



STATE OF ARIZONA  
AQUIFER PROTECTION PERMIT NO. P-103676  
PLACE ID 5395, LTF 92945  
**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 Pine Meadows Utilities, LLC to operate the Houston Creek Landing Wastewater Treatment Plant (WWTP) located at 390 Granite Ridge Road, Star Valley, Arizona, Gila County, over the groundwater of the Tonto Creek.

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:** Houston Creek Landing Wastewater Treatment Plant (WWTP)  
**Facility Address:** 390 Granite Ridge Road  
Star Valley, AZ 85541  
**County:** Gila

**Permitted Flow Rate:** 37,000 gallons per day (gpd)

**Permittee:** Pine Meadows Utilities, LLC  
**Permittee Address:** 7581 E. Academy Blvd., Ste 229  
Denver, CO 80230

**Facility Contact:** Patricia Olsen, Operator  
**Emergency Phone No.:** (928) 300 - 3291

**Latitude/Longitude:** 34° 14' 48" N / 111° 14' 48" W  
**Legal Description:** Township 11N, Range 11E, Section 32, SE ¼ of the Gila and Salt River Baseline and Meridian

**1.2. AUTHORIZING SIGNATURE**

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

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 2025

**TABLE OF CONTENTS**

<b>1.0</b>	<b>AUTHORIZATION .....</b>	<b>1</b>
1.1.	PERMITTEE INFORMATION .....	1
1.2.	AUTHORIZING SIGNATURE .....	1
<b>2.0</b>	<b>SPECIFIC CONDITIONS.....</b>	<b>4</b>
2.1.	FACILITY / SITE DESCRIPTION .....	4
2.1.1.	Annual Registration Fee .....	5
2.1.2.	Financial Capability.....	5
2.2.	BEST AVAILABLE DEMONSTRATED CONTROL TECHNOLOGY (BADCT) .....	5
2.2.1.	Engineering Design .....	5
2.2.2.	Site-Specific Characteristics .....	5
2.2.3.	Pre-Operational Requirements.....	5
2.2.4.	Operational Requirements .....	5
2.2.5.	Reclaimed Water Classification .....	6
2.2.6.	Certified Areawide Water Quality Management Plan Conformance .....	6
2.3.	DISCHARGE LIMITATIONS .....	6
2.4.	POINT OF COMPLIANCE (POC).....	6
2.5.	MONITORING REQUIREMENTS .....	7
2.5.1.	Pre-Operational Monitoring.....	7
2.5.2.	Routine Discharge Monitoring .....	7
2.5.3.	Reclaimed Water Monitoring .....	7
2.5.4.	Facility / Operational Monitoring .....	7
2.5.5.	Groundwater Monitoring and Sampling Protocols .....	7
2.5.5.1.	<i>POC Well Replacement .....</i>	<i>8</i>
2.5.6.	Surface Water Monitoring and Sampling Protocols .....	8
2.5.7.	Analytical Methodology .....	8
2.5.8.	Installation and Maintenance of Monitoring Equipment.....	8
2.6.	CONTINGENCY PLAN REQUIREMENTS .....	8
2.6.1.	General Contingency Plan Requirements .....	8
2.6.2.	Exceeding of Alert Levels and Performance Levels .....	9
2.6.2.1.	<i>Exceeding of Performance Levels Set for Operational Conditions.....</i>	<i>9</i>
2.6.2.2.	<i>Exceeding of Alert Levels (ALs) Set for Discharge Monitoring.....</i>	<i>9</i>
2.6.2.2.1.	Exceeding Permit Flow Limit .....	10
2.6.2.3.	<i>Exceeding of Alert Levels in Groundwater Monitoring .....</i>	<i>10</i>
2.6.2.3.1.	Alert Levels for Indicator Parameters .....	10
2.6.2.3.2.	Alert Levels for Pollutants with Numeric Aquifer Water Quality Standards .....	10
2.6.2.3.3.	Alert Levels to Protect Downgradient Users from Pollutants without Numeric Aquifer Water Quality Standards .....	10
2.6.2.3.4.	Alert Level for Groundwater Level.....	10
2.6.3.	Discharge Limit Violation .....	10
2.6.4.	Aquifer Quality Limit Violation .....	11
2.6.5.	Emergency Response and Contingency Requirements for Unauthorized Discharges .....	11
2.6.5.1.	<i>Duty to Respond .....</i>	<i>11</i>
2.6.5.2.	<i>Discharge of Hazardous Substances or Toxic Pollutants .....</i>	<i>11</i>
2.6.5.3.	<i>Discharge of Non-Hazardous Materials .....</i>	<i>11</i>
2.6.5.4.	<i>Reporting Requirements .....</i>	<i>11</i>
2.6.6.	Corrective Actions .....	12
2.7.	REPORTING AND RECORDKEEPING REQUIREMENTS .....	12
2.7.1.	Self-Monitoring Report Form.....	12
2.7.2.	Operation Inspection / Log Book Recordkeeping .....	12
2.7.3.	Permit Violation and Alert Level Status Reporting.....	13

