

STATE OF ARIZONA  
AQUIFER PROTECTION PERMIT NO. P-511225  
PLACE ID 14836, LTF 86823  
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 Golden Vertex Corp. to operate the discharging facilities located at the Moss Mine, located in Oatman, Mohave County, Arizona, over groundwater of the Lake Havasu groundwater basin in portions of Sections 19, 20, 29 and 30 of Township 20 North, Range 20 West of the Gila and Salt River Baseline and Meridian.

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

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

### 1.1. PERMITTEE INFORMATION

**Facility Name:** Golden Vertex Corp. Moss Mine  
**Facility Address:** 10 miles east of Bullhead City on BLM Route 7717  
**County:** Mohave  
**Annual Registration Fee Flow Rate:** 6,500,000 gallons per day (gpd)  
**Permittee:** Golden Vertex Corp.  
**Permittee Address:** 1882 Lakeside Dr. #23277  
Bullhead City, Arizona 86439  
**Facility Contact:** Joel Murphy, General Manager  
**Emergency Phone No.:** (928) 201-9404  
**Latitude/Longitude:** 35° 05' 50" N / 114° 26' 52" W  
**Legal Description:** Portions of Sections 19, 20, 29 and 30 of Township 20N, Range 20W 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 \_\_\_\_\_, 20\_\_\_\_

**THIS AMENDED PERMIT SUPERCEDES ALL PREVIOUS PERMITS**

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**2.0 SPECIFIC CONDITIONS**

[A.R.S. §§ 49-203(4), 49-241(A)]

**2.1. FACILITY / SITE DESCRIPTION**

[A.R.S. § 49-243(K)(8)]

The Moss Mine project is developed by the Golden Vertex Corp. as a gold-silver mine and heap leaching facility. The total mine area, as patented mining claims, is approximately 253 acres. The Moss Mine is located in the northern part of the San Francisco (Oatman) mining district. Four APP discharging facilities (see table below) have been constructed for the purpose of processing ore through a cyanide (gold recovery) leach process including Phase 2 Heap Leach Pad, Pregnant Solution Pond, South Contingency Pond, and West Contingency Pond. All facilities have been constructed using prescriptive BADCT.

The site includes the following permitted discharging facilities:

Table 1: DISCHARGING FACILITIES		
Facility	Latitude (N)	Longitude (W)
Phase 2 Heap Leach Pad	35° 5' 42.50"	114° 26' 55.16"
Phase 2 Pregnant Solution Pond	35° 5' 38.89"	114° 26' 56.91"
Phase 2 South Contingency Pond	35° 5' 38.90"	114° 26' 54.15"
Phase 2 West Contingency Pond	35° 5' 45.56"	114° 27' 11.16"
Phase 3A Heap Leach Pad Phase 1	35° 5' 35.76 "	114° 27' 30.93"
Phase 3A Process/Contingency Pond	35° 5' 37.60 "	114° 27' 38.36"

**2.1.1. Annual Registration Fee**

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

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

**2.1.2. Financial Capability**

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

The permittee has demonstrated financial capability under A.R.S. § 49-243(N) and A.A.C. R18-9-A203. The permittee shall maintain financial capability throughout the life of the facility. The financial assurance mechanism was demonstrated through A.A.C. R18-9-A203(C)(2) using surety bonds.

Phase 2 is covered under two surety bonds. The first surety bond (for \$510,706) was issued by US Specialty Insurance Company and was executed on October 8, 2020. The second surety bond (for \$981,246.00) was issued by US Specialty Insurance Company, and was executed on January 30, 2021.

Phase 3 is covered under two surety bonds. The first surety bond (for \$4,643,000) was issued by US Specialty Insurance Company, and was executed on October 30, 2020. The second surety bond (for \$284,813) was issued by US Specialty Insurance Company, was executed on January 30, 2021.

The permittee shall also establish a Standby Trust Fund in accordance with A.A.C R18-9-A203(C)(2)(g) as required by the Compliance Schedule, Section 3.0 of this permit.

