

PERMIT

STATE OF ARIZONA AQUIFER PROTECTION PERMIT NO. P-513090 PLACE ID 190845, LTF 91988

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 Global Water-Hassayampa Utilities Company, Inc to operate the HUC Campus 2 Water Reclamation Facility at Maricopa County Parcels 504-12-134 and 504-12-136; North of Buckeye Rd, 0.15 miles west from the intersection of W. Buckeye Road. and S 343rd Avenue in Maricopa County, over the groundwater of the Phoenix Active Management Area.

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: HUC Campus 2 Water Reclamation Facility (WRF)

Facility Address: Maricopa County Parcels 504-12-134 & 504-12-136; From the intersection of

W. Buckeye Rd. and S 343rd Ave, the site is approximately 825 ft. West and

1,260 ft. North located in Tonopah, Arizona 85354.

County: Maricopa

Permitted Flow Rate: 120,000 gallons per day

Permittee: Global Water - Hassayampa Utilities Company, Inc. **Permittee Address:** 21410 N 19th Avenue, Suite 205, Phoenix, AZ 85027

Facility Contact: Jon Corwin; General Manager

Emergency Phone No.: (520) 265-1947 Office; (602) 885-2791; Cell jon.corwin@gwresources.com

Latitude/Longitude: 33° 26′ 23.2″ N / 112° 47′ 35.3 W

Legal Description: Township 1N, Range 5W, Section 8, SW1/4 E 1/2 of the Gila and Salt River

Baseline and Meridian

1.2. AUTHORIZING SIGNATURE

Randall Matas,	Deputy Director	
Water Quality D Arizona Departr	ivision nent of Environmental Qu	ıality
Signed this	day of	, 202



TABLE OF CONTENTS

	IORIZATION	
1.1. PE	RMITTEE INFORMATION	1
1.2. AU	THORIZING SIGNATURE	1
2.0 SPEC	IFIC CONDITIONS	4
	CILITY / SITE DESCRIPTION	
2.1.1.	Annual Registration Fee	
2.1.2.	Financial Capability	
	ST AVAILABLE DEMONSTRATED CONTROL TECHNOLOGY (BADCT)	5
2.2.1.	Engineering Design	
2.2.2.	Site-Specific Characteristics.	
2.2.3.	Pre-Operational Requirements	
2.2.4.	Operational Requirements	
2.2.5.	Reclaimed Water Classification	
2.2.6.	Certified Areawide Water Quality Management Plan Conformance	
	SCHARGE LIMITATIONS	
	INT OF COMPLIANCE (POC)	
	ONITORING REQUIREMENTS	
2.5.1 MC	Pre-Operational Monitoring	
2.5.2.	Routine Discharge Monitoring	
2.5.3.	Reclaimed Water Monitoring	
2.5.4.	Facility / Operational Monitoring	
2.5.5.	Groundwater Monitoring and Sampling Protocols	
2.5.6.	Surface Water Monitoring and Sampling Protocols	
2.5.7.	Analytical Methodology	
2.5.8.	Installation and Maintenance of Monitoring Equipment	
	NTINGENCY PLAN REQUIREMENTS	
2.6.1.	General Contingency Plan Requirements	
2.6.2.	Exceeding of Alert Levels and Performance Levels	
2.6.2.		
2.6.2.2		
	2.2.1. Exceeding Permit Flow Limit	
2.6.2.		
2.6.	2.3.1. Alert Levels for Indicator Parameters	10
	2.3.2. Alert Levels for Pollutants with Numeric Aquifer Water Quality Standards	
2.6.	2.3.3. Alert Levels to Protect Downgradient Users from Pollutants without Numeric Aquifer Water Quality	
2.6	Standards	
2.6.3.	2.3.4. Alert Level for Groundwater Level	
2.6.4.	Aquifer Quality Limit Violation	
2.6.5.	Emergency Response and Contingency Requirements for Unauthorized Discharges	
2.6.5.		
2.6.5.2	· · · · · · · · · · · · · · · · · · ·	
2.6.5.3	9 1	
2.6.5.4	e ·	
2.6.6.	Corrective Actions	
	PORTING AND RECORDKEEPING REQUIREMENTS	
2.7. KE	Self-Monitoring Report Form	
2.7.1.	Operation Inspection / Log Book Recordkeeping	
2.7.2.	Permit Violation and Alert Level Status Reporting	
2.7.4.	Operational, Other or Miscellaneous Reporting	