2.7.4.	Operational, Other or Miscellaneous Reporting .....	13
2.7.5.	Reporting Location .....	13
2.7.6.	Reporting Deadline .....	14
2.7.7.	Changes to Facility Information in Section 1.0 and Section 2.0 .....	14
2.8.	TEMPORARY CESSATION .....	14
2.9.	CLOSURE .....	15
2.9.1.	Closure Plan .....	15
2.9.2.	Closure Completion .....	15
2.10.	POST-CLOSURE .....	15
2.10.1.	Post-Closure Plan .....	15
2.10.2.	Post-Closure Completion .....	16
<b>3.0</b>	<b>COMPLIANCE SCHEDULE .....</b>	<b>16</b>
<b>4.0</b>	<b>TABLES OF MONITORING REQUIREMENTS .....</b>	<b>18</b>
4.1.	PRE-OPERATIONAL MONITORING (OR CONSTRUCTION REQUIREMENTS) .....	18
4.2.	COMPLIANCE OR OPERATIONAL MONITORING .....	18
<b>5.0</b>	<b>REFERENCES AND PERTINENT INFORMATION .....</b>	<b>22</b>
<b>6.0</b>	<b>NOTIFICATION PROVISIONS .....</b>	<b>22</b>
6.1.	ANNUAL REGISTRATION FEES .....	22
6.2.	DUTY TO COMPLY .....	22
6.3.	DUTY TO PROVIDE INFORMATION .....	22
6.4.	COMPLIANCE WITH AQUIFER WATER QUALITY STANDARDS .....	22
6.5.	TECHNICAL AND FINANCIAL CAPABILITY .....	22
6.6.	REPORTING OF BANKRUPTCY OR ENVIRONMENTAL ENFORCEMENT .....	22
6.7.	MONITORING AND RECORDS .....	23
6.8.	INSPECTION AND ENTRY .....	23
6.9.	DUTY TO MODIFY .....	23
6.10.	PERMIT ACTION: AMENDMENT, TRANSFER, SUSPENSION, AND REVOCATION .....	23
<b>7.0</b>	<b>ADDITIONAL PERMIT CONDITIONS .....</b>	<b>23</b>
7.1.	OTHER INFORMATION .....	23
7.2.	SEVERABILITY .....	23
7.3.	PERMIT TRANSFER .....	23

**TABLE OF TABLES**

TABLE 1:	DISCHARGING FACILITIES .....	4
TABLE 2:	POINT(S) OF COMPLIANCE .....	6
TABLE 3:	QUARTERLY REPORTING DEADLINES .....	14
TABLE 4:	(SEMI-)ANNUAL REPORTING DEADLINES .....	14
TABLE 5:	COMPLIANCE SCHEDULE ITEMS .....	16
TABLE 6:	ROUTINE FLOW MONITORING .....	18
TABLE 7:	ROUTINE DISCHARGE MONITORING .....	19
TABLE 8:	FACILITY INSPECTION AND OPERATIONAL MONITORING .....	21

**2.0 SPECIFIC CONDITIONS**

[A.R.S. §§ 49-203(4), 49-241(A)]

**2.1. FACILITY / SITE DESCRIPTION**

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

The permittee is authorized to operate the Houston Creek Landing Wastewater Treatment Plant (WWTP), with a maximum average monthly flow of 37,000 gallons per day (gpd). The Department has graded this facility as a Grade 2 wastewater treatment plant. The facility shall have an operator in direct responsible charge who is certified for the class and grade of the facility and is available to the “onsite representative” and ensures an onsite operator visits the facility weekly for a Grade 2 WWTP.

