

**STATE OF ARIZONA  
 AQUIFER PROTECTION PERMIT NO. P-513319  
 PLACE ID 198939, LTF 91861  
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 Mark Anthony Brewing, Inc. to operate the Mark Anthony Brewing Plant located at 9601 N. Reems Road, Glendale, Arizona over the groundwater of the Phoenix Active Management Area over the West Salt River Valley Sub-basin in Township 3N, Range 1W, Section 22, of Gila and Salt River Baseline and Meridian.

This permit becomes effective on the date of the Water Quality Division Deputy Director’s signature and shall be valid for the life of the facility (operational, closure, and post-closure periods) unless suspended or revoked pursuant to A.A.C. R18-9-A213. The permittee shall construct, operate and maintain the permitted facilities:

1. Following all the conditions of this permit including the design and operational information documented or referenced below, and
2. Such that Aquifer Water Quality Standards (AWQS) are not violated at the applicable point(s) of compliance (POC) set forth below or if an AWQS for a pollutant has been exceeded in an aquifer at the time of permit issuance, that no additional degradation of the aquifer relative to that pollutant and as determined at the applicable POC occurs as a result of the discharge from the facility.

**1.1. PERMITTEE INFORMATION**

**Facility Name:** Mark Anthony Brewing Plant  
**Facility Address:** 9601 N. Reems Rd.,  
 Glendale, Arizona 85355  
**County:** Maricopa

**Annual Registration Fee** 1,240,000 gallons per day  
**Flow Rate:**

**Permittee:** Mark Anthony Brewing, Inc.  
**Permittee Address:** 145 South Wells Street  
 Chicago, IL 60606

**Facility Contact:** Patrick Hastings, Plant General Manager  
**Emergency Phone No.:** (334) 703-0320

**Latitude/Longitude:** 33° 34' 22" N / 112° 23' 33" W  
**Legal Description:** Township 3N, Range 1W, Section 22, 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 \_\_\_\_\_, 2023

**THIS AMENDED PERMIT SUPERCEDES ALL PREVIOUS PERMITS**

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**2.0 SPECIFIC CONDITIONS**

[A.R.S. §§ 49-203(4), 49-241(A)]

**2.1. FACILITY / SITE DESCRIPTION**

[A.R.S. § 49-243(K)(8)]

Mark Anthony Brewing Inc. is authorized to discharge treated water (effluent) from an industrial Wastewater Treatment System (WWTS) for Mark Anthony Brewing (MAB) Plant with a maximum monthly average flow of 1.24 million gallons per day (mgd). MAB Plant is a beverage manufacturing plant located in Glendale, Arizona.

The water used for production of beverage products will be pumped from an on-site production well at a maximum rate of 1440 gallons per minutes (gpm). The water will be treated through a Reverse Osmosis (RO) system with a granular activated carbon designed by Suez Water Technologies & Solutions. Then the treated water will be used in the production of beverages. The RO reject water will be discharged to an onsite industrial WWTS.

The facility will consist of a WWTS to treat the wastewater generated at the site. The WWTS will receive wastewater generated by brewing operations including cleaning tanks, cleaning equipment, any product spillage, cooling tower blowdown water, boiler blowdown water and RO reject water. The WWTS consists of a wastewater wet well with pumps, wastewater storage tank, pH polishing tank, AquaTex Bioreactors #1, #2 and #3, Dissolve Air Flotation (DAF) unit, tertiary disk filter, sludge storage tank, sludge press and two surge tanks. The sludge from the sludge press will be hauled offsite for management or disposal to landfill.

The treated process water will be discharged to three on-site recharge wells (RW-1, RW-2, RW-3) for the purpose of replenishing the aquifer beneath the MAB manufacturing plant. The facility will be installing RW-3 in the future when needed. The treated process water generated at the MAB will be routinely monitored per the requirements in Table 6 to ensure that all constituents meet the Aquifer Water Quality Standard (AWQS) prior to discharge into the proposed wells. The WWTS effluent may be reused for irrigation of up to 487 acres of a food crop under a valid Recycled Water Permit #R513319. The WWTS effluent may also be reused for a beneficial purpose other than the production or processing of a crop or substance that could be used as human or animal food, per A.A.C. R18-9-C701(A)(2). The facility will be providing the effluent for irrigation of the rose farms. The facility shall monitor the effluent per Table 6 when effluent is discharged for irrigation of the rose farms.