### **2.1.3. Engineering Design**

#### **2.1.3.1. Phase 2 Heap Leach Pad**

The heap leach pad liner has been designed with two lining systems. The majority of the leach pad was be lined with a single 2.0 millimeter textured low density polyethylene (LLDPE) geomembrane liner placed over a 1.5 millimeter geo-synthetic clay composite liner (GCL) base. The GCL was placed on a prepared foundation of sub-graded and compacted native foundation materials and, where needed for GCL protection, leach ore from the permitted Phase I heap. GCL is provided as a substitute for the low permeability liner bedding fill material specified in the ADEQ prescriptive design guidance. A dual liner system consisting of upper 2.0 mm and lower 1.5 mm LLDPE geomembranes with an intervening sand or geonet drain layer was constructed in selected areas of the leach pad.

The heap leach facility was built in an area that lacks any known affected soils or other fill materials. The leach pad footprint contains a central ridge that will cause the leach pad LCRS and solution collection systems to drain to the south and west. Separate LCRS and leach solution collection systems that drain to the west and south will be required. Risers for collection of any leakage from the leach pad LCRS were constructed on the south and west limits of the Leach Pad. LCRS risers were fitted with submersible pumps to recover accumulated leakage, which are pumped to the Pregnant Solution Pond. Leach solution from the eastern portion of the Leach Pad drains by gravity to the Pregnant Solution Pond through the internal solution collection piping network. Two steel wet wells were constructed within the ore heap to collect leach solution that drains from the western portion of the Leach Pad. A submersible pump was installed in each wet well and leach solution is pumped to the Pregnant Solution Pond.

Additional solution storage is provided in-heap leach on the west side of the Leach Pad within the pore space of the ore heap. A berm constructed across the west Leach Pad drainage develops the in-heap storage capacity.

The Phase 2 Leach Pad was constructed in three Phases. Phase 2A construction included the central and western portions of the Leach Pad, the Pregnant Solution Pond, and contingency ponds. To minimize the potential for damage to constructed Phase 2A facilities, Phase 2B rough grading was completed as part of Phase 2A construction. Phase 2A Heap Leach Pad construction is complete.

In Phase 2B, the Leach Pad was extended to its northern limits on the western side as shown in the December 2019 design drawings prepared by Stantec. Phase 2B construction included fine grading, GCL base liner installation, 2.0 millimeter textured low density polyethylene (LLDPE) geomembrane liner installation, anchor trenching and backfilling, over liner cover placement, wet well construction (north in-heap sump), LCRS construction beneath the wet well and adjacent areas, construction of an in-heap berm to route Phase 2B leach solution to the wet well, and stormwater diversion channel to divert stormwater around the Phase 2B north edge toward the west. The liner anchor trench is overlain by a berm to prevent stormwater from running on to the pad.

In Phase 2C, the Leach Pad extended eastward over waste rock fill. The Phase 2C waste rock fill was placed as part of normal waste rock disposal operations using the mine haulage fleet. Phase 2C construction included fine grading, GCL base liner installation, anchor trenching and backfilling, over liner cover placement, and extension of the solution collection pipe network. Spent ore that had previously been placed on the Phase 1 Leach Pad was utilized, after being de-toxified, in Phase 2A construction as liner bedding, anchor trench fill, and within the sand drain layer.

The Heap Leach Pad presently has an access road around it and shall have a storm channel and drainage basins system to prevent stormwater run-on. Stormwater and sediment collection ponds have been designed to contain stormwater and sediment associated with the 10-year, 24-hour storm event of 58 mm and pass stormwater flows associated with the 100-year, 24-hour storm event of 98 mm. Sediment ponds spillways are lined with 1.5-mm HDPE geomembrane to prevent erosion of embankments during stormwater discharge. Sediment pond embankments are constructed with locally derived borrow material or mine waste rock. The upstream face of each embankment is also lined with 1.5-mm HDPE to control potential seepage through embankment fill. Diversion ditches and stormwater conveyances were excavated into the bedrock foundation where required. Where erodible soils are encountered, riprap was placed.