The Houston Creek Landing WWTP utilizes a Santec treatment system consisting of a series of underground fiberglass tanks and airlift pumps. Wastewater enters the wastewater treatment plant through a fiberglass influent manhole with drop in manual bar screens that can be pulled up cleaned and reinstalled, then flows into an equalization tank with two mechanical pumps (lead/lag) and a pump control panel with high level floats hooked to audible and visual alarms. The pumps push influent through a flowmeter vault, to the biological treatment process based upon the activated sludge principle, that includes two (2) tanks split with a fiberglass divider into two reactors in each tank (Reactor #1-Anoxic, #2-aerobic in the 1<sup>st</sup> tank, and Reactor #3, and #4 are both aerobic in the 2<sup>nd</sup> tank), each with three manways for access, and a third tank with denitrification (1<sup>st</sup> manway), and a reaeration tank with three clarifiers (2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> manway). A methanol dosing system is utilized to assist, as necessary, with denitrification. Mixed liquor suspended solids from the reaeration tank and return activated sludge (RAS) from the clarifiers flow through air lift pumps back to Reactor #1, or RAS is wasted (WAS) to an aerated sludge holding tank that decants to the flow equalization tank to thicken the sludge. From the clarifiers, secondary effluent gravity flows through a Norweco tablet feeder into a chlorine contact tank. From the chlorine contact tank, the effluent flows through a dechlorination tablet feeder, and an effluent flowmeter to a 4-ft diameter by 12-ft deep effluent pump station wetwell equipped with two (2) 50-gpm (0.3-hp) pumps. The effluent pump station discharges to a recharge basin (the primary method of disposal) through a 2" pipe and flowmeter. The effluent recharge basin has a divider in the middle to form two basins, has a berm around the perimeter to prevent stormwater run-off from entering, is designed with a bottom recharge area of 700-sf (approximately 35-ft x 20-ft) and an estimated percolation capacity of 17,900 gpd. A minimum of 2-ft of freeboard will be maintained, and a float in the recharge basin will turn the effluent pumps off and engage a visual alarm to alert the facility that a discharge to Houston Creek may be occurring. The primary method of discharge will be to this on-site effluent recharge basin with the constructed effluent lift station so that the effluent percolates to groundwater. The effluent pump station has a 4" overflow drain pipe that discharges to Houston Creek, regulated under AZPDES permit AZ0025305, a tributary to Tonto Creek. For emergency purposes, if the recharge basins have reached their discharge limit, or for maintenance of the basin, the permittee can discharge directly to Houston Creek under a current AZPDES permit.

There shall be no overflow pipes between the recharge basin and the effluent pump station, and there shall be no overflow pipes that carry effluent back to the influent pump station of equalization basin.

All the sludge, including the screenings, grit, and scum, is hauled offsite and disposed of in accordance with State and Federal regulations.

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

The site includes the following permitted discharging facilities:

Table 1: DISCHARGING FACILITIES		
Facility	Latitude (North)	Longitude (West)
Houston Creek Landing WWTP	34° 14' 47.8"	111° 14' 48.3"
Recharge Basin (Primary Discharge)	34° 14' 47.6"	111° 14' 49.1"
Houston Creek (Contingency Discharge)	34° 14' 50.3"	111° 14' 54.0"

### **2.1.1. Annual Registration Fee**

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

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

### **2.1.2. Financial Capability**

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

The permittee has demonstrated financial capability under A.R.S. § 49-243(N) and A.A.C. R18-9-A203. The estimated dollar amount for facility closure is \$27,500. The financial capability was demonstrated through A.A.C. R18-9-A203(C)(8).

## **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 on-site effluent disposal improvement was designed as per the design report and design plans signed, dated, and sealed by Jeffrey W. Bower, P.E. (Civil #37214) with Arizona Water Engineering on May 2, 2023 and subsequent sealed submittals that served as additions to the design report.

### **2.2.2. Site-Specific Characteristics**

Unpermitted discharges and a history of non-compliance was considered for BADCT practices implemented in this permit. The facility will be fully fenced to help prevent tampering with treatment processes and effluent discharges. The effluent conveyance system shall be secured to prevent illegal discharges to Houston Creek. The sludge aeration tank decant piping has been re-configured to the influent equalization tank so that it is fully treated prior to being discharged. The disinfection system will need to be recommissioned or re-designed, so that proper disinfection is occurring. The gate valve at Houston Creek has been replaced with a flap check valve so that stagnant water is not released, when this discharge is utilized and the rip-rap will be replaced to prevent further erosion of the bank.