The site includes the following permitted discharging facilities:

Table 1: DISCHARGING FACILITIES		
Facility	Latitude	Longitude
RW-1	33° 34' 17.42" N	112° 23' 3.4" W
RW-2	33° 34' 16.4" N	112° 23' 3.4" W
RW-3	33° 34' 15.1" N	112° 23' 3.4" 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 \$698, 317. The financial capability was demonstrated through Financial Test for Self-Assurance per A.A.C. R18-9-A203(C)(1).

## **2.2. BEST AVAILABLE DEMONSTRATED CONTROL TECHNOLOGY (BADCT)**

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

BADCT was achieved with engineering designs that assure the treated wastewater meets all applicable Aquifer Water Quality Standards (AWQS).

The WWTS shall be maintained as described in this permit. Any modifications to the approved BADCT shall be submitted to ADEQ in the form of an amendment prior to construction or upgrade of a new or existing feature.

### **2.2.1. Engineering Design**

The WWTS treatment facility was designed as per the design report prepared by Richard Strum, P.E., Wastewater Resources, Inc., dated March 14, 2020 and additional subsequent submittals that served as additions to the design report. The effluent discharge pipeline is designed per the design drawing sealed and signed by Aubrey Thomas, P.E., HilgartWilson and dated June 5, 2020.

The biological wastewater treatment processes at the WWTS will be provided by AquaTex BIO. The details of wastewater treatment processes are described below:

#### **2.2.1.1. Wet Well Tank with Pumps**

The underground Wet Well Tank collects all process wastewater directed to the AquaTex™ BIO system. Wastewater enters the tank via the inlet gravity line. A debris basket straining system is incorporated within the tank to prevent foreign objects such as bottle caps, tie wraps, rags etc. from entering into the treatment system. There are two Wet Well Pumps installed (1-Duty, 1-Standby) providing for redundancy. The Wet Well Pumps transfer the incoming water from the Wet Well to the Wastewater Storage Tank.

#### **2.2.1.2. Wastewater Storage Tank**

The 440,000 Wastewater Storage Tank provides equalization storage from peak flows transferred by the Wet Well Pumps, while the AquaTex™ BIO system continues to provide treatment and discharge at a normal flow rate of 930 gpm. The Wastewater Storage Tank is continuously mixed utilizing a Jet Mixing System. Mixing Pumps continuously recirculates the wastewater through a fiberglass bidirectional jet mixing manifold located on the bottom of the tank. The pH value of the Wastewater Storage Tank continuously monitored by a pH sensor.

#### **2.2.1.3. pH Polishing Treatment Tank**

The pH Polishing Tank receives roughly pH adjusted process water from the System Feed Pumps. The pH Polishing Tank remains full at all times and is completely mixed by top mounted Gear Mixer and internal anti vortex tank baffles. The pH value of Polishing Tank is continuously monitored by a pH sensor. When the pH drops below 6.5, or rises above 7.5, the Programmable Logic Controller (PLC) will automatically start and speed control the Caustic/Acid Metering Pumps to adjust the pH value until it returns to within the preset range.

#### **2.2.1.4. AquaTex Bioreactors #1, #2 and #3**

The WWTS includes series of three Bioreactors. The AquaTex™ BIO biological treatment process integrates biofilm carrier technology to achieve superior biodegradation efficiency. The process acts as a moving bed with thousands of polyethylene biofilm carriers operating in a mixed motion within the aerated Bioreactors. Biofilm carriers are manufactured from high-density polyethylene (HDPE) which are permanent within the process and do not require cleaning, backwashing, or any other regular maintenance. The biofilm technology is a self-sustaining biological process, eliminating the need to manage a return activated sludge process. During bio-degradation process, Nutrient Reagents (Ammonia Nitrogen and Phosphorus) are injected directly into the Bioreactors to maintain a proportional nutrient

dosing plan. The Bio-degradation process consists of a coarse-bubble aeration piping, non-metallic coarse bubble diffusers, biofilm carriers, and media retaining screens. Aeration will be provided to the bioreactors from positive displacement screw type air blowers.

#### **2.2.1.5. Dissolved Air Floatation (DAF) Unit**

The DAF unit provides the solids separation necessary to remove the sloughed biofilm following the bioreactor process. The DAF unit is a high efficiency solids/liquid separation process where micro-bubbles agglomerate particles and float them to the surface with no moving mechanical parts within the process tank. The system includes the provision of a polymer supply mechanism for addition of polymer to the waste stream prior to entering the DAF. A flight and chain skimmer assembly remove the floated solids from the surface and discharges at ~4% dry weight into the integrated hopper. The DAF employs a progressive cavity pump to transfer the secondary solids to the Sludge Storage Tank.

