within thirty (30) days of the receipt of laboratory results of the sixth sampling event.

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

Not required at time of permit issuance.

2.6.2.3.4. Alert Level for Groundwater Level

Not applicable at the time of permit issuance.

2.6.3. Discharge Limit Violation

1. If a DL set in Section 4.2, Table 11: ROUTINE DISCHARGE MONITORING or Table 12: 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 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

- 1. If an AQL set in Section 4.2, Table 13: GROUNDWATER MONITORING has been exceeded, the permittee may conduct verification sampling for those pollutant(s) that were above their respective AQL(s) within five (5) days of becoming aware of the exceedance. The permittee may use results of another sample taken between the date of the last sampling event and the date of receiving the result as verification.
- 2. If verification sampling does not confirm an AQL exceedance, no further action is needed under this Section.
- 3. If verification sampling confirms that an AQL was exceeded for any parameter or if the permittee opts not to perform verification sampling, then, the permittee shall increase the frequency of monitoring for those parameters as follows:

Table 4: ACCELERATED MONITORING - AQUIFER QUALITY LIMIT VIOLATION	
Specified Monitoring Frequency	Monitoring Frequency for AQL Violation
Daily	Daily
Weekly	Daily
Monthly	Weekly
Quarterly	Monthly
Semi-annually	Quarterly
Annually	Quarterly

In addition, the permittee shall immediately initiate an evaluation for the cause of the violation, including inspection of all discharging units and all related pollution control devices, and review of any operational and maintenance practices that might have resulted in unexpected discharge.

The permittee also shall submit a report 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. A verified exceedance of an AQL will be considered a violation unless the permittee demonstrates within thirty (30) days that the exceedance was not caused or contributed to by pollutants discharged from the facility. Unless the permittee has demonstrated that the exceedance was not caused or contributed to by pollutants discharged from the facility, 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, 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.

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.
5. The increased monitoring for those pollutant(s) required as a result of an AQL exceedance may be reduced to the original sampling frequency for each respective pollutant, if the results of three (3) sequential sampling events demonstrate that the parameter(s) does not exceed their respective AQL(s), and upon ADEQ approval.

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 Protection & Reuse 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 Protection & Reuse 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 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, 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 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 per Section 2.7.5.
3. The tables contained in Section 4.0 list the monitoring parameters and the frequencies for reporting results on the SMRF:
 - a. Table 8: ROUTINE FLOW MONITORING: Phase 1 – 6.83 mgd
 - b. Table 9: ROUTINE FLOW MONITORING: Phase 2 – 7.50 mgd
 - c. Table 10: ROUTINE FLOW MONITORING: Phase 3 – 6.73 mgd
 - d. Table 11: ROUTINE DISCHARGE MONITORING
 - e. Table 12: RECLAIMED WATER MONITORING
 - f. Table 13: GROUNDWATER 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. Daily 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, 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 Protection & Reuse 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 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 5: 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 6: (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, or any treatment or disposal works listed in Section 2.1 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, or any treatment or disposal works listed in Section 2.1 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 7: COMPLIANCE SCHEDULE ITEMS			
No.	Description	Due By:	Permit Amendment Required?
Unpermitted Drying Bed			
1	The permittee shall clean close the drying bed located west of the sludge drying facilities, including at least three soil samples below the unpermitted treatment works.	Within 1 year of issuance of this permit.	No
Completion of Construction for Treatment Facilities			
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 each of the three Bioreactor Swing Zones (Zone #4) is constructed with a new mixer and two IMLRs, with a minimum of two shelf spare IMLR pumps to serve all three bioreactors, according to the Department-approved design report or plans and specifications, as applicable.	Within 90 days of issuance of this permit.	No
3	The permittee shall submit a signed, dated, and sealed Engineer’s Certificate of Completion in a format approved by the Department and a signed, dated, and sealed engineering memo to serve as an addendum to the September 2, 2024 “157th Avenue WRF Phased Expansion Phase 2 Design Report” listed in Section 2.2.1 to show the correct operation of the 14-disc Hydrotech cloth media filter system and the 4,200 gpm (250-hp) submersible effluent pump located at the end of the CCB.	Prior to the approval to discharge under Table 9: ROUTINE FLOW MONITORING: Phase 2 - 7.50 mgd.	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 aeration modifications to the Sludge Holding Tanks has been constructed according to the Department-approved design report or plans and specifications, as applicable.	Prior to the approval to discharge under Table 9: ROUTINE FLOW MONITORING: Phase 2 - 7.50 mgd.	No
5	The permittee shall submit a signed, dated, and sealed set of as-builts for the improvements listed in Section 3.0; CSI Nos. 2, 3, and 4, listed above, and confirmation that the facility has received a hard copy of the updated facility O&M Manual, which includes these improvements.	Within 90 days of the approval to discharge under Table 9: ROUTINE FLOW MONITORING: Phase 2 - 7.50 mgd.	No
Table 10: ROUTINE FLOW MONITORING: Phase 3 – 6.73 mgd Reduction of flows After Brine Flow Diversion			
6	The permittee shall notify ADEQ when the RO brine and backwash flows from Goodyear Water Treatment Facility (GWTF) diversions project has been completed, so that monitoring under “Table 10: ROUTINE FLOW MONITORING: Phase 3 – 6.73 mgd” can begin. Failure to notify the Department that the diversion project is complete, will be considered a routine flow monitoring discharge limit violation under his permit.	Thirty (30) days prior to diverting brine flows from the 157th WRF and within two (2) years of permit issuance	No