### **2.2.3. Pre-Operational Requirements**

Prior to initiating use of the effluent recharge basin and effluent lift station, 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 and Reuse Section.

### **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 8: FACILITY INSPECTION AND OPERATIONAL MONITORING

3. If any damage of the pollution control structures is identified during inspection, proper repair procedures shall be performed. All repair procedures and material(s) used shall be documented in the facility log book as per Section Table 8: FACILITY INSPECTION AND OPERATIONAL MONITORING and reported to ADEQ in the event of a violation or exceedance per Section **Error! Reference source not found.**

**2.2.5. Reclaimed Water Classification**

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

Since none of the effluent will be disposed by Reuse, the WWTP has not been classified for any Reclaimed Water Class (A.A.C. R18-11, article 3).

**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 37,000 gallons per day (gpd).
2. The permittee shall notify all users annually that the materials authorized to be disposed of through the treatment facility are typical household sewage and pre-treated commercial wastewater and shall not include motor oil, gasoline, paints, varnishes, hazardous wastes, solvents, pesticides, fertilizers or other materials not generally associated with toilet flushing, food preparation, laundry facilities and personal hygiene.
3. The permittee shall operate and maintain all permitted facilities to prevent unauthorized discharges pursuant to A.R.S. § 49-201(12) resulting from failure or bypassing of applicable BADCT.
4. Specific discharge limitations are listed in Section 4.2, Table 7: ROUTINE DISCHARGE MONITORING.

**2.4. POINT OF COMPLIANCE (POC)**

[A.R.S. § 49-244]

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

Table 2: POINT(S) OF COMPLIANCE			
POC #	POC Location	Latitude	Longitude
1 (Conceptual)	Southeast Corner of the WWTP	34°14'48" N	111°14'48" W
2 (Conceptual)	Southeast and downstream of the NPDES/AZPDES discharge point to Houston Creek	34°14'46" N	111°14'55" W

The direction of the groundwater is towards the east-southeast and the depth to groundwater at the WWTP is between 55 and 95 feet below ground surface.

Groundwater monitoring is not required at the point of compliance wells. POC #1 and POC #2 wells are conceptual wells, monitoring is not required except as a contingency action. The director may require an amendment of this permit to install a monitoring well if there is cause or concern that groundwater quality may be impacted at the POC. The Director may amend this permit to designate additional points of compliance if information on groundwater gradients or groundwater usage indicates the need.

## **2.5. MONITORING REQUIREMENTS**

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

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

### **2.5.1. Pre-Operational Monitoring**

Not Applicable.

### **2.5.2. Routine Discharge Monitoring**

The permittee shall monitor the effluent according to Section 4.2, Table 7: ROUTINE DISCHARGE MONITORING. Representative samples of the effluent shall be collected at the point of discharge from the dechlorination system. Effluent flow into the recharge basin shall be monitored using the effluent flow meter.

### **2.5.3. Reclaimed Water Monitoring**

Not Applicable.

### **2.5.4. Facility / Operational Monitoring**

Operational monitoring inspections shall be conducted according to Section 4.2, Table 8: FACILITY INSPECTION AND OPERATIONAL MONITORING.

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

### **2.5.5. Groundwater Monitoring and Sampling Protocols**

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

If groundwater monitoring is required, 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.

As a third alternative method for sampling within POC wells with very low recharge rates, the permittee may conduct the sampling using no-purge sampling techniques using HydraSleeve™ or similar type methodology. The use of HydraSleeve™ or similar type samplers shall follow accepted EPA, USGS, or DOD protocols. In addition, the HydroSleeve™ or similar type sampler shall be placed just below the water table.

#### **2.5.5.1. POC Well Replacement**

Not applicable.

#### **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 and Reuse Section for approval prior to installation and the permit shall be amended to include any new monitoring points.

### **2.6. CONTINGENCY PLAN REQUIREMENTS**

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

#### **2.6.1. General Contingency Plan Requirements**

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

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

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



## **2.6.2. Exceeding of Alert Levels and Performance Levels**

### **2.6.2.1. Exceeding of Performance Levels Set for Operational Conditions**

For freeboard performance levels, the permittee shall comply with the requirements as specified in Section 4.2, Table 8: FACILITY INSPECTION AND OPERATIONAL MONITORING to prevent the overtopping of a tank or an impoundment. If a tank of an impoundment is overtopped, the permittee shall follow the requirements in Section 2.6.5.3 and the reporting requirements of Section 2.7.3. This includes releases of more than 2,000 gallons of raw influent from the collection system or a treatment process prior to biological treatment that are contained onsite.