#### **2.1.3.2. Phase 2 Pregnant Solution Pond**

The Pregnant Solution Pond is located at 35° 5' 38.89" N, 114° 26' 56.91" W. The Pregnant Solution Pond is constructed with upper and lower 1.5-mm (60 mil) high density polyethylene (HDPE) geomembranes placed on a GCL base. An HDPE drain net is placed between the geomembranes to serve as a pregnant pond Leak Collection Removal System (LCRS). An LCRS sump was constructed to recover potential leakage through the upper HDPE geomembrane. The sump was fitted with a submersible pump and collected leakage is discharged into the pregnant pond. The Pregnant Solution Pond is located on the south leach pad boundary. The Pregnant Solution Pond has been sized to contain dead storage for normal pump operations, and 24 hours of pregnant solution drain down at the maximum solution application rate and direct precipitation resulting from the 100-yr, 24-hr design storm event of 98 mm. The entire maximum leach solution flow rate of 467 m<sup>3</sup>/hr can occur in either of the westward and southward draining leach pad areas.

Required draindown water storage capacity is 11,200 cubic meters (m<sup>3</sup>). The lower 2 m of the pond, containing 2,800 m<sup>3</sup> of storage, is assumed to be reserved for normal solution inventory and pregnant solution reclaim pump operation. Total pond capacity is approximately 14,500 m<sup>3</sup>, which provides approximately 11,700 m<sup>3</sup> of reserve storage capacity for draindown storage under upset conditions with 0.6 meters of dry freeboard. Phase 2 PLS Pond construction has been completed.

#### **2.1.3.3. Phase 2 West Contingency Pond**

The Pregnant Solution Pond and contingency ponds have been designed to contain 24 hours of leach pad draindown plus direct precipitation resulting from the 100-year, 24-hour design storm event of 98 mm incident on the leach pad and ponds. The West Contingency Pond was constructed with a single 1.5 mm HDPE geomembrane placed over a prepared subgrade layer.

Flow into the West Contingency Pond occurs when the in-heap storage and wet well pregnant solution pumping capacity are exceeded. The West Contingency Pond was constructed contiguous with the Heap Leach Pad boundary and receives stormwater overflow from the Heap Leach Pad. Site preparation for the West Contingency Pond included clearing the area of vegetation, grubbing and grading as well as embankment and subgrade preparation in newly disturbed areas. Perimeter berms were constructed during grading. The subgrade was prepared by stripping the organic soil cover and vegetation to a minimum of 6-inch depth. The organic soil was placed in temporary topsoil stockpiles for reclamation. The required pond capacity is approximately 7,300 m<sup>3</sup>. The storage capacities in the West Contingency Pond is approximately 7,900 m<sup>3</sup>, with 0.6 m of dry freeboard. Phase 2 West Contingency Pond construction is complete.

#### **2.1.3.4. Phase 2 South Contingency Pond**

The South Contingency Pond was constructed with a single 1.5 mm HDPE geomembrane placed over a prepared subgrade layer. Flow into the pond will occur when the Pregnant Solution Pond water surface reaches the level of the spillway to the pond. The pond will be located in previously disturbed permitted Phase I ground.

The contingency ponds have been designed to contain direct precipitation resulting from the 100-year, 24-hour design storm event of 98 mm incident on the leach pad and ponds. Contingency ponds are located west and south of the Phase 2 leach pad. Direct precipitation incident on the south draining portion of the leach pad reports to the Pregnant Solution Pond and flows into the South Contingency Pond when the Pregnant Solution Pond water surface reaches the level of the spillway to the South Contingency Pond. Assuming all precipitation incidents on the pad will report to the contingency ponds, the required South Contingency Ponds capacity is approximately 13,200 m<sup>3</sup>. The storage capacity in the South and West Contingency Pond is approximately 15,800 and 7,900 m<sup>3</sup>, respectively, with 0.6 m of dry freeboard. Phase 2 South Contingency Pond construction is complete.

#### **2.1.3.5. Phase 1 of 3A Heap Leach Pad**

The expansion is designed to support ore placement to a maximum height of 200 feet. The overall side slopes of the heap will be 2.5:1 H:V (horizontal to vertical). Heap leach material has been estimated to occupy 18.4 cubic feet per ton of ore (109 pcf). The HLP will be completely lined with a composite liner system, which consists of 12 inches of low permeability soil (LPS) material meeting a maximum permeability requirement of 10-6 cm/sec or geosynthetic clay liner (GCL), overlain by double-sided textured 80-mil LLDPE geomembrane liner. The lining system will be overlain with a collection piping system and a granular backfill within the main drainages which traverse the site. Solution application rates range from 0.004 to 0.005 gpm/ft<sup>2</sup> applied at a maximum of 4,500 gpm (3,000 gpm barren solution and 1,500 gpm intermediate solution).