Table 7: COMPLIANCE SCHEDULE ITEMS (Continued)

No.	Description	Due By:	Permit Amendment Required?
Groundwater Monitoring at POC No. 3			
7	The permittee shall submit a groundwater monitoring well design, sealed by an Arizona Registered Geologist or other qualified registrant, for ADEQ approval. The well design shall include a screened interval suitable to monitor the top of the aquifer/water table, with no more than 30 feet of screen located beneath the top of the water table and no more than 10 feet located above the top of the water table.	Within 30 days after the 3rd consecutive month during which the monthly average discharge to Gila River Outfall 003 exceeds 250,000 gpd.	No
8	The permittee shall install a groundwater monitoring well at POC No. 3 according to the ADEQ-approved design. Appropriate measures, such as field and downhole geophysical logging shall be used to determine the top of the aquifer. The permittee shall ensure that no more than 30 feet of the screen is installed beneath the top of the water table and no more than 10 feet is installed above the top of the water table.	Within 90 days after the date of submittal of the well design, unless otherwise directed by ADEQ.	No
9	The permittee shall begin initial groundwater sampling of the well at POC No. 3 for a minimum of 8 samples, in accordance with A.A.C. R18-9-A202(A)(6) for all parameters listed in Section 4.2, Table 12.	Within 30 days after completion of well construction.	No
10	The permittee shall submit an APP amendment application with a report summarizing the results from a minimum of 8 sampling rounds of monitoring at POC #3, and propose ALs and AQLs for all the pollutants listed in Section 4.2, Tables 12, in accordance with A.A.C. R18-9-A202(A)(6) and A.A.C. R18-9-A205. The permittee shall submit a well completion report, sealed by an Arizona Registered Geologist or other qualified registrant, which includes detailed geologic and well construction logs for the well at POC #3 to the ADEQ Groundwater Protections Value Stream. Where identification is possible, the logs should note moisture and the depth at which groundwater is first encountered. The ADWR Registry ID (55 No.) shall be submitted to ADEQ.	Within 24 months after the completion of well construction.	Yes

4.0 TABLES OF MONITORING REQUIREMENTS

4.1. PRE-OPERATIONAL MONITORING (OR CONSTRUCTION REQUIREMENTS)

Not applicable.

4.2. COMPLIANCE OR OPERATIONAL MONITORING

Table 8: ROUTINE FLOW MONITORING: Phase 1 – 6.83 mgd ²					
Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
1	Influent Flow Meter ³			33° 23' 59.6"	112° 24' 01.1"
2	Flow meter located on line going to Recharge			33° 23' 59.3"	112° 24' 02.7"
3	Flow meter located on AZPDES discharge line			33° 23' 56.6"	112° 23' 49.7"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Total Influent Flow: Daily ⁴	Not Applicable ⁵	Not Applicable	mgd ⁶	Daily	Quarterly
Total Influent Flow: Influent Monthly Average ⁷	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
Total Effluent Flow ⁸ : Daily ⁴	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Total Effluent Flow: Monthly Average	6.15	6.83	mgd	Monthly Calculation	Quarterly
Reuse Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Reuse Flow: Monthly Average ⁹	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
Outfall Gila River 001 Flow: Daily ¹⁰ (AZPDES 001)	6.15	6.83	mgd	Daily	Quarterly
Outfall Gila River 001 Flow: Monthly Average	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
Buckeye Irrigation District Flow: Daily ¹⁰ (AZPDES 002)	6.15	6.83	mgd	Daily	Quarterly
Buckeye Irrigation District Flow: Monthly Average	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
Gila River Outfall 003 Flow: Daily ¹⁰ (AZPDES 003)	6.15	6.83	mgd	Daily	Quarterly
Gila River Outfall 003 Flow: Monthly Average ¹¹	0.25	Not Applicable	mgd	Monthly Calculation	Quarterly
Soil Aquifer Treatment Flow: Daily (SAT Site)	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Soil Aquifer Treatment Flow: Annual Average ¹²	Not Applicable	5.87	mgd	Annual Calculation	Annually
Vadose Injection Project Flow: Daily (VIP Site)	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Vadose Injection Project Flow: Annual Average ¹²	Not Applicable	0.13	mgd	Annual Calculation	Annually