If a performance level set in Section 4.2, Table 8: FACILITY INSPECTION AND OPERATIONAL MONITORING has been exceeded the permittee shall:

1. Notify the Groundwater Protection and Reuse Section within five (5) days of becoming aware of the exceedance per Section 2.7.5.
2. Submit a written report to the Groundwater Protection and Reuse Section within thirty (30) days after becoming aware of the exceedance per Section 2.7.5. The report shall document all of the following:
  - a. A description of the exceedance and the cause of the exceedance;
  - b. The period of the exceedance, including exact date(s) and time(s), if known, and the anticipated time period during which the exceedance is expected to continue;
  - c. Any action taken or planned to mitigate the effects of the exceedance or spill, or to eliminate or prevent recurrence of the exceedance or spill;
  - d. Any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS; and
  - e. Any malfunction or failure of pollution control devices or other equipment or process.
3. The facility is no longer on alert status once the operational indicator no longer indicates that a performance level is being exceeded. The permittee shall, however, complete all tasks necessary to return the facility to its pre-alert operating condition.

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

1. If an AL set in Section 4.2, Table 7: 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 and Reuse Section per Section 2.7.5 along with a summary of the findings of the investigation, the cause of the exceedance, and actions taken to resolve the problem.
4. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions or other actions.

**2.6.2.2.1. Exceeding Permit Flow Limit**

If the AL for average monthly flow in Section 4.2, Table 6: ROUTINE FLOW MONITORING has been exceeded, the permittee shall submit an application to the Groundwater Protection and Reuse Section for an APP amendment to expand the WRF, or submit a report detailing the reasons an expansion is not necessary. Acceptance of the report instead of an application for expansion requires ADEQ approval

**2.6.2.3. Exceeding of Alert Levels in Groundwater Monitoring**

**2.6.2.3.1. Alert Levels for Indicator Parameters**

No ALs have been established for indicator parameters.

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

Not required at the time of permit issuance.

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

Not required at time of issuance.

**2.6.2.3.4. Alert Level for Groundwater Level**

Not applicable.

**2.6.3. Discharge Limit Violation**

1. If a DL set in Section 4.2, Table 7: ROUTINE DISCHARGE MONITORING has been violated, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:
  - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the violation;
  - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences;
  - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the violation, the permittee shall sample individual waste streams composing the wastewater for the parameters in violation, as necessary to identify the cause of the violation.

The permittee shall submit a report to the Groundwater Protection and Reuse Section according to Section 2.7.3, which includes a summary of the findings of the investigation, the cause of the violation, and actions taken to resolve the problem. The permittee shall consider and ADEQ may require corrective action that may include control of the source of discharge, cleanup of affected soil, surface water or groundwater, notification of downstream or downgradient users who may be directly affected by the discharge, and mitigation of the impact of pollutants on existing uses of the

aquifer. Corrective actions shall either be specifically identified in this permit, included in an ADEQ-approved contingency plan, or separately approved according to Section 2.6.6.

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

#### **2.6.4. Aquifer Quality Limit Violation**

Not required at the time of permit issuance.

#### **2.6.5. Emergency Response and Contingency Requirements for Unauthorized Discharges**

[A.R.S. § 49-201(12) AND PURSUANT TO A.R.S. § 49-241]

##### **2.6.5.1. Duty to Respond**

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

##### **2.6.5.2. Discharge of Hazardous Substances or Toxic Pollutants**

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

##### **2.6.5.3. Discharge of Non-Hazardous Materials**

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

##### **2.6.5.4. Reporting Requirements**

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

### **2.6.6. Corrective Actions**

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

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

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

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

## **2.7. REPORTING AND RECORDKEEPING REQUIREMENTS**

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

### **2.7.1. Self-Monitoring Report Form**

1. The permittee shall complete the Self-Monitoring Reporting Forms (SMRFs) provided by ADEQ, and submit the completed report through the myDEQ online reporting system per Section 2.7.5. The permittee shall use the format devised by ADEQ.
2. The permittee shall complete the SMRF to the extent that the information reported may be entered on the form. If no information is required during a reporting period, the permittee shall enter "not required" on the form, include an explanation, and submit the form to the Groundwater Protection and Reuse Section.
3. The tables contained in Section 4.0 list the monitoring parameters and the frequencies for reporting results on the SMRF:
  - a. Table 6: ROUTINE FLOW MONITORING
  - b. Table 7: ROUTINE DISCHARGE MONITORING