#### **2.1.3.6. Phase 3A Process/Contingency Pond**

The Process/Contingency Pond will be double geomembrane lined with a leak collection and recovery system (LCRS). Six inches of LPS or GCL will underlie the lower geomembrane in the pond. The lining system for the Process/Contingency pond consists of an 80-mil HDPE primary liner, a geonet drainage layer (or Agru Drainliner) and a 60-mil HDPE secondary liner. The secondary liner is underlain by six-inches of LPS or a GCL. The base of the pond will slope to a low point where a collection sump will be located. The sump will be filled with drain rock and an inclined riser pipe will be placed between the liners to serve as a leak collection, monitoring and recovery system. The riser will be fitted with a pump with level switches to evacuate the sump should any leakage occur. The process/contingency pond design incorporates the capacity for a 24-hour power loss at 4,500 gpm. The solution pond freeboard is 2-feet in accordance with BADCT prescriptive criteria. Stormwater runoff collection, storage and diversion structures (as applicable) are designed for a 100-year, 24-hour storm event.

#### **2.1.4. Site-Specific Characteristics**

Not applicable.

#### **2.1.5. Pre-Operational Requirements**

Not applicable.

#### **2.1.6. Operational Requirements**

The discharging facilities shall be operated according to and inspected for compliance with the requirements in Table 2, Table 3 and Section 4.2, Table 12, and recorded in a log as required by Section 2.6.2. If damage is identified during an inspection that could cause or contribute to a discharge, proper repairs shall be promptly performed in accordance with Section 2.6 of this permit and recorded in a log.

Contingency requirements of Section 2.5.2.2 and 2.5.2.3 shall be followed for AL1 and AL2 exceedances, respectively. An exceedance of AL1 or AL2 is not a violation of the permit unless the permittee fails to perform actions as required under the Sections referenced above.



Table 2: LEAK COLLECTION AND REMOVAL SYSTEM (LCRS) MONITORING					
LCRS Sump	Parameter	AL1 gallons per day (gpd)	AL2 gallons per day (gpd)	Monitoring Method	Monitoring Frequency
Phase 2 PLS Pond	Liquid Pumped	873	7,854	Sump with pump and flow meter/totalizer	Daily
Phase 3A Process/Contingency Pond	Liquid Pumped	7,910	37,283	Sump with pump and flow meter/totalizer	Daily

At a minimum, permitted facilities shall be inspected for performance levels listed in Section 4.2, Table 12. Results of these inspections and monitoring activities shall be documented and maintained at the mine location for at least ten years, and as required by Section 2.6.2 of this permit.

If damage is identified during an inspection that could cause or contribute to an unauthorized discharge, proper repairs shall be promptly performed. A summary of the repairs, including a description of the procedures and materials used shall be maintained with the inspection records noted above.

Table 3: REQUIRED FREEBOARD FOR IMPOUNDMENTS	
Facility Name	Minimum Freeboard*
Phase 2 PLS Pond	2 feet
Phase 2 South Contingency Pond	2 feet
Phase 2 West Contingency Pond	2 feet
Phase 3A Process/Contingency Pond	2 feet

\*- Freeboard incidents shall be reported as required in Section 2.5.2.1.1.

**2.2. DISCHARGE LIMITATIONS**

[A.R.S. §§ 49-201(14), 49-243 and A.A.C. R18-9-A205(B)]

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 BADCT pollutant control technologies including liner failure, uncontrollable leakage, berm breaches that result in an unexpected loss of fluid, accidental spills, or other unauthorized discharges. Liner failure in a single-lined impoundment is any condition that would result in leakage exceeding 550 gallons per day per acre. The discharge limitations in this section are not applicable to any discharge caused by precipitation in excess of a single 100-year/24 hour storm event or process overflow during a power outage exceeding 24 hours in duration.