² The monitoring under this table shall be continued until CSI No. 5 for Phase 2 has been approved by the Department and shall be discontinued and the monitoring under Table 9 shall commence upon receiving Agency approval for the operation of Phase 2.

³ 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.

⁴ Daily Flow shall be measured using a continuous recording flow meter/s which totals the flow daily.

Table 9: ROUTINE FLOW MONITORING: Phase 2 – 7.50 mgd¹³

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
1	Influent Flow Meter ³			33° 23' 59.6"	112° 24' 01.1"
2	Flow meter located on line going to Recharge			33° 23' 59.3"	112° 24' 02.7"
3	Flow meter located on AZPDES discharge line			33° 23' 56.6"	112° 23' 49.7"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Total Influent Flow: Daily ⁴	Not Applicable ⁵	Not Applicable	mgd ⁶	Daily	Quarterly
Total Influent Flow: Monthly Average ⁷	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
Total Effluent Flow ⁸ : Daily ⁴	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Total Effluent Flow: Monthly Average	6.75	7.50	mgd	Monthly Calculation	Quarterly
Reuse Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Reuse Flow: Monthly Average ⁹	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
AZPDES 001-Gila Flow: Daily ¹⁰	6.75	7.50	mgd	Daily	Quarterly
AZPDES 001-Gila River Flow: Monthly Average	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
AZPDES 002-BID Flow: Daily ¹⁰	6.75	7.50	mgd	Daily	Quarterly
AZPDES 002-BID Flow: Monthly Average	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
AZPDES 003-Gila Flow: Daily ¹⁰	6.75	7.50	mgd	Daily	Quarterly
AZPDES 003-Gila River Flow: Monthly Average ¹¹	0.25	Not Applicable	mgd	Monthly Calculation	Quarterly
SAT Site Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
SAT Site Flow: Annual Average ¹²	Not Applicable	5.87	mgd	Annual Calculation	Annually
VIP Site Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Vadose Injection Project Flow: Annual Average ¹²	Not Applicable	0.13	mgd	Annual Calculation	Annually

⁵ Not Applicable means that monitoring is required, but no limits have been specified at the time of permit issuance

⁶ mgd = million gallons per day

⁷ Monthly Average means the calculated average of daily flow values in each calendar month.

⁸ Total Effluent Flow is the sum of flow to reuse from 157th Ave WRF, the Gila River outfalls, the BID Canal outfall, SAT site, and the VIP site.

⁹ Class A+ reclaimed water can be supplied by City of Goodyear 157th Avenue WRF and Palm Valley WRF/Sarival WRF reclaimed water distribution systems and may be beneficially reused under a valid recycled water permit. Discharge Limits for 'reuse flow' are covered by effluent monthly averages from all three facilities.

¹⁰ The sum of the combined daily flows for Gila River Outfall 001 at the Bridge, Gila River Outfall 003, and Buckeye Irrigation District Canal discharges are not to exceed 7.50 mgd, as constrained by AZPDES Permit No. AZ0022357. Flow does not discharge to more than one site at any time, and flowmeter values are recorded while changing valves to the discharge sites under **Goodyear Standard Operating Procedure #####**.

¹¹ In the event that a discharge to the Gila River at Outfall 003 exceeds 250,000 gallons per day (gpd) for three consecutive months, POC No. 3, as specified Table 2: POINT(S) OF COMPLIANCE and Section 3.0, CSI No. 7 through No. 9 shall be performed and, upon completion, the permittee shall perform CSI No. 10 through an APP Amendment.