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

### **2.7.2. Operation Inspection / Log Book Recordkeeping**

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

1. Name of inspector;
2. Date and shift inspection was conducted;

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

**2.7.3. Permit Violation and Alert Level Status Reporting**

1. The permittee shall notify the Groundwater Protection and Reuse Section per Section 2.7.5 within five (5) days (except as provided in Section 2.6.5) of becoming aware of an AL exceedance, or violation of any permit condition, or DL for which notification requirements are not specified in Sections 2.6.2 through 2.6.5.
2. The permittee shall submit a written report to the Groundwater Protection and Reuse Section per Section 2.7.5 within thirty (30) days of becoming aware of the violation of any permit condition, or DL. The report shall document all of the following:
  - a. Identification and description of the permit condition for which there has been a violation and a description of the cause;
  - b. The period of violation including exact date(s) and time(s), if known, and the anticipated time period during which the violation is expected to continue;
  - c. Any corrective action taken or planned to mitigate the effects of the violation, or to eliminate or prevent a recurrence of the violation;
  - d. Any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS;
  - e. Proposed changes to the monitoring which include changes in constituents or increased frequency of monitoring; and
  - f. Description of any malfunction or failure of pollution control devices or other equipment or processes.

**2.7.4. Operational, Other or Miscellaneous Reporting**

The permittee shall record the information as required in Section 4.2, Table 8: FACILITY INSPECTION AND OPERATIONAL MONITORING in the facility log book as per Section 2.7.2, and report to the Groundwater Protection and Reuse Section any violations or exceedances as per Section 2.7.3.

**2.7.5. Reporting Location**

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

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

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

The Arizona Department of Environmental Quality  
Groundwater Protection and Reuse Section

1110 West Washington Street  
Phoenix, Arizona 85007  
Phone (602) 771-4999

**2.7.6. Reporting Deadline**

The following table lists the quarterly report due dates:

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

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

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

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

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

**2.8. Temporary Cessation**

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

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

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

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

## **2.9. Closure**

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

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

### **2.9.1. Closure Plan**

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

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

### **2.9.2. Closure Completion**

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

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

## **2.10. Post-closure**

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

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

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

### **2.10.1. Post-Closure Plan**

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

**2.10.2. Post-Closure Completion**

Not required at the time of permit issuance.

**3.0 COMPLIANCE SCHEDULE**

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

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

Table 5: COMPLIANCE SCHEDULE ITEMS			
No.	Description	Due By:	Permit Amendment Required?
1	The permittee shall send documentation that the discharge to Houston Creek has been improved, including: <ol style="list-style-type: none"> <li>1. Replacing the gate valve with a “flap check valve”;</li> <li>2. Removing vegetation within 10 feet discharge and ensuring access has been restored;</li> <li>3. Properly secured to a permanent pipe stand;</li> <li>4. Replacing the dumped rip-rap to prevent further erosion; and</li> <li>5. Ensuring all effluent manholes downstream of the effluent pump station are properly secured to prevent tampering with discharged effluent.</li> </ol>	Within 180 days of permit issuance	No
2	The permittee shall submit a signed, dated, and sealed Engineer’s Certificate of Completion in a format approved by the Department that confirms that the <b>Effluent Recharge Basin</b> is constructed according to the Department-approved design report or plans and specifications, as applicable.	Prior to discharging under this permit and within 90 days of completion of construction.	No
3	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 <b>Effluent Lift Station</b> is constructed according to the Department-approved design report or plans and specifications, as applicable.	Prior to discharging under this permit and within 90 days of completion of construction.	No
4	Submit performance testing, as-built plans, and confirmation that the facility has received a hard copy of the O&M Manual, including final survey of the constructed Effluent Recharge Basin.	Within 180 days of discharging to the Effluent Recharge Basin	No