2.7	7.5. Reporting Location	13
2.7		
2.7	7.7. Changes to Facility Information in Section 1.0 and Section 2.0	14
2.8.	TEMPORARY CESSATION	14
2.9.	CLOSURE	15
2.9	P.1. Closure Plan	15
2.9	9.2. Closure Completion	15
2.10.	POST-CLOSURE	15
2.1	0.1. Post-Closure Plan	15
2.1	0.2. Post-Closure Completion	16
3.0	COMPLIANCE SCHEDULE	16
4.0	TABLES OF MONITORING REQUIREMENTS	
4.1.	PRE-OPERATIONAL MONITORING	
4.2.	COMPLIANCE OR OPERATIONAL MONITORING	19
5.0	REFERENCES AND PERTINENT INFORMATION	24
6.0 I	NOTIFICATION PROVISIONS	24
6.1.	ANNUAL REGISTRATION FEES	24
6.2.	DUTY TO COMPLY	24
6.3.	DUTY TO PROVIDE INFORMATION	24
6.4.	COMPLIANCE WITH AQUIFER WATER QUALITY STANDARDS	24
6.5.	TECHNICAL AND FINANCIAL CAPABILITY	24
6.6.	REPORTING OF BANKRUPTCY OR ENVIRONMENTAL ENFORCEMENT	
6.7.	MONITORING AND RECORDS	
6.8.	INSPECTION AND ENTRY	
6.9.	DUTY TO MODIFY	
6.10.	PERMIT ACTION: AMENDMENT, TRANSFER, SUSPENSION, AND REVOCATION	
7.0	ADDITIONAL PERMIT CONDITIONS	25
7.1.	OTHER INFORMATION	
7.2.	SEVERABILITY	
7.3.	PERMIT TRANSFER	25
	TABLE OF TABLES	
Table 1	: DISCHARGING FACILITIES	4
	2: POINT(S) OF COMPLIANCE	
	: QUARTERLY REPORTING DEADLINES	
	: (SEMI-)ANNUAL REPORTING DEADLINES	
	S: COMPLIANCE SCHEDULE ITEMS	
	5: FLOW MONITORING INITIAL START-UP	
	7: FLOW MONITORING (PHASE 1)	
	3: FLOW MONITORING (PHASE 2)	
	2: ROUTINE DISCHARGE MONITORING	
	0: RECLAIMED WATER MONITORING	
IARIE	T FACTITLY INSPECTION AND OPERATIONAL MONITORING	23



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 Global Water - Hassayampa Utilities Co, Inc. is authorized to operate the Global Water - Hassayampa Utilities Co, Inc. Water Reclamation Facility Campus 2 with a maximum average monthly flow of 120,000 gallons per day (gpd) for Phase 2 and 60,000 gpd for Phase 1. The Department has graded this facility as a Grade 2 Wastewater Treatment Plant for both phases. The facility shall have an operator in direct responsible charge who is certified for the grade of the facility and inspects the facility weekly.

Start-Up Plan:

During the initial start-up, up to 10,000 gallons per day of influent may be vaulted and hauled off-site to an approved facility as per Section 4.1, Table IA. Domestic wastewater from the residential development will be fed by a forcemain to the 20,000 gallon effluent equalization tank (aerated as necessary) with a 100,000 gallon Emergency Overflow Tank as back-up volume. The system consists of a flowmeter, followed by a mechanical fine screen, two influent airlift pumps with a covered effluent equalization tank (aerated as necessary) and odor control system. The odor control system will consist of a negative pressure air evacuation system and biofilter assembly to eliminate any nuisance odors.

Phase 1 WRF:

Flow from the collection system forcemain goes through an influent flowmeter then flows through a mechanical fine screen with a wash compactor and solids bagging system, or can overflow through a manual barscreen into a 20,000 gallon aerated (as necessary) emergency overflow and equalization tank with an available additional 100,000 gallon capacity overflow tank for peak flows and to perform plant maintenance. From the equalization tank, two 43 gallon per minute (gpm) air-lift pumps transfer influent into the first of two anoxic tanks prior to entering the FAST secondary treatment tank, which contains fixed-film activated sludge media. Mixed liquors are returned from the end of the FAST tank back to the 1st anoxic tank for denitrification. The effluent that passes through the FAST tank goes through a clarifier and a duplex gravity filter prior to UV disinfection and discharge to an effluent pump station. The Class A+ effluent may be utilized under a valid reuse permit or discharged at Dickey Wash covered by an AZPDES permit (AZPDES Permit number AZ0026611).