#### **2.2.1.6. Tertiary Disk Filter**

The Disk Filter is a secondary polishing system which provides a 'positive barrier' to meet the total suspended solids discharge requirements. The Disk Filter cloth is capable of solids capture to 10 microns without having to build up a filter mat or require any run-in time. The two-layer cloth allows for complete cleaning, utilizing filtered water from inside the filter disk. The filter cloth is a sealed bag that can be replaced in a matter of minutes while the filter remains in operation without any interruption. The underground Tertiary Discharge Sump collects filtered water from the Disk Filter Unit. Tertiary Discharge Pumps transfer the final treated effluent water from Tertiary Discharge Sump into the Effluent Discharge Line.

#### **2.2.1.7. Sludge Storage Tank**

The biological solids are effectively removed by the DAF unit and transferred to the Sludge Storage Tank. The Sludge Storage Tank will have sufficient capacity to store two days of generated solids at full design capacity. The sludge in Sludge Storage Tank will be mixed and agitated to ensure optimal performance of the downstream sludge press. Mixing and aeration is accomplished by positive displacement blowers and coarse bubble diffusers which allows for minimal accumulations in the tank and maintains an aerobic condition within the tank minimizing the formation of hydrogen sulfate ( $H_2S$ ) gas.

#### **2.2.1.8. Sludge Press**

The Dewatering Press achieves both thickening and dewatering of the sludge in a single, compact operation. The dewatering press can take sludge as dilute as 0.1% solids directly from a treatment process and produce a cake of over 20% solids. Sludge is fed into a mixing tank where polymer is thoroughly mixed in and then sludge passes through a flocculation tank where gentle mixing and flocculation occurs. From there, the sludge overflows into the dewatering drum and is pressed. The entire operation is controlled by the Volute Dewatering Press control panel. The dewatered sludge will be hauled offsite for management or disposal to landfill.

#### **2.2.1.9. Surge Tanks**

The facility will be providing two surge tanks which are sized for 2.97 million gallons and 1.32 million gallons. The surge tanks will be used to store any out-of-compliance effluent during production ramp up and/or a potential process upset conditions. During an out-of-compliance condition at the WWTS, the operator will divert the WWTS effluent to the surge tanks via a set of manual valves upon receiving a non-conforming result from the water quality compliance sampling through the inline nitrate and nitrite analyzers and turbidity meter and daily-per-shift tests for COD, ammonia, and phosphorous. The stored

wastewater from the surge tank will be pumped back to the wet well of the AquaTex™ BIO treatment system.

**2.2.2. Site-Specific Characteristics**

Site specific characteristics were not used to determine BADCT.

**2.2.3. Pre-Operational Requirements**

Not applicable.

**2.2.4. Operational Requirements**

1. The permittee shall maintain a copy of the up-to-date operations and maintenance manual at the treatment facility site at all times; the manual shall be available upon request during inspections by ADEQ personnel.
2. The WWTS and pipeline shall be operated according to and inspected for the items listed in Section 4.2, Table 9: FACILITY INSPECTION AND OPERATIONAL MONITORING
3. If any damage of the WWTS and pipeline 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 the event of a violation or exceedance as per Section 2.7.3.

**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 1.24 mgd.
2. The permittee shall ensure that only the following wastes are disposed of through the WWTS: wastewater generated by brewing operations including cleaning tanks, cleaning equipment, any product spillage, cooling tower blowdown water, boiler blowdown water and RO reject water. Waste streams disposed of through the WWTS shall not include motor oil, gasoline, paints, varnishes, hazardous wastes, solvents, pesticides, fertilizers, and domestic wastewater 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 6: ROUTINE DISCHARGE MONITORING – Discharge to Recharge Wells and Rose Farm.

**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
POC #1	The POC well is located downgradient of the recharge wells near the northeast corner of the PMA	33° 34' 14.3" N	112° 23' 03.5" W

Monitoring requirements for each POC are listed in Section 4.2, Table 8: GROUNDWATER MONITORING. The Director may amend this permit to designate additional POCs, 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 6: ROUTINE DISCHARGE MONITORING – Discharge to Outfall. Representative samples of the effluent shall be collected at the point of discharge located downstream of the tertiary filters.