Table 5: COMPLIANCE SCHEDULE ITEMS (Continued)			
No.	Description	Due By:	Permit Amendment Required?
5	<p>The permittee shall submit a demonstration that the financial assurance mechanism listed in Section 2.1, Financial Capability, is being maintained as per A.R.S. 49-243.N.4 and A.A.C. R18-9-A203(H) for all estimated closure and post-closure costs including updated costs submitted under Section 3.0, No.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.</p> <p>NOTE: The financial assurance mechanism due on the date specified in CSI No. 5, may be provided following ADEQ's approval of the closure and post-closure costs. When submitting the closure and post-closure costs, permittee may provide a statement for the type of mechanism intended to be provided.</p>	By May 1, 2030 and every six (6) years thereafter, for the duration of the permit.	No
6	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 May 1, 2030 and every six (6) years thereafter, for the duration of the permit.	Yes

**4.0 TABLES OF MONITORING REQUIREMENTS**

**4.1. PRE-OPERATIONAL MONITORING (OR CONSTRUCTION REQUIREMENTS)**

Not applicable.

**4.2. COMPLIANCE OR OPERATIONAL MONITORING**

Table 6: ROUTINE FLOW MONITORING					
Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
1 <sup>1</sup>	Flow Meter After Flow Equalization			34° 14' 48.0"	111° 14' 48.5"
2	Flow Meter at Effluent Pump Station			34° 14' 48.5"	111° 14' 49.1"
3	Flow Meter after Effluent Pump Station			34° 14' 48.1"	111° 14' 48.3"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Total Influent Flow <sup>2</sup> : Daily <sup>3</sup>	Not Applicable <sup>4</sup>	Not Applicable	mgd <sup>5</sup>	Daily	Quarterly
Total Influent Flow: Monthly Average <sup>6</sup>	Not Applicable	Not Applicable	mgd	Monthly Calculation	Quarterly
Recharge Flow <sup>7</sup> (Flow to recharge basin): Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Recharge Flow (Flow to recharge basin): Monthly Average	0.033	0.037	mgd	Monthly Calculation	Quarterly
AZPDES Flow <sup>8</sup> (Flow to Houston Creek <sup>9</sup> ): Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
AZPDES Flow (Flow to Houston Creek): Monthly Average	0.033	0.037	mgd	Monthly Calculation	Quarterly

<sup>1</sup> 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.

<sup>2</sup> Total Influent Flow = Flow reported from Sampling Point Number 1.

<sup>3</sup> Total Daily Flow shall be measured using a continuous recording flow meter that totals the flows daily.

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

<sup>5</sup> mgd = million gallons per day

<sup>6</sup> Monthly Average means the calculated average of daily flow values in a month

<sup>7</sup> Recharge Flow = Flow from Sampling Point Number 3

<sup>8</sup> AZPDES Flow = Flow from Sampling Point Number 2 minus Sampling Point Number 3

<sup>9</sup> Flow to Houston Creek shall only occur as a recharge basin emergency overflow or for maintenance of the Recharge basin. Negligible differences between flowmeters due to errors shall be considered as zero and be reported as "No Discharge", if an alarm from the EPS has occurred, flow should be reported.

Table 7: ROUTINE DISCHARGE MONITORING

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
4	Point of discharge from the dechlorination system (Treated Effluent)			34° 14' 48.1"	111° 14' 48.3"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Fecal Coliform: Single sample maximum	Not Applicable	126	CFU <sup>10</sup>	Weekly	Quarterly
Total Nitrogen <sup>11</sup> .Five-sample rolling geometric mean <sup>12</sup>	8	10	mg/l <sup>13</sup>	Monthly Calculation	Quarterly
Cyanide (as free cyanide)	0.16	0.2	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	mg/l	Quarterly	Quarterly
<b>Metals (Total)</b>					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.6	2	mg/l	Quarterly	Quarterly
Beryllium	0.0032	0.004	mg/l	Quarterly	Quarterly
Cadmium	0.004	0.005	mg/l	Quarterly	Quarterly
Chromium	0.08	0.1	mg/l	Quarterly	Quarterly
Lead	0.04	0.05	mg/l	Quarterly	Quarterly
Mercury	0.0016	0.002	mg/l	Quarterly	Quarterly
Nickel	0.08	0.1	mg/l	Quarterly	Quarterly
Selenium	0.04	0.05	mg/l	Quarterly	Quarterly
Thallium	0.0016	0.002	mg/l	Quarterly	Quarterly

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

<sup>11</sup> Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

<sup>12</sup> The five-sample rolling geometric mean is determined by multiplying the five (5) most recent monthly sample values together then taking the fifth root of the product. Example:  $GM_5 = \sqrt[5]{(m_1)(m_2)(m_3)(m_4)(m_5)}$  For the first four samples enter "Not Required" on SMRFs.