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

[A.R.S. § 49-244]

The POCs are established by the following monitoring locations:

Table 4: POINT(S) OF COMPLIANCE				
Well ID	Status	ADWR No.	Latitude (North)	Longitude (West)
MW-1	Replacement	55-227740	35° 05' 37.50"	114° 26' 56.93"
MW-2	Replacement	55-227741	35° 05' 37.36"	114° 26' 54.54"
MW-3	Replacement	55-227742	35° 05' 40.70"	114° 26' 49.52"
MW-4	Existing	55-920863	35° 05' 43.65"	114° 27' 16.13"
MW-5	Existing	55-920864	35° 05' 41.62"	114° 26' 44.78"

Monitoring requirements for each POC are listed in Section 4.2, Table 9 and Table 10.

The Director may amend this permit to designate additional POCs, if information on groundwater gradients or groundwater usage indicates the need.

## **2.4. 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.

### **2.4.1. Discharge Monitoring**

None required by this permit.

### **2.4.2. Facility / Operational Monitoring**

At a minimum, permitted facilities shall be inspected for performance levels listed in Section 4.2, Table 12. If damage is identified during an inspection that could cause or contribute to an unauthorized discharge pursuant to A.R.S. § 49-201(12), proper repairs shall be promptly performed. Results of these inspections and monitoring activities shall be documented and maintained at the facility location for at least 10 years, and as required by Section 2.6.2 of this permit.

On a quarterly basis, the permittee shall characterize the material placed within the low-grade ore stockpile and waste rock stockpile to ensure the material placed within those facilities continues to meet the inertness exemption in accordance with A.R.S. § 49-250(20).

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

Compliance groundwater monitoring is required under the terms of this permit. For all sampling methods, 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, and 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 Self-Monitoring Report Form (SMRF).

As an alternative method for sampling, the permittee may conduct the sampling using the low-flow purging method as described in the Arizona Water Resources Research Center, March 1995 Field Manual for Water Quality Sampling. 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, and DOD protocols. In addition, the HydraSleeve™ or similar type sampler shall be placed just below the water table.

#### **2.4.3.1. Point of Compliance 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 50 feet or less from the original well, the ALs and/or aquifer quality limits (AQLs) calculated for the designated POC well shall apply to the replacement well.

#### **2.4.3.2. Compliance Groundwater Quality Monitoring for POC Wells**

Quarterly compliance groundwater monitoring in each POC well shall commence within the first calendar quarter after completion of the ambient groundwater sampling period. For quarterly compliance monitoring, the permittee shall analyze groundwater samples for the parameters listed in Section 4.2, Table 9. In addition to quarterly compliance groundwater monitoring, the permittee shall analyze samples from the POC wells annually for an expanded list of parameters listed in Section 4.2, Table 10. The annual sampling event shall replace the regularly scheduled quarterly sampling event for the quarter in which the annual sampling event is conducted.

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

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

#### **2.4.5. 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 2.5 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 Arizona state-certified laboratories can be obtained at the address below:

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

#### **2.4.6. 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.

### **2.5. CONTINGENCY PLAN REQUIREMENTS**

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

#### **2.5.1. 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 an AQL, DL, or other permit condition shall be reported to ADEQ following the reporting requirements in Section 2.6.3, unless more specific reporting requirements are set forth in Section 2.5.2 through 2.5.5.

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

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

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

#### **2.5.2.1.1. Performance Levels Set for Freeboard**

In the event that freeboard performance levels required by Section 4.2 Table 12 in a surface impoundment are not maintained, the permittee shall:

1. As soon as practicable, cease or reduce discharging to the impoundment to prevent overtopping. Remove and properly dispose or recycle to other operations the excess fluid in the reservoir until the water level is restored at or below the permitted freeboard limit.
2. Within 5 days of discovery, evaluate the cause of the incident and adjust operational conditions or identify design improvements to the affected system as necessary to avoid future occurrences.
3. Record in the facility log, the amount of fluid removed, a description of the removal method, and the disposal arrangements. The facility log shall be maintained according to Section 2.6.2 (Operational Inspection/Log Book Recordkeeping). Records documenting each freeboard incident and actions taken to correct the problem shall be included in the quarterly report as required in Section 2.6.3.
4. Within 30 days of discovery, initiate repairs to the affected system, structure, or other component as necessary to return the system to compliance with this permit, or remove the affected system(s) from service as specified in Section 2.7 (Temporary Cessation) and Section 2.8 (Closure) of this permit. Record any repair procedures, methods, and materials used to restore the facility to operating condition in the facility log/recordkeeping file.
5. If design improvements are necessary, submit an amendment application within 90 days of discovery.
6. The facility is no longer on alert status once the operational indicator no longer indicates that the freeboard performance level is being exceeded. The permittee shall, however, complete all tasks necessary to return the facility to its pre-alert operating condition.

#### **2.5.2.1.2. Performance Levels, other than Freeboard**

1. If an operational performance level (PL) listed in Section 4.2, Table 12 has been observed or noted during required inspection and operational monitoring, such that the result could cause or contribute to an unauthorized discharge, the permittee shall immediately investigate to determine the cause of the condition. 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 operational performance condition.
  - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences.
2. The PL exceedance, results of the investigation, and any corrective action taken shall be reported to the Groundwater Protection Value Stream, within 30 days of the discovery of the condition. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, or other actions.
  3. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 2.5 and any necessary contingency measures to resolve problems identified by the investigation which may have led to a PL being exceeded. To implement any other corrective action the permittee may choose to obtain prior approval from ADEQ according to Section 2.5.6.
  4. The facility is no longer on alert status once an Operational Condition is not being exceeded. The permittee shall, however, complete all tasks necessary to return the facility to its pre-alert operating condition.

**2.5.2.2. Exceedance of Alert Level #1 for Normal Liner Leakage**

If an Alert Level #1 (AL #1) as specified in Section 2.1.6, Table 2, has been exceeded, the permittee shall take the following actions:

1. Within 5 days of discovery, determine if the fluid in the collection sump is operational/process water from the impoundment by measuring the pH and conductivity of fluids in the impoundment and in the sump to allow direct comparison in operational/process water quality. Notify ADEQ Groundwater Protection Value Stream in accordance with Section 2.6.3(1) (Permit Violation and AL Status Reporting), and include in the notification an assessment of the type of water in the sump. Monitor fluid removal from the LCRS on a daily basis until the daily volume of fluid quantified remains below AL1 for 30 days in order to minimize the hydraulic head on the lower liner.
2. Within 15 days of discovery, assess the condition of the liner system using visual methods for visible portions of the liner, electrical leak detection, or other methods as applicable to determine the location of leaks in the primary liner. If liner damage is evident, the permittee shall complete liner repairs and submit documentation of the repairs in the initial report discussed in Item No. 3 below.
3. Within 30 days of discovery of exceeding AL1, the permittee shall submit an initial report to ADEQ Groundwater Protection Value Stream to address problems identified from the initial assessment of the liner system, the source of the fluid, and any remedial actions taken to minimize the future occurrences. The report shall include the results of the initial liner evaluation, methods used to locate the leak(s) if applicable, any repair procedures implemented to restore the liner to optimal operational status if required, and other information necessary to ensure the future occurrence of the incidence will be minimized. The permittee shall also submit the report required under Section 2.6.3.
4. Within 45 days of AL #1 exceedance, if liner damage is evident, the permittee shall complete liner repairs.
5. Within 45 days of AL #1 exceedance, if the visual inspection does not identify the location of leaks, formulate a corrective action plan to determine their location and repair them.

