STATE OF ARIZONA
AQUIFER PROTECTION PERMIT NO. P-101733
PLACE ID 3288, LTF 86910
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 City of Prescott to operate the Airport Water Reclamation Facility located at 2800 Melville Road, Prescott, Arizona, in Yavapai County, over groundwater of the Prescott Active Management Area in Township 15 N, Range 01 W, Section 30, Gila and Salt River Baseline and Meridian.

This permit becomes effective on the date of the Water Quality Division 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:	Airport Water Reclamation Facility
Facility Address:	2800 Melville Road Prescott, Arizona, 86301
County:	Yavapai
Permitted Flow Rate:	7,500,000 gallons per day (gpd)
Permittee:	City of Prescott
Permittee Address:	1505 Sundog Ranch Road Prescott, Arizona, 86301
Facility Contact:	Scott Gregorio
Emergency Phone No.:	(928) 777-1628
Latitude/Longitude:	34° 39' 26" N / 112° 24' 05" W
Legal Description:	Township 15N, Range 1W, Section 30, 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_____

THIS AMENDED PERMIT SUPERCEDES ALL PREVIOUS PERMITS

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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)]

The permittee is authorized to operate the Airport Water Reclamation Facility (WRF) with a maximum average monthly flow of 7.5 million gallons per day (mgd). The WRF will be constructed in three phases. The Phase I treatment train is rated at 3.75 mgd, Phase IA treatment train is rated at 4.75 mgd, and the Phase II treatment train is rated at 7.5 mgd. The facility is currently in Phase I and upon installation of an additional disc to each filter and a new pump in effluent pump station, the facility may operate under Phase IA. Upon construction of Phase II and submittal and approval of the Engineer's Certification of Completion, the facility may operate in Phase II under this permit. For all phases, the facility may receive up to 2.24 mgd of influent, 0.014 mgd of primary sludge, and 0.044 mgd of waste active sludge from the City of Prescott Sundog Wastewater Treatment Plant. The combined flow from the Sundog facility will be added at the influent manhole prior to the headworks at the Airport WRF. All industrial hookups and other non-residential hookups to the treatment system shall be authorized according to the applicable federal, state or local regulations.

Phase I

In Phase I, the permittee is authorized to operate the treatment plant at a capacity of 3.75 mgd. The Phase I treatment process consists of headworks with a fine screen and grit removal system, two equalization basins, two aeration basins with anoxic and aerobic zones for nitrification and denitrification, two secondary clarifiers, three cloth media filters, two on-site sodium hypochlorite generators, one chlorine contact chamber, an effluent pump station, two sludge thickeners, and two centrifuges for sludge dewatering. Alum is added to the secondary process for chemical precipitation to reduce fluoride levels in the effluent. There is one existing sludge drying beds at the site which is used during emergencies only. The Phase I WRF is classified as producing Class A+ reclaimed water as per A.A.C. R18-11, Article 3. Dewatered sludge is hauled off-site to an approved landfill.

Phase IA - Current

In Phase IA, the permittee is authorized to operate the treatment plant with a flow of 4.75 mgd. The existing treatment train of Phase I is re-rated to 4.75 mgd and the facility will be adding one additional disc to each cloth media disc filter unit, and upgrading one pump in existing pump station. The treatment process remains same as Phase I WRF.

Phase II

In Phase II, the permittee is authorized to operate the treatment plant at a capacity of 7.5 mgd. The Phase II treatment process consists of headworks with a fine screen and grit removal system, two existing equalization basins, two new primary clarifiers, two existing aeration basins with anoxic and aerobic zones for nitrification and de-nitrification, two existing secondary clarifiers and one new secondary clarifier, three existing filters and one new filter, two existing and one new on-site sodium hypochlorite generators, one existing and one new chlorine contact chamber, an upgraded effluent pump station, two existing sludge thickeners and two existing centrifuges for sludge dewatering. One sludge drying beds will remain on site for emergency use. The Phase II WRF is classified as producing Class A+ reclaimed water as per A.A.C. R18-11, Article 3. Dewatered sludge shall be hauled off-site to an approved landfill.

Effluent from the Phase I, Phase IA and Phase II WRFs may be discharged to existing recharge basins or may be used for beneficial purposes under a valid reclaimed water permit (A.A.C. R18-9, Article 7). The recharge basins may also receive effluent from the City of Prescott Sundog Wastewater Treatment Plant (see APP No. 100353).