Return Activated Sludge is returned to Anoxic Tank #1 or wasted to an aerated sludge holding tank for storage. The aerated sludge holding tank will have storage capacity of approximately 30 days and will implement decanting to 1.5% solids. The facility will not process sludge on site. All sludge will be periodically trucked to an off-site facility for processing and disposal in accordance with Part 503 of the Clean Water Act and Title 18, Chapter 9 of the AAC.

Phase 2 WRF

A second treatment plant that will mirror the Phase 1 WRF FAST package plant will be installed and include a mechanical fine screen, additional 20,000 gpd equalization basin, two anoxic zones, FAST secondary treatment tank, clarifier, duplex gravity filter, UV system, and aerated sludge holding tank. Disinfected effluent will be discharged to the combined effluent pumping station, which will include a 3rd effluent pump.

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					
HUC Campus 2 WRF	33° 26' 23.2" N	112° 47' 35.3" W			
Effluent Pump Station	33° 26' 22.6" N	112° 47' 35.4" W			
Dickey Wash Discharge	33° 26' 07.5" N	112° 48' 14.7" 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 estimated dollar amount for facility closure is \$ 46,279.68. The financial capability was demonstrated through A.A.C. R18-9-A203(B)(1) and (C). The financial capability was demonstrated through a Certificate of Deposit A.A.C. R18-9-A203(C)(3).

2.2. BEST AVAILABLE DEMONSTRATED CONTROL TECHNOLOGY (BADCT)

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

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

2.2.1. Engineering Design

The treatment facility was designed as per the design report and Phase 1 design plans signed, dated, and sealed by an Arizona-registered professional engineer, Brian McBride (Reg #33441), under Wilson & Company, Inc., dated July 29, 2022. The Phase 2 design plans were signed, dated, and sealed by an Arizona-registered professional engineer, Brian McBride (Reg #33441), under Consor Engineers, Inc., dated May 20, 2021 (LTF 77667).

2.2.2. Site-Specific Characteristics

Flow is delivered to the WRF via a forcemain and offsite pump station covered under a type 4 general permit. This WRF is an above ground Smith and Loveless package plant, which resulted in lower closure costs.

2.2.3. Pre-Operational Requirements

Prior to utilizing the Initial Start-Up Plan, the permittee shall submit an Engineer's Certificate of Completion, in a format approved by the Department, which confirms that the vault and haul system is constructed according to the Department-approved design report or plans and specifications, as applicable, per the Section 3.0, Compliance Schedule Item Number 1.

The facility shall monitor flows per Section 4.1, Table 6: FLOW MONITORING INITIAL START-UP. Once the flow rate reaches 10,000 gpd, the facility shall commence the operation of the Phase 1 WRF. At start-up, the permittee must notify ADEQ Ground Protection Value Stream prior to being authorized to operate the Fixed Activated Sludge Treatment (FAST) package plant for the Phase 1 permitted capacity of 60,000 gpd.

Prior to initiating use of the Phase 1 Water Reclamation Facility, 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 Item Number 3 in Section 3.0. The certificate shall be submitted to the Groundwater Protection Value Stream and approved prior to use of the new facility.



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 11: 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 permittee is authorized to operate the treatment facility with a maximum average monthly flow of 0.06 million gallons per day (mgd) for Phase 1 and 0.12 mgd for Phase 2.
- 2. Annually, the permittee shall notify all users that the materials authorized to be disposed of through the treatment facility are typical household sewage and pre-treated commercial wastewater and shall not include motor oil, gasoline, paints, varnishes, hazardous wastes, solvents, pesticides, fertilizers or other materials not generally associated with toilet flushing, food preparation, laundry facilities and personal hygiene.
- 3. The permittee shall operate and maintain all permitted facilities to prevent unauthorized discharges pursuant to A.R.S. § 49-201(12) resulting from failure or bypassing of applicable BADCT.
- 4. Specific discharge limitations are listed in Section 4.2, Table 9: ROUTINE DISCHARGE MONITORING and Table 10: RECLAIMED WATER MONITORING

2.4. POINT OF COMPLIANCE (POC)

[A.R.S. § 49-244]

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

Table 2: POINT(S) OF COMPLIANCE					
POC # POC Location Latitude Longitud					
1 (Conceptual)	Downgradient of HUC Campus 2 WRF site	33° 26' 20.1" N	112° 47' 39.7" W		
2 (Conceptual)	Downgradient of Dickey Wash Discharge	33° 26' 02.5" N	112° 48' 14.9" W		

POC #1 and POC #2 are conceptual locations and no groundwater monitoring is required. The Director may amend this permit to require installation of the well(s) and initiation of groundwater monitoring at the POC or to designate additional points of compliance if information on groundwater gradients or groundwater usage indicates the need.