6. Within 90 days of AL #1 exceedance and following formulation of a corrective action plan, the permittee shall complete liner repairs.
7. Within 75 days of AL #1 exceedance (if repairs were completed in Step 3), or 120 days of AL #1 exceedance (if corrective action plan was implemented per Steps 4 and 5 ), if no alert level exceedance is observed for 30 consecutive days, notify Groundwater Protection Value Stream and document assessment and/or repairs in the log book.
8. Within 120 days of AL #1 exceedance (if repairs were completed in Step 3), or 165 days of AL #1 exceedance (if corrective action plan was implemented per Steps 4 and 5), if 30 consecutive days without an AL #1 exceedance is not achieved, notify Groundwater Protection Value Stream and reassess the entire liner system and complete any necessary repairs as described in Steps 2 and 3 (and if necessary Steps 4 and 5 also). Repeat the assessment and liner repair cycle until requirements of Step No. 6 are attained.
9. A liner leakage assessment and repair report shall be included in the next annual report described in Section 2.6.4.1 (Annual Reporting) of this permit. The permittee may also submit the liner leakage assessment report to the ADEQ prior to the annual report due date. This liner leakage assessment and repair report shall be submitted to Groundwater Protection Value Stream. Upon review of the report, ADEQ may require that the permittee take additional corrective actions to address the problems identified from the assessment of the liner and perform other applicable repair procedures.

**2.5.2.3. Exceedance of Alert Level #2 for Liner Failure or Rips**

If the Liner Leakage Discharge Limit (AL #2) specified in Section 2.1.6, Table 2 has been exceeded, the permittee shall:

1. As soon as practicable, cease all discharge to the impoundment, implement control measures to prevent new solution buildup that may subsequently report to the impoundment, and immediately notify Groundwater Protection Value Stream of the AL #2 exceedance.
2. Within 15 days of initial AL #2 exceedance, perform a visual inspection of the liner above the solution level to identify the location of the leak(s). The permittee shall complete liner repairs and discharge to the impoundment shall not be re-initiated until the leak(s) have been identified and repaired.
3. Within 30 days of initial AL #2 exceedance if the visual inspection does not identify the location of leaks and AL #2 exceedance continues, formulate a corrective action plan to determine their location and repair them. The corrective action plan will take into account the schedule for a 3rd party contractor to perform electronic leak detection or other methods if required.
4. Within 60 days of initial AL #2 exceedance if leaks were found and fixed and if no AL #2 exceedance is observed for 30 consecutive days, submit a liner leakage assessment and repair report to ADEQ. The report shall include the results of the initial liner evaluation, methods used to locate the leak(s), repair procedures and quality assurance/quality control implemented to restore the liner to optimal operational status, and other information necessary to ensure the future occurrence of the incidence will be minimized.
5. Within 75 days of initial AL #2 exceedance and following formulation of a corrective action plan, the permittee shall complete liner repairs
6. Within 105 days of AL #2 exceedance and implementation of the corrective action plan per Steps 4 and 5, if no AL #2 exceedance is observed for 30 consecutive days, notify Groundwater Protection Value Stream and document assessment and/or repairs in the log book.

7. Within 105 days of initial AL #2 exceedance, (if repairs were completed in Step 3), or 150 days of AL #2 exceedance (if corrective action plan was implemented per Steps 4, 5, and 6) if 30 consecutive days without an AL #2 exceedance is not achieved, repeat Steps 1 through 7 until AL #2 is not exceeded for 30 consecutive days. When the Steps 1 through 7 are repeated, the notification date is reset. Discharge to the impoundment shall not be re-initiated until the leak(s) have been identified and repaired.
8. Liner leakage assessment and repair reports required by Sections 2.5.2.2 and 2.5.2.3, shall be referenced in the next annual report described in Section 2.6.4.1 (Annual Reporting) of this permit.

**2.5.2.4. Exceeding of Alert Levels Set for Discharge Monitoring**

Not applicable.

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

**2.5.2.5.1. Alert Levels for Indicator Parameters**

Monitoring for Indicator Parameters is not required under the terms of this permit.