The facility includes eight recharge basins which can dispose up to 14,237 acre-feet per year (12.7 mgd) of combined effluent from the Airport and Sundog treatment facilities.

The depth to groundwater is approximately 248 feet below ground surface (bgs) and the direction of groundwater flow is from the southwest to the north-northeast.

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**	**Longitude**
Airport WRF	34° 39' 26" N	112° 24' 05" W
Recharge Basin #1	34° 39' 25" N	112° 24' 21" W
Recharge Basin #2	34° 39' 20" N	112° 24' 21" W
Recharge Basin #3	34° 39' 20" N	112° 24' 14" W
Recharge Basin #4	34° 39' 25" N	112° 24' 14" W
Recharge Basin #5	34° 39' 32" N	112° 24' 11" W
Recharge Basin #6	34° 39' 37" N	112° 24' 09" W
Recharge Basin #7	34° 39' 37" N	112° 24' 01" W
Recharge Basin #8	34° 39' 20" N	112° 24' 12" W
Sludge Drying Bed #1 (Closed-in-Place)	34° 39' 30" N	112° 24' 01" W
Sludge Drying Bed #2 (Closed-in-Place)	34° 39' 30" N	112° 24' 01" W
Sludge Drying Bed #3	34° 39' 29" N	112° 24' 01" 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 Protection Value Stream. 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 permittee shall maintain financial capability throughout the life of the facility. The estimated dollar amount for closure of the facility is $663,600 and the post-closure cost is $53,100. 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 treatment facility (Phase I, Phase IA, and Phase II) 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 existing WRF and Recharge Basins expansion and upgrade (as permitted under a modification issued January 29, 1999) was designed by Black & Veatch Corporation, and the sludge dewatering centrifuge system was designed by Brown & Caldwell Environmental Engineers & Consultants. Both firms employ professional engineers registered in the state of Arizona.

The Phase I and Phase II WRFs were designed as per the design report prepared and stamped, dated, and signed (sealed) by John Matta, P.E., and Rob Bryant, P.E., Waterworks Engineers, dated September 12, 2012 and subsequent sealed submittals that served as additions to the design report. Waterworks Engineers employs professional engineers registered in the state of Arizona.

The re-rating of Phase IA was demonstrated in the design report prepared and stamped, dated, and signed (sealed) by Rob Bryant, P.E. (Professional Engineer) Waterworks Engineers dated December 3, 2020, final design report dated May 24, 2021 and subsequent sealed submittals that served as additions to the design report.

2.2.2. Site-Specific Characteristics

Site specific characteristics were not used to determine BADCT.

2.2.3. Pre-Operational Requirements

Prior to initiating use of Phase II, the permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion in a format approved by the Department per the compliance schedule in Section 3.0. The certificate shall be submitted to the Groundwater Protection Value Stream.

2.2.4. Operational Requirements

1. The permittee shall maintain a copy of the up-to-date operations and maintenance manual at the WRF 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 20: 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 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. The monitoring tables are listed in Section 4.2 for Phase I (3.75 mgd capacity), Phase IA (4.75 mgd capacity), and Phase II (7.5 mgd capacity). The permittee shall use the monitoring tables which are commensurate with the phase in use at the time. Monitoring is not required for phases not yet constructed.
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 8 through Table 16.

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	Monitor Well #3 NE property boundary	34° 39' 42"	112° 23' 57"
2	Monitor Well #5 NW property boundary	34° 39' 42"	112° 24' 12"

Groundwater monitoring is required at the point of compliance wells. The director may require an amendment of this permit to install a monitoring well if there is cause for 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.

The permittee shall develop a site-specific Quality Management Plan (QMP) which describes the sample collection and analysis procedures to ensure that the result of work performed under this permit will satisfy the data quality objectives of the permit. The permittee shall be responsible for the quality and accuracy of all data required by this permit. If a third party collects or analyzes samples on behalf of the permittee, the permittee shall obtain a copy of the third party site-specific QMP. The permittee shall consult with the most recent version of the ADEQ QMP and Title 40, PART 136 of the Environmental Protection Agency's Code of Federal Regulations (CFR) for guidance in this regard. 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 at the time of permit issuance.

2.5.2. Routine Discharge Monitoring

The permittee shall monitor the effluent according to Section 4.2, Table 8 through Table 16 (The specific tables used for monitoring shall correspond with the current phase of the permit). Representative samples of the effluent shall be collected at the point of discharge from the effluent pump station.