2.5. MONITORING REQUIREMENTS

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

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

2.5.1. Pre-Operational Monitoring

During the initial start-up period, the permittee shall monitor the flow rate according to Section 4.1, Table 6: FLOW MONITORING INITIAL START-UP. The flow rate shall be measured at the influent flow meter and recorded daily. Monitoring under Section 4.1, Table 6: FLOW MONITORING INITIAL START-UP shall continue until the permittee ceases to vault and haul and initiates routine discharge monitoring under Section 4.2, Table 7: FLOW MONITORING (PHASE 1) and Table 9: ROUTINE DISCHARGE MONITORING.

2.5.2. Routine Discharge Monitoring

Upon cessation of the initial start-up period, the permittee shall monitor the effluent according to Section 4.2, Table 9: ROUTINE DISCHARGE MONITORING. Representative samples of the effluent shall be collected at the point of discharge from the effluent pump station.

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 10: RECLAIMED WATER MONITORING in addition to the routine discharge monitoring parameters listed in Table 9: ROUTINE DISCHARGE MONITORING. 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 11: FACILITY INSPECTION AND OPERATIONAL MONITORING.

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

2.5.5. Groundwater Monitoring and Sampling Protocols

Groundwater monitoring is not required under the terms of this permit.

2.5.6. Surface Water Monitoring and Sampling Protocols

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

2.5.7. Analytical Methodology

All samples collected for compliance monitoring shall be analyzed using Arizona state-approved methods. If no state-approved method exists, then any appropriate EPA-approved method shall be used. Regardless of the method used, the detection limits must be sufficient to determine compliance with the regulatory limits of the parameters specified in this permit. If all methods have detection limits higher than the applicable limit, the permittee shall follow the applicable contingency requirements of Section 2.6 and may propose "other



actions" including amending the permit to set higher limits. Analyses shall be performed by a laboratory licensed by the Arizona Department of Health Services, Office of Laboratory Licensure and Certification unless exempted under A.R.S. 36-495.02. For results to be considered valid, all analytical work shall meet quality control standards specified in the approved methods. A list of state-certified laboratories in Arizona can be obtained at the address below:

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

2.5.8. Installation and Maintenance of Monitoring Equipment

Monitoring equipment required by this permit shall be installed and maintained so that representative samples required by the permit can be collected. If new groundwater wells are determined to be necessary, the construction details shall be submitted to the Groundwater Protection 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 the application submitted as Appendix O in the application and resubmitted on August 11, 2022, 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 11: FACILITY INSPECTION AND OPERATIONAL MONITORING to prevent the overtopping of the package plant and emergency overflow basins. If 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.

If a performance level set in Section 4.2, Table 11: 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 per Section 2.7.5.
- 2. Submit a written report to the Groundwater Protection Value Stream within thirty (30) days after becoming aware of the exceedance per Section 2.7.5. The report shall document all of the following:
 - a. A description of the exceedance and the cause of the exceedance;
 - b. The period of the exceedance, including exact date(s) and time(s), if known, and the anticipated time period during which the exceedance is expected to continue;
 - c. Any action taken or planned to mitigate the effects of the exceedance or spill, or to eliminate or prevent recurrence of the exceedance or spill;
 - d. Any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS; and
 - e. Any malfunction or failure of pollution control devices or other equipment or process.
- 3. The facility is no longer on alert status once the operational indicator no longer indicates that a performance level is being exceeded. The permittee shall, however, complete all tasks necessary to return the facility to its pre-alert operating condition.

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

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

Not applicable – Groundwater monitoring is not required under this permit.

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 Groundwater Level

Not applicable – Groundwater level monitoring is not required under this permit.