¹² The Soil Aquifer Treatment site is the primary recharge location for APP (Inventory No. 511440; LTF No. 69122), which permits the discharge for up to 5.87 mgd, and permits discharge to the Vadose Injection Project wells as needed but not more than 0.13 mgd for a combined total of 6.0 mgd annual average. Flows for both discharges will be reported for this SMRF utilizing the flow meter sample points in APP No. P-511440 – Section 4.2; Table 1.

¹³ The monitoring under this table shall be continued until CSI No. 6 for Phase 3 has been received by the Department and shall be discontinued and the monitoring under Table 10 shall commence upon removal of the Brine flows and operation of Phase 3.

Table 10: ROUTINE FLOW MONITORING: Phase 3 – 6.73 mgd¹⁴

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
1	Influent Flow Meter ³			33° 23' 59.6"	112° 24' 01.1"
2	Flow meter located on line going to Recharge			33° 23' 59.3"	112° 24' 02.7"
3	Flow meter located on AZPDES discharge line			33° 23' 56.6"	112° 23' 49.7"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Total Influent Flow: Daily ⁴	Not Applicable ⁵	Not Applicable	mgd ⁶	Daily	Quarterly
Total Influent Flow: Monthly Average ⁷	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
Total Effluent Flow ⁸ : Daily ⁴	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Total Effluent Flow: Monthly Average	6.10	6.73	mgd	Monthly Calculation	Quarterly
Reuse Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Reuse Flow: Monthly Average ⁹	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
AZPDES 001-Gila Flow: Daily ¹⁰	6.10	6.73	mgd	Daily	Quarterly
AZPDES 001-Gila River Flow: Monthly Average	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
AZPDES 002-BID Flow: Daily ¹⁰	6.10	6.73	mgd	Daily	Quarterly
AZPDES 002-BID Flow: Monthly Average	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
AZPDES 003-Gila Flow: Daily ¹⁰	6.10	6.73	mgd	Daily	Quarterly
AZPDES 003-Gila River Flow: Monthly Average ¹¹	0.25	Not Applicable	mgd	Monthly Calculation	Quarterly
SAT Site Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
SAT Site Flow: Annual Average ¹²	Not Applicable	5.87	mgd	Annual Calculation	Annually
VIP Site Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Vadose Injection Project Flow: Annual Average ¹²	Not Applicable	0.13	mgd	Annual Calculation	Annually

¹⁴ The monitoring under this table shall not be commenced until CSI No. 6 has been received by the Department for Phase 3 and shall be continued thereafter for the life of this permit.

Table 11: ROUTINE DISCHARGE MONITORING

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
4 - Treated Effluent	Effluent Sampler at End of CCB			33° 23' 58.3"	112° 23' 59.4"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Fecal Coliform: Single sample maximum	Not Applicable	23.0	CFU ¹⁵	Daily ¹⁶	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week ¹⁷	Not Applicable	Non-detect ¹⁸	CFU	Weekly Evaluation	Quarterly
Total Nitrogen ¹⁹ :Five-sample rolling geometric mean ²⁰	8	10	mg/l ²¹	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

¹⁵ CFU = Colony Forming Units / 100 ml sample. For CFU, a value of <1.0 shall be considered to be non-detect.

¹⁶ 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

¹⁷ 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

¹⁸ 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

¹⁹ Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

²⁰ 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: $GM_5 = \sqrt[5]{(m_1)(m_2)(m_3)(m_4)(m_5)}$

²¹ mg/l = milligrams per liter

Table 11: ROUTINE DISCHARGE MONITORING (Continued)

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
4 - Treated Effluent	Effluent Sampler at End of CCB			33° 23' 58.3"	112° 23' 59.4"
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) ²²	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

²² Total Trihalomethanes (TTHMs) are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane

Table 12: RECLAIMED WATER MONITORING

Reclaimed water monitoring under Table 12: RECLAIMED WATER MONITORING shall be performed in addition to routine discharge monitoring required under Section 4.2, Table 11: ROUTINE DISCHARGE MONITORING				
Sampling Point Number	Sampling Point Identification		Latitude (North)	Longitude (West)
4 - Treated Effluent	Effluent Sampler at End of CCB		33° 23' 58.3"	112° 23' 59.4"
Parameter	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Fecal Coliform Single-sample maximum:	23	CFU ¹⁵	Daily ¹⁶	Quarterly
Fecal Coliform: Four (4) of last seven (7) samples	Non-detect ²³	CFU	Daily Evaluation	Quarterly
Total Nitrogen ¹⁹ : Five-sample rolling geometric mean ²⁰	10	mg/l ²¹	Monthly Calculation	Quarterly
Turbidity ²⁴ : Single reading	5	NTU ²⁵	Daily ²⁶	Quarterly
Turbidity: 24-hour average	2	NTU	Daily Calculation	Quarterly
Enteric Virus ²⁷ : Four (4) of last seven (7) samples	Non-detect	CFU ¹⁵	Monthly / Suspended ²⁸	Quarterly