2.5.3. Reclaimed Water Monitoring

For Phase I, Phase IA, and Phase II, the permittee shall monitor the reclaimed water according to the Class A+ Reclaimed Water Monitoring Tables in Section 4.2, Table 17: A+ RECLAMIED WATER MONITORING in addition to the routine discharge monitoring parameters listed in the tables that correspond with the current phase of the permit. 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 20: 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, exceedance of an alert level (AL) for water level as required by Section 2.6.2.3.5, 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 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
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 Value Stream 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 Attachment T of the application which was submitted on September 14, 2012 (LTF No. 56850) 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 alert levels, the permittee shall comply with the requirements as specified in Section 4.2, Table 20: FACILITY INSPECTION AND OPERATIONAL MONITORING to prevent the overtopping of an impoundment or sludge drying bed. If an impoundment or sludge drying bed is overtopped, the permittee shall follow the requirements in Section 2.6.5.3 and the reporting requirements of Section 2.7.3.

If an alert level set in Section 4.2, Table 20: FACILITY INSPECTION AND OPERATIONAL MONITORING has been exceeded the permittee shall:

1. Notify the Groundwater Protection Value Stream within five (5) days of becoming aware of the exceedance.
2. Submit a written report to the Groundwater Protection Value Stream within 30 days after becoming aware of the exceedance. 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.

2.6.2.1.1. Overflow of effluent from Effluent Pump Station

In the event of overflow of effluent from the effluent pump station, the permittee shall follow the requirements of Section 2.7.3 and shall take the following actions:

1. The permittee shall immediately identify the issue with the effluent pumps, take the necessary actions to mitigate the overflow of effluent as described in facility's Emergency Operation Contingency Plan for Effluent Pump Station provided in the application.
2. Within 24 hours of discovery, notify the ADEQ Groundwater Protection Value Stream of the incident.
3. Within 24 hours of discovery, estimate the quantity of effluent released, obtain effluent sample and characterize for the parameters listed in Section 4.2 Table 11 and Table 12 and report in accordance with Section 2.7.3.
4. Within 30 days of discovery, evaluate the cause of the effluent overflow and identify the circumstances that resulted in the incident. Implement corrective actions and adjust operational conditions as necessary to resolve the problems identified in the evaluation.
5. Within 30 days of discovery of the incident, submit a report to Groundwater Protection Value Stream as specified in Section 2.7.3. Include a description of the actions performed in Subsections 1 through 4 listed above. Upon review of the report, ADEQ may request additional information.
6. Within 60 days of discovery, submit a report discussing an assessment for upgrading the effluent pump station, timeline for upgrade and amendment of the permit.

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

1. If an AL set in Section 4.2, Table 8 through Table 16 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 days of an AL exceedance, the permittee shall submit the laboratory results to the Groundwater Protection Value Stream 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

If the AL for average monthly flow in Section 4.2, Table 8 through Table 16 has been exceeded, the permittee shall submit an application to the Groundwater Protection Value Stream for a permit amendment to expand the treatment facility, or submit a report detailing the reasons an expansion is not necessary. Acceptance of the report instead of an application for amendment 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 18: 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 Value Stream,

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. 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 Value Stream.

4. Within 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 Value Stream 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 18: 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 ADEQ a second report documenting an investigation of each pollutant which continued to exceed an AL. This report is due within 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 issuance.

2.6.2.3.4. Alert Level for Fecal Coliform in Groundwater

1. In the case of an exceedance of the AL for fecal coliform in Section 4.2, Table 18: GROUNDWATER MONITORING. The permittee may conduct verification sampling within five (5) days of becoming aware of the exceedance of the fecal coliform. 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. If verification sampling confirms the AL exceedance or if the permittee opts not to perform verification sampling, then the permittee shall conduct monitoring required below.
2. If the AL for fecal coliform is exceeded, the permittee shall begin monitoring for total coliform.
3. If the total coliform AQL is exceeded, then the permittee must follow the requirements of section 2.6.4.
4. The Permittee may cease monitoring for total coliform when neither the fecal coliform alert level nor the total coliform AQL are exceeded for four consecutive months.

2.6.2.3.5. Alert Level for Groundwater Level

Not required at time of issuance.