2.6.3. Discharge Limit Violation

- 1. If a DL set in Section 4.2, Table 9: ROUTINE DISCHARGE MONITORING or Table 10: 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 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. Aguifer Quality Limit Violation

Not applicable – Groundwater monitoring is not required under this permit.



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 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, and actions identified in the approved contingency plan referenced in Section 5.0, 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 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 Value Stream 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.
- 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 6: FLOW MONITORING INITIAL START-UP
 - b. Table 7: FLOW MONITORING (PHASE 1)
 - c. Table 8: FLOW MONITORING (PHASE 2)
 - d. Table 9: ROUTINE DISCHARGE MONITORING
 - e. Table 10: RECLAIMED WATER 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. The operator in direct responsible charge shall visit the site "weekly" and sign-in to comply with R18-5-104.



2.7.3. Permit Violation and Alert Level Status Reporting

- 1. The permittee shall notify the Groundwater Protection Value Stream 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 Value Stream 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 11: 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;
- 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. Contact at 602-771-4571 for any inquiry related to the SMRFs.

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

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



The Arizona Department of Environmental Quality
Groundwater Protection Value Stream
Mail Code 5415B-3
1110 West Washington Street
Phoenix, Arizona 85007
Phone (602) 771-4999

2.7.6. Reporting Deadline

The following table lists the quarterly report due dates:

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

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

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

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

The Groundwater Protection Value Stream 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 Value Stream per Section 2.7.5 before ceasing operation of the facility for a period of 60 days or greater. The permittee shall take the following measures upon temporary cessation:

- 1. If applicable, direct the wastewater flows from the facility to another state-approved wastewater treatment facility;
- 2. Correct the problem that caused the temporary cessation of the facility; and
- 3. Notify the Groundwater Protection 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 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 Value Stream 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 Value Stream 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;
- 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 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 per Section 2.7.5.

Table 5: COMPLIANCE SCHEDULE ITEMS								
No. Description		Due By:	Permit Amendment Required?					
Initial S	Initial Start-up Plan – Vault and Haul							
1	The permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion, in a format approved by the Department, which confirms that the vault and haul system is constructed according to the Department-approved design report or plans and specifications, as applicable.	Prior to utilizing the vault and haul system and within 90 days after completion of construction.	No					
2	The permittee shall notify the Department regarding cessation of vault and haul.	Within 15 days of the date of the cessation of the vault and haul activity or when flow reaches 10,000 gpd, whichever comes first	No					
Phase 1	- 0.06 mgd							
3	The permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion, in a format approved by the Department, which confirms that the Phase I is constructed according to the Department-approved design report or plans and specifications, as applicable.	Prior to commencing discharge from the WRF under Phase I and within 90 days after completion of construction.	No					
4 Notify ADEQ of commencement of discharge from the WRF for Phase I.		Within 15 days of commencement of discharge under Phase I.	No					
Phase 2	– 0.12 mgd							
5	The permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion, in a format approved by the Department, which confirms that the Phase II is constructed according to the Department-approved design report or plans and specifications, as applicable.	Prior to commencing discharge from the WRF under Phase II and within 90 days after completion of construction.	No					
6	Notify ADEQ of commencement of discharge from the WRF for Phase 2.	Within 15 days of commencement of discharge under Phase 2.	No					

HUC Campus 2 WRF Page 16 of 25



	Table 5: COMPLIANCE SCHEDULE ITEMS (Continued)						
Closure	Closure Cost and Financial Assurance Mechanism						
7	The permittee shall submit a demonstration that the financial assurance mechanism listed in Section 2.1, Financial Capability, is being maintained as per A.R.S. 49-243.N.4 and A.A.C. R18-9-A203(H) for all estimated closure and post-closure costs including updated costs submitted under Section 3.0; Table 7, CSI Item No. 6 below. The demonstration shall include a statement that the closure and post-closure strategy has not changed, the discharging facilities listed in the permit have not been altered in a manner that would affect the closure and post-closure costs, and discharging facilities have not been added. The demonstration shall also include information in support of a letter of credit as required in A.A.C. R18-9-A203(C)(2).	By September 1, 2028 and every 6 years thereafter	Yes				
8	The permittee shall submit updated cost estimates for facility closure and post-closure, as per A.A.C. R18-9-A201(B)(5) and A.R.S. 49-243.N.2.a.	By September 1, 2028 and every 6 years thereafter	Yes				

HUC Campus 2 WRF Page 17 of 25



4.0 TABLES OF MONITORING REQUIREMENTS

4.1. PRE-OPERATIONAL MONITORING

Table 6: FLOW MONITORING INITIAL START-UP					
Monitoring under this table shall continue until permittee ceases to vault and haul and initiates routine monitoring under Section					
4.2, Table 9: ROUTINE DISCHARGE MONITORING. Notify the Groundwater Section within 15 days of making this transition					
(see Section 3.0, Compliance Schedule Item No. 2).					