**2.5.3. Facility / Operational Monitoring**

Operational monitoring inspections shall be conducted according to Section 4.2, Table 9: 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.

**2.5.4. Groundwater Monitoring and Sampling Protocols**

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



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

#### **2.5.4.1. Ambient Groundwater Monitoring for POC Wells**

Twelve (12) monthly rounds of groundwater sampling are required to establish ambient groundwater quality at POC wells. Each ambient sample shall be analyzed for the parameters listed in Section 4.2, Table 7: PARAMETERS FOR AMBIENT GROUNDWATER MONITORING. Alert levels and aquifer quality limits shall be established as required in Sections 2.5.4.2 and 2.5.4.3.

#### **2.5.4.2. Alert Levels for POC Wells**

ALs shall be calculated for all contaminants with a numeric aquifer water quality standard (AWQS).

Within 90 days of the receipt of the laboratory analyses for the final month of the ambient groundwater monitoring period for each POC well referenced in Section 4.2, Table 8: GROUNDWATER MONITORING the permittee shall submit the ambient groundwater data in tabulated form to the Groundwater Section for review. Copies of all laboratory analytical reports, field notes, and the Quality Assurance/Quality Control (QA/QC) procedures used in collection and analyses of the samples for all parameters listed in Section 4.2, Table 7: PARAMETERS FOR AMBIENT GROUNDWATER MONITORING to be established for each POC well, shall be submitted to the Groundwater Section. The permittee may submit a report with the calculations for each AL and AQL included in the permit for review and approval by ADEQ, or the permittee may defer calculation of the ALs and AQLs by the Groundwater Section. The ALs shall be established and calculated by the following formula, or another valid statistical method submitted to Groundwater Section in writing and approved for this permit by the Groundwater Section:

$$AL = M + Ks$$

Where M = mean, s = standard deviation, and K = one-sided normal tolerance interval with a ninety-five percent (95%) confidence level (Lieberman, G.J. (1958) Tables for One-sided Statistical Tolerance Limits: Industrial Quality Control, Vol XIV, No. 10). Obvious outliers should be excluded from the data used in the AL calculation.

The following criteria shall be used in establishing ALs in the Permit:

- a. The AL shall be calculated for a parameter using the analyses from a minimum of
- b. Twelve consecutive monthly sample rounds events.
- c. Any data where the MRL exceeds eighty percent (80%) of the AWQS shall not be included in the AL calculation.
- d. If a parameter is below the detection limit, the permittee must report the value as
- e. “less than” the numeric value for the MRL or detection limit for the parameter, not just as “non-detect.” For those parameters, the permittee shall use a value of one-half (1/2) the reported detection limit for the AL calculation.
- f. If the analytical results from more than fifty percent (50%) of the samples for a specific parameter are non-detect, then the AL shall be set at eighty percent (80%) of the AWQS and the AQL at the AWQS.

If the calculated AL for a specific constituent and well is less than eighty percent (80%) of the AWQS, the AL shall be set at eighty percent (80%) of the AWQS for that constituent in that well.

#### **2.5.4.3. Aquifer Quality Limits for POC Wells**

AQLs will be established in the Permit as a permit amendment for all parameters listed in Section 4.2, Table 8: GROUNDWATER MONITORING, for which a numeric AWQS has been adopted. For each of the monitored analytes for which a numeric AWQS has been adopted, the AQL shall be established as follows:

If the calculated AL is less than the AWQS, then the AQL shall be set equal to the AWQS.

If the calculated AL is greater than the AWQS, then the AQL shall be set equal to the calculated AL value, and no AL shall be set for that constituent at that monitoring point.

Using the same methodology, ADEQ reserves the right to set ALs or AQLs, where applicable, for those analytes that may have a numeric standard adopted by rule at a future time.

#### **2.5.4.4. POC Well Replacement**

In the event that one or more of the designated POC wells should become unusable or inaccessible due to damage or any other event, a replacement POC well shall be constructed and installed upon approval by ADEQ. If the replacement well is fifty feet or less from the original well, the ALs and/or aquifer quality limits (AQLs) calculated for the designated POC well may apply to the replacement well. Otherwise, the ALs and/or AQLs shall be set following the provisions in Section 2.5.4.2 and Section 2.5.4.3 of this permit.