2.6.3. Discharge Limit Violation

1. If a DL set in Section 4.2, Table 8 through Table 16 or Table 17: A+ RECLAMIED 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 Value Stream 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 Violations

1. If an AQL set in Section 4.2, Table 18: GROUNDWATER MONITORING has been violated, 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 violation. 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 violation, no further action is needed under this Section.

3. If verification sampling confirms that an AQL was violated 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 violation of an AQL will be considered a violation unless the permittee demonstrates within 30 days that the violation was not caused or contributed to by pollutants discharged from the facility. Unless the permittee has demonstrated that the violation 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 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 Value Stream 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 Value Stream within 24 hours of discovering the discharge of non-hazardous material which has the potential to cause an AQL 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 Value Stream within 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 Value Stream prior to implementing a corrective action to

accomplish any of the following goals in response to exceedance of an AL, AQL, DL, or other 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 30 days of completion of any corrective action, the operator shall submit to the Groundwater Protection Value Stream, 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) and A.A.C. 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. 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 Value Stream.
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 DISCHARGE MONITORING
    b. Table 9: ROUTINE DISCHARGE MONITORING PHASE I – 3.75 MGD CONTINUED
    c. Table 10: ROUTINE DISCHARGE MONITORING PHASE I – 3.75 MGD CONTINUED
    d. Table 11: ROUTINE DISCHARGE MONITORING PHASE IA – 4.75 MGD
    e. Table 12: ROUTINE DISCHARGE MONITORING PHASE IA – 4.75 MGD CONTINUED
    f. Table 13: ROUTINE DISCHARGE MONITORING PHASE IA – 4.75 MGD CONTINUED
    g. Table 14: ROUTINE DISCHARGE MONITORING PHASE II - 7.5 MGD
    h. Table 15: ROUTINE DISCHARGE MONITORING PHASE II – 7.5 MGD CONTINUED
    i. Table 16: ROUTINE DISCHARGE MONITORING PHASE II – 7.5 MGD CONTINUED
    j. Table 17: A+ RECLAMIED WATER MONITORING
    k. Table 18: 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 were 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).

2.7.3. Permit Violation and Alert Level Status Reporting

1. The permittee shall notify the Groundwater Protection Value Stream 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 Value Stream within 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 20: FACILITY INSPECTION AND OPERATIONAL MONITORING in the facility log book as per Section 2.7.2, and report to the Groundwater Protection Value Stream 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: http://www.azdeq.gov/welcome-mydeq

All other documents required by this permit shall be mailed to:

The Arizona Department of Environmental Quality
Groundwater Protection Value Stream
Mail Code 5415B-3
1110 West Washington Street
Phoenix, Arizona 85007
Phone (602) 771-4571
Or
groundwaterpermits@azdeq.gov

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

The Groundwater Protection Value Stream shall be notified within ten days of any change of facility information including Facility Name, Permittee Name, Mailing or Street Address, Facility Contact Person, 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 Value Stream before ceasing operation of the facility for a period of 60 days or greater. The permittee shall take the following measures upon temporary cessation:

1. If applicable, direct the wastewater flows from the facility to another state-approved wastewater treatment facility;

2. Correct the problem that caused the temporary cessation of the facility; and
3. Notify the Groundwater Protection Value Stream 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 Value Stream of the operational status of the facility every three years. If the permittee intends to permanently cease operation of any facility, the permittee shall submit closure notification, as set forth in Section 2.9 below.

2.9. Closure

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

For a facility addressed under this permit, the permittee shall give written notice of closure to the Groundwater Protection Value Stream 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 Value Stream, 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 Value Stream 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(30) and Title 49, Chapter 2, Article 3;
4. Further action is necessary to meet property use restrictions.
5. SMRF submittals shall continue 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 Value Stream.

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 Value Stream 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 Value Stream.

Table 7: COMPLIANCE SCHEDULE ITEMS

No.	Description	Due By:	Permit Amendment Required?
Phase IA Notification			
1	The permittee shall notify the Department regarding upgrades for Phase IA including installation of additional disc in each filter and replacement of existing pump with a new pump for effluent pump station.	Prior to operate under Phase IA and within 90 days of installation	No
Engineer's Certificate of Completion for Phase II			
2	The permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion in a format approved by the Department that confirms that the units of the Phase II WRF (7.5 mgd) have been constructed according to the Department-approved design report or plans and specifications, as applicable.	Prior to discharging under the Phase II WRF and within 90 days of completion of construction.	No
3	The permittee shall provide notification regarding the commencement of operation of Phase II to the Groundwater Protection Value Stream.	Within 15 days of commencement of operation of the Phase II WRF.	No