Sampling Point Number ¹	Sampling Point Identification			Latitude	Longitude
1	Influent Flow Meter M1		33° 26' 23.8" N	112° 47' 35.6" W	
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Total Flow: Daily ²	Not Applicable ³	0.01	mgd ⁴	Daily	Quarterly

HUC Campus 2 WRF Page 18 of 25

¹ Influent Flow Meter must be calibrated prior to use and reporting and recalibrated either biennially (every 2 years) or at the minimum frequency specified by the manufacturer. This flow measurement device must be calibrated using the procedures specified by the device manufacturer

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.

mgd = million gallons per day



4.2. COMPLIANCE OR OPERATIONAL MONITORING

Table 7: FLOW MONITORING (PHASE 1)						
Sampling Point Number ⁵	Sampling	g Point Identification	1	Latitude (North)	Longitude (West)	
1	Influe	nt Flow Meter M1		33° 26' 23.8" N	112° 47' 35.6" W	
2	Effluent Flow	Meter to Dickey Was	sh M2	33° 26' 22.6" N	112° 47' 35.4" W	
3	Reus	e Flow Meter M3		33° 26' 22.7" N	112° 47' 35.4" W	
Parameter	Alert Level Discharge Limit Units		Sampling Frequency	Reporting Frequency		
Total Flow ⁶ : Daily ⁷	Not Applicable ⁸	Not Applicable	mgd ⁹	Daily	Quarterly	
Total Flow: Monthly Average ¹⁰	0.054	0.06	mgd	Monthly Calculation	Quarterly	
Dickey Wash Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly	
Dickey Wash Flow: Monthly Average	0.054	0.06	mgd	Monthly Calculation	Quarterly	
Reuse Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly	
Reuse Flow: Monthly Average	0.054	0.06	mgd	Monthly Calculation	Quarterly	
Sludge Hauling From WRF	Not Applicable	Not Applicable	gallons	Monthly Calculation	Quarterly	

Table 8: FLOW MONITORING (PHASE 2)					
Sampling Point Number ⁵	Sampling Point Identification			Latitude (North)	Longitude (West)
1	Influent Flow Meter M1		33° 26' 23.8" N	112° 47' 35.6" W	
2	Effluent Flow Meter to Dickey Wash M2		33° 26' 22.6" N	112° 47' 35.4" W	
3	Reuse Flow Meter M3		33° 26' 22.7" N	112° 47' 35.4" W	
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Total Flow ⁶ : Daily ⁷	Not Applicable ⁸	Not Applicable	mgd ⁹	Daily	Quarterly
Total Flow: Monthly Average ¹⁰	0.108	0.12	mgd	Monthly Calculation	Quarterly
Dickey Wash Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Dickey Wash Flow: Monthly Average	0.108	0.12	mgd	Monthly Calculation	Quarterly
Reuse Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Reuse Flow: Monthly Average	0.108	0.12	mgd	Monthly Calculation	Quarterly
Sludge Hauling From WRF	Not Applicable	Not Applicable	gallons	Monthly Calculation	Quarterly

HUC Campus 2 WRF Page 19 of 25

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.

⁶ Total flow = The total flow recorded from Sample Point 1 (Influent Flow Meter M1)

⁷ Total Daily Flow shall be measured using a continuous recording flow meter that totals the flows daily.

⁸ Not Applicable means that monitoring is required, but no limits have been specified at the time of permit issuance

⁹ mgd = million gallons per day

¹⁰ Monthly Average means the calculated average of daily flow values in a month



	Table 9: ROU	JTINE DISCHARG	E MONITO	DRING		
Sampling Point Number	Sampling Point Identification		Latitude (North)	Longitude (West)		
4	Effluent Pump Station		33° 26' 22.6" N	112° 47' 35.4" W		
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency	
Fecal Coliform: Single sample maximum	Not Applicable ¹¹	23.0	MPN ¹²	Daily ¹³	Quarterly	
Fecal Coliform: four (4) of seven (7) samples in a week 14	Not Applicable	Non-detect ¹⁵	MPN	Weekly Evaluation	Quarterly	
Total Nitrogen ¹⁶ : Five-sample rolling geometric mean ¹⁷	8.0	10.0	mg/l ¹⁸	Monthly Calculation	Quarterly	
Salts						
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	1.60	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	
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	

HUC Campus 2 WRF Page 20 of 25

¹¹ Not Applicable means that monitoring is required, but no limits have been specified at the time of permit issuance.