#### **2.5.5. Surface Water Monitoring and Sampling Protocols**

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

#### **2.5.6. 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. 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

#### **2.5.7. 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 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**

If an alert level set in Section 4.2, Table 9: 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 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 6: ROUTINE DISCHARGE MONITORING – Discharge to Outfall has been exceeded, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:
  - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the exceedance;
  - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences; and
  - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the exceedance, the permittee shall sample individual waste streams composing the wastewater for the parameter(s) in question, if necessary to identify the cause of the exceedance.
2. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 5.0 and specific contingency measures identified in Section 2.6 to resolve any problems identified by the investigation which may have led to the AL exceedance. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6.
3. Within thirty days of an AL exceedance, the permittee shall submit the laboratory results to the Groundwater Protection Value Stream 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 DISCHARGE MONITORING – Discharge to Outfall 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.

#### **2.6.3. Discharge Limit Violation**

1. If a DL set in Section 4.2, Table 6: ROUTINE DISCHARGE MONITORING – Discharge to Outfall has been violated, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:
  - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the violation;
  - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences;
  - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the violation, the permittee shall sample individual waste streams composing the wastewater for the parameters in violation, as necessary to identify the cause of the violation.

The permittee shall submit a report to the Groundwater Protection Value Stream according to Section 2.7.3, which includes a summary of the findings of the investigation, the cause of the violation, and actions taken to resolve the problem. The permittee shall consider and ADEQ may

require corrective action that may include control of the source of discharge, cleanup of affected soil, surface water or groundwater, notification of downstream or downgradient users who may be directly affected by the discharge, and mitigation of the impact of pollutants on existing uses of the aquifer. Corrective actions shall either be specifically identified in this permit, included in an ADEQ-approved contingency plan, or separately approved according to Section 2.6.6.

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

#### **2.6.4. Aquifer Quality Limit Exceedances**

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 exceedance of an AWQS or has the potential to further degrade an aquifer that exceeds an aquifer water quality standard, 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 exceedance of an AWQS or has the potential to further degrade an aquifer that exceeds an aquifer water quality standard, or (b) 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 30 days of the discharge or as required by subsequent ADEQ action. The report shall summarize the event, including any human exposure, and facility response activities and include all information specified in Section 2.7.3. If a notice is issued by ADEQ subsequent to the discharge notification, any additional information requested in the notice shall also be submitted within the time frame specified in the notice. Upon review of the submitted report, ADEQ may require additional monitoring or corrective actions.

#### **2.6.6. Corrective Actions**

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

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

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

Within 30 days of completion of any corrective action, the operator shall submit to the Groundwater Protection Value Stream 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) and A.A.C. R18-9-A206(B) and R18-9-A207]

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

1. The permittee shall complete the Self-Monitoring Reporting Forms (SMRFs) provided by ADEQ, and submit the completed report through the myDEQ online reporting system 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 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: ROUTINE DISCHARGE MONITORING – Discharge to Outfall
  - b. Table 8: GROUNDWATER MONITORING

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

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

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

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

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

**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, 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 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 9: 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.

**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](mailto: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**

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, 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. 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;
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 still 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?
1	<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. 2 below.</p> <p>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>The demonstration shall also include information in support of the self-assurance demonstration as required in A.A.C. R18-9-A203(C)(1).</p>	Every two (2) years after permit issuance for the duration of the permit	No
2	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 June 30 <sup>th</sup> , 2026 and every six (6) years thereafter for the duration of the permit	Yes
3	Submit a well installation report for the on-site recharge wells RW-1 and RW-2 prior to discharging.	Prior to injection	No
4	Submit a well installation report for the on-site recharge well RW-3 prior to discharging.	Prior to injection and within 90 days of well completion	No
5	Install POC Well No. 1 and final completion report.	Within 30 days of ADEQ approval of well construction and installation proposal.	No
6	Permittee shall conduct up to 12 monthly Ambient Groundwater Quality Monitoring rounds at POC No.1 in accordance with Section 2.5.4.1. The permittee shall submit the Ambient Groundwater Monitoring Report with a Permit Amendment application, along with copies of all laboratory analytical reports, field notes, QA/QC procedures used in collection and analysis of the samples, and a report including the statistical calculations of the ALs and AQLs per Sections 2.5.4.2 and 2.5.4.3,	Report to be submitted within 90 days of receipt of the laboratory analytical analysis of the final ambient sampling round.	Yes

Table 5: COMPLIANCE SCHEDULE ITEMS			
No.	Description	Due By:	Permit Amendment Required?
	respectively. Begin monitoring under Section 4.2, for the parameters listed in Table 7. To receive the SMRFs for reporting contact the ADEQ Data Unit.		