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 DISCHARGE MONITORING PHASE I – 3.75 MGD					
Sampling Point Number	**Sampling Point Identification**		**Latitude (North)**		**Longitude (West)**
1 Sundog WWTP Recharge Flow	Meter located at the far west side of the recharge basins between basins 1 and 2		34° 39' 22.5" N		112° 24' 25" W
2 Effluent Flow (Total)	Meter located at the effluent pump station from the Airport Phase I WRF		34° 39' 27" N		112° 23' 58" W
3 Reuse Flow	Meter located at the reclaimed water storage tank		34° 39' 24.25" N		112° 24' 31.5" W
Parameter	**Alert Level**	**Discharge Limit**	**Units**	**Sampling Frequency**	**Reporting Frequency**
Total Flow[1]: Daily[2]	Not Applicable[3]	Not Applicable	mgd[4]	Daily	Quarterly
Total Flow: Monthly Average[5]	3.56	3.75	mgd	Monthly Calculation	Quarterly
Reuse Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Reuse Flow: Monthly Average	3.56	3.75	mgd	Monthly Calculation	Quarterly
Airport Phase I WRF Recharge Flow: Daily	Not Established	Not Established	mgd	Daily	Quarterly
Airport Phase I WRF Recharge Flow[6]: Monthly Average	3.56	3.75	mgd	Monthly Calculation	Quarterly
Sundog WWTP Recharge Flow: Daily	Not Established	Not Established	mgd	Daily	Quarterly
Sundog WWTP Recharge Flow: Monthly Average	Not Established	Not Established	mgd	Monthly Calculation	Quarterly
Recharge Flow (Total)[7]: Daily	Not Established	Not Established	mgd	Daily Calculation	Quarterly
Recharge Flow (Total): Monthly Average	12	12.7	mgd	Monthly Calculation	Quarterly

[1] Total flow for all methods of disposal
[2] Total Daily Flow shall be measured using a continuous recording flow meter that totals the flows daily.
[3] Not Applicable means that monitoring is required, but no limits have been specified at the time of permit issuance
[4] mgd = million gallons per day
[5] Monthly Average means the calculated average of daily flow values in a month
[6]Calculated value: Airport Recharge Flow = Total effluent flow minus Reuse flow
[7]Calculated value: Total Recharge Flow = Recharge flow from the Airport Phase I WRF + Recharge flow from the Sundog WWTP

Table 9: ROUTINE DISCHARGE MONITORING PHASE I – 3.75 MGD CONTINUED					
Sampling Point Number	**Sampling Point Identification**		**Latitude (North)**		**Longitude (West)**
4	Upstream of the chlorine contact basin effluent weir, just before entering the effluent pump station		34° 39' 27" N		112° 23' 58" W
Parameter	**Alert Level**	**Discharge Limit**	**Units**	**Sampling Frequency**	**Reporting Frequency**
Total Nitrogen[8]: Five-sample rolling geometric mean[9]	8.0	10.0	mg/l	Monthly Calculation	Quarterly
Fecal Coliform: Single sample maximum	Not Applicable	23.0	CFU[10]	Daily[11]	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week[12]	Not Applicable	Non-detect[13]	CFU	Weekly Evaluation	Quarterly
Metals (Total)					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.60	2.00	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
Cyanide (as free cyanide)	0.16	0.2	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	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

[8]Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen (TKN)

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

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

[11] 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

[12] 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

[13] 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

Table 10: ROUTINE DISCHARGE MONITORING PHASE I – 3.75 MGD CONTINUED					
Sampling Point Number	**Sampling Point Identification**		**Latitude (North)**		**Longitude (West)**
4	Upstream of the chlorine contact basin effluent weir, just before entering the effluent pump station		34° 39' 27" N		112° 23' 58" W
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	1.0	mg/l	Semi-Annually	Semi-Annually
Trihalomethanes (total)[14]	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
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

[14] Total Trihalomethanes (TTHMs) are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane

Table 11: ROUTINE DISCHARGE MONITORING PHASE IA – 4.75 MGD					
Sampling Point Number	**Sampling Point Identification**		**Latitude (North)**		**Longitude (West)**
1 Sundog WWTP Recharge Flow	Meter located at the far west side of the recharge basins between basins 1 and 2		34° 39' 22.5" N		112° 24' 25" W
2 Effluent Flow (Total)	Meter located at the effluent pump station from the Airport Phase I WRF		34° 39' 27" N		112° 23' 58" W
3 Reuse Flow	Meter located at the reclaimed water storage tank		34° 39' 24.25" N		112° 24' 31.5" W
Parameter	**Alert Level**	**Discharge Limit**	**Units**	**Sampling Frequency**	**Reporting Frequency**
Total Flow[15]: Daily[16]	Not Applicable[17]	Not Applicable	mgd[18]	Daily	Quarterly
Total Flow: Monthly Average[19]	4.5	4.75	mgd	Monthly Calculation	Quarterly
Reuse Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Reuse Flow: Monthly Average	4.5	4.75	mgd	Monthly Calculation	Quarterly
Airport Phase I WRF Recharge Flow: Daily	Not Established	Not Established	mgd	Daily	Quarterly
Airport Phase I WRF Recharge Flow[20]: Monthly Average	4.5	4.75	mgd	Monthly Calculation	Quarterly
Sundog WWTP Recharge Flow: Daily	Not Established	Not Established	mgd	Daily	Quarterly
Sundog WWTP Recharge Flow: Monthly Average	Not Established	Not Established	mgd	Monthly Calculation	Quarterly
Recharge Flow (Total)[21]: Daily	Not Established	Not Established	mgd	Daily Calculation	Quarterly
Recharge Flow (Total): Monthly Average	12	12.7	mgd	Monthly Calculation	Quarterly

[15] Total flow for all methods of disposal
[16] Total Daily Flow shall be measured using a continuous recording flow meter that totals the flows daily.
[17] Not Applicable means that monitoring is required, but no limits have been specified at the time of permit issuance
[18] mgd = million gallons per day
[19] Monthly Average means the calculated average of daily flow values in a month
[20] Calculated value: Airport Recharge Flow = Total effluent flow minus Reuse flow
[21] Calculated value: Total Recharge Flow = Recharge flow from the Airport Phase I WRF + Recharge flow from the Sundog WWTP

Table 12: ROUTINE DISCHARGE MONITORING PHASE IA – 4.75 MGD CONTINUED					
Sampling Point Number	**Sampling Point Identification**		**Latitude (North)**		**Longitude (West)**
4	Upstream of the chlorine contact basin effluent weir, just before entering the effluent pump station		34° 39' 27" N		112° 23' 58" W
Parameter	**Alert Level**	**Discharge Limit**	**Units**	**Sampling Frequency**	**Reporting Frequency**
Total Nitrogen[22]: Five-sample rolling geometric mean[23]	8.0	10.0	mg/l	Monthly Calculation	Quarterly
Fecal Coliform: Single sample maximum	Not Applicable	23.0	CFU[24]	Daily[25]	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week[26]	Not Applicable	Non-detect[27]	CFU	Weekly Evaluation	Quarterly
Metals (Total)					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.60	2.00	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
Cyanide (as free cyanide)	0.16	0.2	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	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

[22]Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen (TKN)

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

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

[25] 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

[26] 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

[27] 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

Table 13: ROUTINE DISCHARGE MONITORING PHASE IA – 4.75 MGD CONTINUED					
Sampling Point Number	**Sampling Point Identification**		**Latitude (North)**		**Longitude (West)**
4	Upstream of the chlorine contact basin effluent weir, just before entering the effluent pump station		34° 39' 27" N		112° 23' 58" W
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	1.0	mg/l	Semi-Annually	Semi-Annually
Trihalomethanes (total)[28]	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
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

[28] Total Trihalomethanes (TTHMs) are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane

Table 14: ROUTINE DISCHARGE MONITORING PHASE II - 7.5 MGD					
Sampling Point Number	**Sampling Point Identification**		**Latitude (North)**		**Longitude (West)**
1 Sundog WWTP Recharge Flow	Meter located at the far west side of the recharge basins between basins 1 and 2		34° 39' 22.5" N		112° 24' 25" W
2 Effluent Flow (Total)	Meter located at the effluent pump station from the Airport Phase I WRF		34° 39' 27" N		112° 23' 58" W
3 Reuse Flow	Meter located at the reclaimed water storage tank		34° 39' 24.25" N		112° 24' 31.5" W
Parameter	**Alert Level**	**Discharge Limit**	**Units**	**Sampling Frequency**	**Reporting Frequency**
Total Flow[29]: Daily[30]	Not Applicable[31]	Not Applicable	mgd[32]	Daily	Quarterly
Total Flow: Monthly Average[33]	7.12	7.5	mgd	Monthly Calculation	Quarterly
Reuse Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Reuse Flow: Monthly Average	7.12	7.5	mgd	Monthly Calculation	Quarterly
Airport Phase I WRF Recharge Flow: Daily	Not Established	Not Established	mgd	Daily	Quarterly
Airport Phase I WRF Recharge Flow[34]: Monthly Average	7.12	7.5	mgd	Monthly Calculation	Quarterly
Sundog WWTP Recharge Flow: Daily	Not Established	Not Established	mgd	Daily	Quarterly
Sundog WWTP Recharge Flow: Monthly Average	Not Established	Not Established	mgd	Monthly Calculation	Quarterly
Recharge Flow (Total)[35]: Daily	Not Established	Not Established	mgd	Daily Calculation	Quarterly
Recharge Flow (Total): Monthly Average	12	12.7	mgd	Monthly Calculation	Quarterly

[29] Total flow for all methods of disposal

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

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

[32] mgd = million gallons per day

[33] Monthly Average means the calculated average of daily flow values in a month

[34]Calculated value: Airport Recharge Flow = Total effluent flow minus Reuse flow

[35]Calculated value: Total Recharge Flow = Recharge flow from the Airport Phase I WRF + Recharge flow from the Sundog WWTP

Table 15: ROUTINE DISCHARGE MONITORING PHASE II – 7.5 MGD CONTINUED					
Sampling Point Number	**Sampling Point Identification**		**Latitude (North)**		**Longitude (West)**
4	Upstream of the chlorine contact basin effluent weir, just before entering the effluent pump station		34° 39' 27" N		112° 23' 58" W
Parameter	**Alert Level**	**Discharge Limit**	**Units**	**Sampling Frequency**	**Reporting Frequency**
Total Nitrogen[36]: Five-sample rolling geometric mean[37]	8.0	10.0	mg/l	Monthly Calculation	Quarterly
Fecal Coliform: Single sample maximum	Not Applicable	23.0	CFU[38]	Daily[39]	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week[40]	Not Applicable	Non-detect[41]	CFU	Weekly Evaluation	Quarterly
Metals (Total)					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.60	2.00	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
Cyanide (as free cyanide)	0.16	0.2	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	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

[36]Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen (TKN)

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

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

[39] 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

[40] 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

[41] 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

Table 16: ROUTINE DISCHARGE MONITORING PHASE II – 7.5 MGD CONTINUED					
Sampling Point Number	**Sampling Point Identification**		**Latitude (North)**		**Longitude (West)**
4	Upstream of the chlorine contact basin effluent weir, just before entering the effluent pump station		34° 39' 27" N		112° 23' 58" W
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	1.0	mg/l	Semi-Annually	Semi-Annually
Trihalomethanes (total)[42]	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
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

[42] Total Trihalomethanes (TTHMs) are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane

Table 17: A+ RECLAMIED WATER MONITORING				
Reclaimed water monitoring under Table 17: A+ RECLAMIED WATER MONITORING shall be performed in addition to routine discharge monitoring required under Section 4.2, Table 8: ROUTINE DISCHARGE MONITORING				
Sampling Point Number	**Sampling Point Identification**		**Latitude (North)**	**Longitude (West)**
4	Upstream of the chlorine contact basin effluent weir, just before entering the effluent pump station		34° 39' 27" N	112° 23' 58" W
Parameter	**Discharge Limit**	**Units**	**Sampling Frequency**	**Reporting Frequency**
Fecal Coliform Single-sample maximum:	23.0	CFU[43]	Daily[44]	Quarterly
Fecal Coliform: Four (4) of last seven (7) samples	Non-detect[45]	CFU	Daily Evaluation	Quarterly
Total Nitrogen[46]: Five-sample rolling geometric mean[47]	10.0	mg/l[48]	Monthly Calculation	Quarterly
Turbidity[49]: Single reading	5.0	NTU[50]	Daily[51]	Quarterly
Turbidity: 24-hour average	2.0	NTU	Daily Calculation	Quarterly

[43] CFU = Colony Forming Units per 100 ml: For CFU, a value of <1.0 shall be considered to be non-detect.

[44] 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 (4) samples in each seven-day period are obtained and analyzed.