¹² MPN = Most Probable Number / 100 ml sample. For MPN, a value of <2.2 shall be considered to be non-detect.

¹³ 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.

¹⁴ Fecal coliform to be monitored daily, with four of the seven samples meeting 'non-detect' limit and a single sample maximum of 23 CFU/100ml. 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.

¹⁵ To classify effluent as Class A+, facility must meet 'non-detect' limit for pathogens. 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.

¹⁶ Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

¹⁷ 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: $GM_5 = \sqrt[5]{(m_1)(m_2)(m_3)(m_4)(m_5)}$

 $^{^{18}}$ mg/l = milligrams per liter



Table 9: ROUTINE DISCHARGE MONITORING (Continued)						
Sampling Point Number	Sampling Point Identification		Latitude (North)	Longitude (West)		
4	Effluent Pump Station		33° 26' 22.6" N	112° 47' 35.4" 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) ¹⁹	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	

HUC Campus 2 WRF Page 21 of 25

¹⁹ Total Trihalomethanes (TTHMs) are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane



TE 1.1 10 DEGE	ATLAND MA	ATED AG	NUTCODING
Table 10: RECL	AIMED W.	ATER MIC)NITORING

Reclaimed water monitoring under Table 10: RECLAIMED WATER MONITORING shall be performed in addition to routine discharge monitoring required under Section 4.2, Table 9: ROUTINE DISCHARGE MONITORING

Sampling Point Number	Sampling Point Identification		Latitude (North)	Longitude (West)
4	Effluent Pump Station		33° 26' 22.6" N	112° 47' 35.4" W
Parameter	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Fecal Coliform Single-sample maximum:	23.0	MPN^{20}	Daily ²¹	Quarterly
Fecal Coliform: Four (4) of last seven (7) samples	Non-detect ²²	MPN	Daily Evaluation	Quarterly
Total Nitrogen ²³ : Five-sample rolling geometric mean ²⁴	10.0	mg/l ²⁵	Monthly Calculation	Quarterly
Turbidity ²⁶ : Single reading	5.0	NTU ²⁷	Daily ²⁸	Quarterly
Turbidity: 24-hour average	2.0	NTU	Daily Calculation	Quarterly
Enteric Virus ²⁹ : Four (4) of last seven (7) samples	Non-detect	MPN ²⁰	Monthly / Suspended ³⁰	Quarterly



²¹ 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.

²² 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

²³ Total Nitrogen is the sum of Nitrate as N, Nitrite as N, and Total Kjeldahl Nitrogen (TKN)

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

²⁵ Mg/l = milligrams per liter

²⁶ 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.

²⁷ NTU = Nephelometric Turbidity Units

²⁸ For the single turbidity reading, daily means the maximum reading during the 24-hour period.

²⁹ Initial monthly enteric virus sampling shall be performed to indicate four (4) out of seven (7) sample results of non-detect.

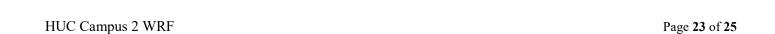
³⁰ Enteric virus sampling shall resume only when the discharge limit for the 24-hour average for turbidity is exceeded for two (2) consecutive 24-hour monitoring periods. Monthly enteric virus monitoring shall continue until four (4) out of seven (7) consecutive sample results show no detection. During times when enteric virus sampling is suspended, enter "suspended" in the appropriate space on the SMRF



Table 11: 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
100,000 gallon Emergency Overflow Tank	One (1) Linear Foot	Weekly	
Package Plant WRF Freeboard	One (1) Linear Foot	Weekly	
Pump Integrity	Good working condition	Weekly	See Section 2.7.3
Treatment Plant Components	Good working condition	Weekly	
Package Plant Vegetation Removal	No vegetation greater than two foot in height present within	Weekly	





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: March 10, 2022 Contingency Plan, dated: August 11, 2022

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

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

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).