<sup>13</sup> mg/l = milligrams per liter

Table 7: ROUTINE DISCHARGE MONITORING (Continued)

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
4	Point of discharge from the dechlorination system (Treated Effluent)			34° 14' 48.1"	111° 14' 48.3"
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
<b>Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs)</b>					
Benzene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Carbon tetrachloride	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
o-Dichlorobenzene	0.48	0.6	mg/l	Semi-Annually	Semi-Annually
para-Dichlorobenzene	0.06	0.075	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,1-Dichloroethylene	0.0056	0.007	mg/l	Semi-Annually	Semi-Annually
cis-1,2-Dichloroethylene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
trans-1,2-Dichloroethylene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Dichloromethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloropropane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Ethylbenzene	0.56	0.7	mg/l	Semi-Annually	Semi-Annually
Hexachlorobenzene	0.0008	0.001	mg/l	Semi-Annually	Semi-Annually
Hexachlorocyclopentadiene	0.04	0.05	mg/l	Semi-Annually	Semi-Annually
Monochlorobenzene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Styrene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Tetrachloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Toluene	0.8	1	mg/l	Semi-Annually	Semi-Annually
Trihalomethanes (total) <sup>14</sup>	0.08	0.10	mg/l	Semi-Annually	Semi-Annually
1,1,1-Trichloroethane	0.16	0.20	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	10	mg/l	Semi-Annually	Semi-Annually

<sup>14</sup> Total Trihalomethanes (TTHMs) are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane

Table 8: 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
Treatment Plant Components (Air lift Pumps and Aeration)	Good Working Condition	Weekly	See Section 2.7.3
Pump/Lift Station Containment Structures	No cracks or spalling in concrete that results in leaks or impairs structural integrity. Structural steel shall not be showing	Weekly	
Influent Flow Equalization & Effluent Pump Integrity	Good Working Condition Test both duplex pumps in each wetwell	Weekly	
Influent Flow Equalization Tank & Effluent Pump Station High-High Level Alarms	Tested to ensure audio/visual alarms are working and alarms are reaching the call-out system	Quarterly	
Influent Flow Equalization Tank Freeboard	Minimum of two (2) foot below bottom of manway	Weekly	
Influent Flow Equalization Tank Solids	Pumped and cleaned out of all solids	Annually	
Treatment Plant Fiberglass Tanks	No cracks or spalling of fiberglass that results in leaks or impairs to the structural integrity. Pipe penetrations do not show signs of infiltration or exfiltration	Quarterly	
Treatment Plant Tank Freeboard	Minimum of 18-inches below bottom of manway Reactor #1, #2, #3 and #4 Denitrification and Clarifier tanks Sludge Holding Tank Chlorine Tank	Weekly	
Sludge Holding Tank Level	Sludge level checked with a sludge judge	Weekly	
Sludge Holding Tank Level	Pumped and cleaned out of all solids	Minimum of Once Every Other Month	
Recharge Basin Freeboard	Two (2) Linear Foot	Weekly	
Recharge Basin Berm Integrity	No visible structural damage, breach, or erosion of embankments	Weekly	
Recharge Basin Vegetation Removal	No vegetation present in the impoundment or within five feet of the impoundment	Monthly	
Houston Creek Discharge	Discharge is accessible for inspection. No vegetation present within 10 feet. Flap check valve is operational. Rip-rap is in tact and does not need repair.	Monthly	
Houston Creek Conveyance	Inspected to ensure all access is secured and had not been opened or vandalized	Monthly	

## **5.0 REFERENCES AND PERTINENT INFORMATION**

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

APP Application, dated: 07/19/2023

Contingency Plan (updated), dated: 03/24/2024

## **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 and Reuse Section in writing within 15 days after any change in the owner or operator of the facility. The notification shall state the permit number, the name of the facility, the date of property transfer, and the name, address, and phone number where the new owner or operator can be reached. The operator shall advise the new owner or operators of the terms of this permit and the need for permit transfer in accordance with the rules.

**7.0. ADDITIONAL PERMIT CONDITIONS**

**7.1. Other Information**

[A.R.S. § 49-243(K)(8)]

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

**7.2. Severability**

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

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

**7.3. Permit Transfer**

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