[45] 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

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

[47] 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:* $\boldsymbol{GM_5 = \sqrt[5]{(m_1)(m_2)(m_3)(m_4)(m_5)}}$ For the first four samples enter "Not Required" on SMRFs

[48] Mg/l = milligrams per liter

[49] 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

[50] NTU = Nephelometric Turbidity Units

[51] For the single turbidity reading, daily means the maximum reading during the 24-hour period.

Table 18: GROUNDWATER MONITORING					
Sampling Point Number	**Sampling Point Identification**			**Latitude (North)**	**Longitude (West)**
5	POC No. 1 (MW #3)			34° 39' 42" N	112° 23' 57" W
6	POC No. 2 (MW #5)			34° 39' 42" N	112° 24' 12" W
Parameter	**Alert Level**	**Aquifer Quality Limit**	**Units**	**Sampling Frequency**	**Reporting Frequency**
Total Nitrogen[52]:	8.0	10.0	mg/l[53]	Monthly Calculation	Quarterly
Nitrate-Nitrite as N	8.0	10.0	mg/l	Monthly Calculation	Quarterly
Nitrate as N	8.0	10.0	mg/l	Monthly	Quarterly
Nitrite as N	0.8	1.0	mg/l	Monthly	Quarterly
Total Kjeldahl Nitrogen (TKN)	Not Applicable[54]	Not Applicable	mg/l	Monthly	Quarterly
Fecal Coliform	Non-detect[55]	Not Applicable	CFU[56]	Monthly	Quarterly
Total Coliform[57]	Absence	Absence	P/A[58]	Monthly/Suspended[59]	Quarterly
Metals (Dissolved)					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.60	2.00	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
Cyanide (as free cyanide)	0.16	0.2	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	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

[52] Total Nitrogen is the sum of Nitrate as N, Nitrite as N, and Total Kjeldahl Nitrogen (TKN)
[53] Mg/l = milligrams per liter
[54] Not Applicable means that monitoring is required, but no limits have been specified at the time of permit issuance
[55] In the event that the alert level for monthly fecal coliform is exceeded, the permittee shall initiate monthly Total Coliform monitoring as described under Section 2.6.2.3.4. For CFU a value of <1.0 shall be considered to be non-detect.
[56] CFU = Colony Forming Units per 100ml
[57] In the event that the alert level for monthly fecal coliform is exceeded, the permittee shall initiate monthly Total Coliform monitoring as described under Section 2.6.2.3.4
[58] P/A = Presence or absence of total coliforms in a 100-milliliter sample. If total coliforms are present, enter "Non-compliance" on the SMRF. If total coliforms are absent, enter "Compliance" on the SMRF.
[59] Monitoring required only as per Section 2.6.2.3.4. If the fecal coliform Alert Level is not exceeded, indicate "Suspended" on SMRFs.

Table 19: GROUNDWATER MONITORING CONTINUED					
Sampling Point Number	**Sampling Point Identification**			**Latitude (North)**	**Longitude (West)**
5	POC No. 1 (MW #3)			34° 39' 42" N	112° 23' 57" W
6	POC No. 2 (MW #5)			34° 39' 42" N	112° 24' 12" W
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	1.0	mg/l	Semi-Annually	Semi-Annually
Trihalomethanes (total)[60]	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
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

[60] Total Trihalomethanes are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

Table 20: 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**
Sludge Drying Bed Freeboard	One (1) Linear Foot	Weekly	See Section 2.7.3
Recharge Basin Freeboard	Two (2) Linear Feet	Weekly	
Pump Integrity	Good working condition	Weekly	
Treatment Plant Components	Good working condition	Weekly	
Recharge Basin Berm Integrity	No visible structural damage, breach, or erosion of embankments	Weekly	
Sludge Drying Bed Liner Integrity	No cracks or leaks that would exceed a leakage rate of 550 gpd/acre	Weekly	
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
Surface Impoundment Vegetation Removal	No vegetation present in the impoundment or within five feet of the impoundment	Monthly	See Section 2.7.3

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:	January 6, 2021
Contingency Plan, dated:	January, 2021
Final Hydrologist Report, dated:	April 7, 2021
Final Engineering Report, dated:	May 26, 2021
Public Notice, dated:	Insert Date
Public Hearing, dated:	Not applicable
Responsiveness Summary, dated:	Not applicable

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 Value Stream 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).