**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 DISCHARGE MONITORING – Discharge to Recharge Wells and Rose Farm (in mg/L unless otherwise noted) <sup>1</sup>					
Sampling Point Number	Sampling Point Identification		Latitude		Longitude
1	Downstream of the Tertiary Filters		33° 34' 13.2" N		112° 23' 9.22" W
Parameter	Alert Level	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Total Flow <sup>2</sup> : Daily <sup>3</sup>	Not Applicable <sup>4</sup>	Not Established	mgd <sup>5</sup>	Daily	Quarterly
Total Flow: Monthly Average <sup>6</sup>	1.17	1.24	mgd	Monthly Calculation	Quarterly
Total Nitrogen <sup>7</sup>	Not Established	Not Established	mg/L	Quarterly	Quarterly
Nitrate-Nitrite (as N)	8.0	10.0	mg/L	Quarterly	Quarterly
Nitrate (as N)	8.0	10.0	mg/L	Quarterly	Quarterly
Nitrite (as N)	0.8	1.0	mg/L	Quarterly	Quarterly
Total Kjeldahl Nitrogen (TKN)	Not Established	Not Established	mg/L	Quarterly	Quarterly
BOD <sub>5</sub> (single sample)	45	Not Established	mg/L	Weekly	Quarterly
BOD <sub>5</sub> (Monthly average)	30	Not Established	mg/L	Monthly	Quarterly
TSS (single sample)	45	Not Established	mg/L	Weekly	Quarterly
TSS (Monthly average)	30	Not Established	mg/L	Monthly	Quarterly
pH	6-9	Not Established	Standard Unit	Monthly	Quarterly
Metals (Dissolved)					
Antimony	0.0048	0.006	mg/L	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/L	Quarterly	Quarterly
Barium	1.60	2.00	mg/L	Quarterly	Quarterly
Beryllium	0.0032	0.004	mg/L	Quarterly	Quarterly
Cadmium	0.004	0.005	mg/L	Quarterly	Quarterly
Chromium	0.08	0.1	mg/L	Quarterly	Quarterly
Cyanide (as free cyanide)	0.16	0.2	mg/L	Quarterly	Quarterly
Fluoride	3.2	4.0	mg/L	Quarterly	Quarterly
Lead	0.04	0.05	mg/L	Quarterly	Quarterly
Mercury	0.0016	0.002	mg/L	Quarterly	Quarterly
Nickel	0.08	0.1	mg/L	Quarterly	Quarterly
Selenium	0.04	0.05	mg/L	Quarterly	Quarterly
Thallium	0.0016	0.002	mg/L	Quarterly	Quarterly

<sup>1</sup> mg/L = milligrams per liter

<sup>2</sup> Total flow for all methods of discharge to Outfall.

<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> Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

Table 7: PARAMETERS FOR AMBIENT GROUNDWATER MONITORING  
(in mg/l unless otherwise noted)

pH – field & lab (SU)	Cadmium	para-Dichlorobenzene
Specific Conductance - field and lab (µmhos/cm)	Chromium	1,2-Dichloroethane
Total Dissolved Solids	Cobalt	1,1-Dichloroethylene
Total Alkalinity	Copper	cis-1,2-Dichloroethylene
Carbonate	Lead	trans-1,2-Dichloroethylene
Bicarbonate	Manganese	Dichloromethane
Total Nitrogen	Mercury	1,2-Dichloropropane
Nitrate as N	Chromium	Ethylbenzene
Nitrite as N	Cobalt	Hexachlorobenzene
Nitrate + Nitrite	Copper	Hexachlorocyclopentadiene
Sulfate	Lead	Monochlorobenzene
Chloride	Nickel	Styrene
Fluoride	Selenium	Tetrachloroethylene
Calcium	Thallium	Toluene
Ammonia	Zinc	Trihalomethanes (total)
Magnesium	Total Uranium	1,1,1-Trichloroethane
Potassium	Gross Alpha Particle Activity (pCi/L)	1,2,4 - Trichlorobenzene
Sodium	Gross Beta (pCi/L)	1,1,2 - Trichloroethane
Iron	Radium 226 + Radium 228 (pCi/L)	Trichloroethylene
Aluminum	Uranium-Isotopes (pCi/L)	Vinyl Chloride
Antimony	Benzene	Xylenes (Total)
Arsenic	Carbon tetrachloride	
Barium	o-Dichlorobenzene	
Beryllium		