²³ Non-detect requires entering “Compliance” or “Non-compliance” on the SMRF for each day of the reporting period. Evaluate the daily fecal coliform result along with the six (6) previous sample results. If four (4) or more of those results are non-detect, report “Compliance” for that day’s entry on the SMRF. If four (4) or more of those results have detections of fecal coliform, report “Non-compliance” for that day’s entry

²⁴ Turbidimeter shall be placed at a point in the wastewater treatment process after filtration and immediately before disinfection and shall have a signal averaging time not exceeding 120 seconds. All exceedances must be explained and submitted to the Department with the corresponding quarterly SMRF; occasional spikes due to back-flushing or instrument malfunction shall not be considered an exceedance.

²⁵ NTU = Nephelometric Turbidity Units

²⁶ For the single turbidity reading, daily means the maximum reading during the 24-hour period.

²⁷ Initial monthly enteric virus sampling shall be performed to indicate four (4) out of seven (7) sample results of non-detect.

²⁸ Enteric virus sampling shall resume only when the discharge limit for the 24-hour average for turbidity is exceeded for two (2) consecutive 24-hour monitoring periods. Monthly enteric virus monitoring shall continue until four (4) out of seven (7) consecutive sample results show no detection. During times when enteric virus sampling is suspended, enter “suspended” in the appropriate space on the SMRF

Table 13: GROUNDWATER MONITORING

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
5 - POC No. 2	Approximately 1,300 feet southwest of Gila River Outfall 001; ADWR Well No. 55-913262			33° 23' 32.9"	112° 23' 46.7"
Parameter	Alert Level	Aquifer Quality Limit	Units	Sampling Frequency	Reporting Frequency
Total Nitrogen ¹⁹	8	10	mg/l ²¹	Monthly Calculation	Quarterly
Nitrate-Nitrite as N	8	10	mg/l	Monthly Calculation	Quarterly
Nitrate as N	8	10	mg/l	Monthly	Quarterly
Nitrite as N	0.8	1	mg/l	Monthly	Quarterly
Total Kjeldahl Nitrogen (TKN)	Not Applicable ⁵	Not Applicable	mg/l	Monthly	Quarterly
Total Coliform	Not Applicable	Non-detect ²⁹	CFU ¹⁵	Monthly	Quarterly
Cyanide (as free cyanide)	0.16	0.2	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	mg/l	Quarterly	Quarterly
Metals (Dissolved)					
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

²⁹ For CFU, a value of <1.0 shall be considered to be non-detect

Table 13: GROUNDWATER MONITORING (Continued)

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
5- POC No. 2	Approximately 1,300 feet southwest of Gila River Outfall 001; ADWR Well No. 55-913262			33° 23' 32.9"	112° 23' 46.7"
Parameter	Alert Level	Aquifer Quality 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) ²²	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

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	
Bioreactor Freeboard	One (1) Linear Foot	Daily	
Secondary Sedimentation Basins Freeboard	One (1) Linear Foot	Daily	
Sludge holding tank Freeboard	One (1) Linear Foot	Weekly	
Emergency Effluent Storage Basin Freeboard	Two (2) Linear Foot	Weekly	
Emergency Effluent Storage Basin Berm Integrity	No visible structural damage, breach, or erosion of embankments	Weekly	
Emergency Effluent Storage Liner Integrity	No cracks or leaks that would exceed a leakage rate of 550 gpd/acre	Weekly	
Emergency Effluent Storage and Treatment Tanks Vegetation Removal	No vegetation present in the Ponds/Tanks or within ten feet of the Ponds/Tanks	Monthly	
Bio-scrubber system	Good working condition H ₂ S and flow	Monthly	
POC 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



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: 10/06/2023

Contingency Plan, dated: **An approved Contingency Plan still needs to be submitted by the permittee**

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).

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).