Table 8: GROUNDWATER MONITORING  
(in mg/l unless otherwise noted)

Sampling Point Number	Sampling Point Identification			Latitude (North)	Longitude (West)
2	POC # 1			33° 34' 14.3" N	112° 23' 03.5" W
Parameter	Alert Level	Aquifer Quality Limit	Units	Sampling Frequency	Reporting Frequency
Depth to Water	Monitor <sup>8</sup>	Monitor	ft bgs	Quarterly	Quarterly
Temperature- field	Monitor	Monitor	°F	Quarterly	Quarterly
pH (lab)	Monitor	Monitor	Standard Unit	Quarterly	Quarterly
Specific Conductance – lab	Monitor	Monitor	µmhos/cm	Quarterly	Quarterly
Total Dissolved Solids	Monitor	Monitor	mg/L	Quarterly	Quarterly
Total Nitrogen <sup>9</sup> :	Monitor	Monitor	mg/L	Monthly Calculation	Quarterly
Nitrate-Nitrite (as N)	Reserved	Reserved	mg/L	Monthly Calculation	Quarterly
Nitrate (as N)	Reserved	Reserved	mg/L	Quarterly	Quarterly
Nitrite (as N)	Reserved	Reserved	mg/L	Quarterly	Quarterly
Total Kjeldahl Nitrogen (TKN)	Not Established	Not Established	mg/l	Monthly	Quarterly
Total Coliform	Not Established	Non-detect <sup>10</sup>	CFU <sup>11</sup>	Monthly	Quarterly
Metals (Dissolved)					
Antimony	Reserved	Reserved	mg/L	Quarterly	Quarterly
Arsenic	Reserved	Reserved	mg/L	Quarterly	Quarterly
Barium	Reserved	Reserved	mg/L	Quarterly	Quarterly
Beryllium	Reserved	Reserved	mg/L	Quarterly	Quarterly
Cadmium	Reserved	Reserved	mg/L	Quarterly	Quarterly
Chromium	Reserved	Reserved	mg/L	Quarterly	Quarterly
Cyanide (as free cyanide)	Reserved	Reserved	mg/L	Quarterly	Quarterly
Fluoride	Reserved	Reserved	mg/L	Quarterly	Quarterly
Lead	Reserved	Reserved	mg/L	Quarterly	Quarterly
Mercury	Reserved	Reserved	mg/L	Quarterly	Quarterly
Nickel	Reserved	Reserved	mg/L	Quarterly	Quarterly
Selenium	Reserved	Reserved	mg/L	Quarterly	Quarterly
Thallium	Reserved	Reserved	mg/L	Quarterly	Quarterly
Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs)					
Benzene	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
Carbon tetrachloride	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
o-Dichlorobenzene	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
para-Dichlorobenzene	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
1,2-Dichloroethane	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
1,1-Dichloroethylene	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
cis-1,2-Dichloroethylene	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
trans-1,2-Dichloroethylene	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
Dichloromethane	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
1,2-Dichloropropane	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
Ethylbenzene	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
Monochlorobenzene	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
Styrene	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
Tetrachloroethylene	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
Toluene	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually

<sup>8</sup> Monitoring required, but no AQL or AL will be established in the permit.

<sup>9</sup> Total Nitrogen is the sum of Nitrate as N, Nitrite as N, and Total Kjeldahl Nitrogen (TKN)

<sup>10</sup> For CFU, a value of <1.0 shall be considered to be non-detect.

<sup>11</sup> CFU = Coliform Forming Units per 100 ml.



**Table 8: GROUNDWATER MONITORING (continued)**  
**(in mg/l unless otherwise noted)**

Trihalomethanes (total) <sup>12</sup>	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
1,1,1-Trichloroethane	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
1,2,4 - Trichlorobenzene	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
1,1,2 - Trichloroethane	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
Trichloroethylene	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
Vinyl Chloride	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually
Xylenes (Total)	Reserved	Reserved	mg/L	Semi-Annually	Semi-Annually

<sup>12</sup> Total Trihalomethanes are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

**Table 9: 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.

<b>Pollution Control Structure/Parameter</b>	<b>Performance Level</b>	<b>Inspection Frequency</b>	<b>Reporting Frequency</b>
Pump Integrity	Good working condition	Weekly	See Section 2.7.3
Treatment Plant Components	Good working condition	Weekly	
Above Ground Discharge Pipeline	No visible leaks, cracks, or damage visible on the outside of the pipeline; obstruction free, no backing up of pipeline flow	Monthly	
POC Well	Wells locked and secured. Well cap and seals are intact. No discernable corrosion or deterioration of the well(s). No discernable materials accumulating in the well. Any dedicated well equipment is functional and intact	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:	June 30, 2022
Public Notice, dated:	Not applicable
Public Hearing, dated:	Not applicable

## **6.0 NOTIFICATION PROVISIONS**

### **6.1. Annual Registration Fees**

The permittee is notified of the obligation to pay an Annual Registration Fee to ADEQ. The Annual Registration Fee is based on the amount of daily influent or discharge of pollutants in gallons per day (gpd) as established by A.R.S. § 49-242.

### **6.2. Duty to Comply**

[A.R.S. §§ 49-221 through 263]

The permittee is notified of the obligation to comply with all conditions of this permit and all applicable provisions of Title 49, Chapter 2, Articles 1, 2 and 3 of the Arizona Revised Statutes, Title 18, Chapter 9, Articles 1 through 4, and Title 18, Chapter 11, Article 4 of the Arizona Administrative Code. Any permit non-compliance constitutes a violation and is grounds for an enforcement action pursuant to Title 49, Chapter 2, Article 4 or permit amendment, suspension, or revocation.

### **6.3. Duty to Provide Information**

[A.R.S. §§ 49-243(K)(2) and 49-243(K)(8)]

The permittee shall furnish to the Director, or an authorized representative, within a time specified, any information which the Director may request to determine whether cause exists for amending or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

### **6.4. Compliance with Aquifer Water Quality Standards**

[A.R.S. §§ 49-243(B)(2) and 49-243(B)(3)]

The permittee shall not cause or contribute to a violation of an Aquifer Water Quality Standard (AWQS) at the applicable point of compliance (POC) for the facility. Where, at the time of issuance of the permit, an aquifer already exceeds an AWQS for a pollutant, the permittee shall not discharge that pollutant so as to further degrade, at the applicable point of compliance for the facility, the water quality of any aquifer for that pollutant.

### **6.5. Technical and Financial Capability**

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

The permittee shall have and maintain the technical and financial capability necessary to fully carry out the terms and conditions of this permit. Any bond, insurance policy, trust fund, or other financial assurance mechanism provided as a demonstration of financial capability in the permit application, pursuant to A.A.C. R18-9-A203(C), shall be in effect prior to any discharge authorized by this permit and shall remain in effect for the duration of the permit.

**6.6. Reporting of Bankruptcy or Environmental Enforcement**

[A.A.C. R18-9-A207(C)]

The permittee shall notify the Director within five days after the occurrence of any one of the following:

1. the filing of bankruptcy by the permittee; or
2. the entry of any order or judgment not issued by the Director against the permittee for the enforcement of any environmental protection statute or rule.

**6.7. Monitoring and Records**

[A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A206]

The permittee shall conduct any monitoring activity necessary to assure compliance with this permit, with the applicable water quality standards established pursuant to A.R.S. §§ 49-221 and 49-223 and §§ 49-241 through 49-252.

**6.8. Inspection and Entry**

[A.R.S. §§ 49-1009, 49-203(B), and 49-243(K)(8)]

In accordance with A.R.S. §§ 41-1009 and 49-203(B), the permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to enter and inspect the facility as reasonably necessary to ensure compliance with Title 49, Chapter 2, Article 3 of the Arizona Revised Statutes, and Title 18, Chapter 9, Articles 1 through 4 of the Arizona Administrative Code and the terms and conditions of this permit.

**6.9. Duty to Modify**

[A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A211]

The permittee shall apply for and receive a written amendment before deviating from any of the designs or operational practices authorized by this permit.

**6.10. Permit Action: Amendment, Transfer, Suspension, and Revocation**

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

This permit may be amended, transferred, suspended, or revoked for cause, under the rules of the Department. The permittee shall notify the Groundwater Protection Value Stream in writing within 15 days after any change in the owner or operator of the facility. The notification shall state the permit number, the name of the facility, the date of property transfer, and the name, address, and phone number where the new owner or operator can be reached. The operator shall advise the new owner or operators of the terms of this permit and the need for permit transfer in accordance with the rules.

**7.0. ADDITIONAL PERMIT CONDITIONS**

**7.1. Other Information**

[A.R.S. § 49-243(K)(8)]

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

**7.2. Severability**

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

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

**7.3. Permit Transfer**

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