**2.5.2.5.2. Alert Levels for Pollutants With Numeric Aquifer Water Quality Standards**

1. If an AL for a pollutant set in Section 4.2, Table 9 or Table 10 has been exceeded, the permittee may conduct verification sampling of the pollutant(s) that exceed their respective AL(s) within 5 days of becoming aware of an AL exceedance. The permittee may use the results of another sample taken between the date of the last sampling event and the date of receiving the result as verification.
2. If verification sampling confirms the AL exceedance or if the permittee opts not to perform verification sampling, then the permittee shall increase the frequency of monitoring for the pollutant(s) exceeding their respective AL(s) according to Table 5. In addition, the permittee shall immediately initiate an investigation of the cause of the AL exceedance, including inspection of all discharging units and all related pollution control devices, review of any operational and maintenance practices that might have resulted in an unexpected discharge, and hydrologic review of groundwater conditions including upgradient water quality.
3. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 5.0 and specific contingency measures identified in Section 2.5 to resolve any problems identified by the investigation which may have led to an AL exceedance. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.5.6. Alternatively, the permittee may submit a technical demonstration, subject to written approval by the Groundwater Protection Value Stream, that although an AL is exceeded, the pollutant(s) that exceed their respective AL(s) are not reasonably expected to cause a violation of an AQL. The demonstration may propose a revised AL or monitoring frequency, for those pollutant(s) that exceed their respective AL(s), for approval in writing by the Groundwater Protection Value Stream.
4. Within 30 days after confirmation of an AL exceedance for those pollutant(s), the permittee shall submit the laboratory results to the Groundwater Protection Value Stream along with a summary of the findings of the investigation, the cause of the AL exceedance, and actions taken to resolve the problem.
5. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, or other actions.

6. The increased monitoring for those pollutant(s) required as a result of an AL exceedance may be reduced to the regular frequency, if the results of three (3) sequential sampling events demonstrate that the parameter(s) does/do not exceed their respective AL(s).
7. If the increased monitoring required as a result of an AL exceedance for those pollutant(s) continues for more than six (6) sequential sampling events, the permittee shall submit a second report documenting an investigation of the continued AL exceedance within 30 days of the receipt of laboratory results of the sixth sampling event.

**2.5.2.5.3. Alert Levels to Protect Downgradient Users from Pollutants Without Numeric Aquifer Water Quality Standards**

Not applicable.

**2.5.3. Discharge Limit Violation**

**2.5.3.1. Liner Failure, Containment Structure Failure, or Unexpected Loss of Fluid**

In the event of overtopping, liner failure, containment structure failure, or unexpected loss of fluid, the permittee shall take the following actions:

1. As soon as practicable, cease all discharges as necessary to prevent any further releases to the environment, including removal of any fluid remaining in the impoundment as necessary, and capture and containment of all escaped fluids.
2. Within 24 hours of discovery, notify Groundwater Protection Value Stream.
3. Within 24 hours of discovery of a failure estimate the quantity released, collect representative samples of the fluid remaining in affected impoundments and drainage structures, analyze sample(s) according to Section 4.2 Table 13 and report in accordance with Section 2.6.3 (Permit Violation and AL Status Reporting). In the 30-day report required under Section 2.6.3, include a copy of the analytical results and forward the report to Groundwater Protection Value Stream.
4. Within 15 days of discovery, initiate an evaluation to determine the cause for the incident. Identify the circumstances that resulted in the failure and assess the condition of the discharging facility and liner system. Implement corrective actions as necessary to resolve the problems identified in the evaluation. Initiate repairs to any failed liner, system, structure, or other component as needed to restore proper functioning of the discharging facility. The permittee shall not resume discharge to the facility until repairs of any failed liner or structure are performed.

Repair procedures, methods, and materials used to restore the system(s) to proper operating condition shall be described in the facility log/recordkeeping file and available for ADEQ review. Record in the facility log/recordkeeping file the amount of fluid released, a description of any removal method and volume of any fluid removed from the impoundment and/or captured from the release area. The facility log/recordkeeping file shall be maintained according to Section 2.6.2 (Operation Inspection / Log/Recordkeeping File).

5. Within 30 days of discovery of the incident, submit a report to Groundwater Protection Value Stream as specified in Section 2.6.3. Include a description of the actions performed in Subsections 1 through 4 listed above. Upon review of the report, ADEQ may request additional monitoring or remedial actions.



6. Within 60 days of discovery, conduct an assessment of the impacts to soil and/or groundwater resulting from the incident. If soil or groundwater is impacted such that it could or did cause or contribute to an exceedance of an AQL at the applicable point of compliance, submit to ADEQ, for approval, a corrective action plan to address such impacts, including identification of remedial actions and a schedule for completion of activities. At the approval of ADEQ, the permittee shall implement the approved plan.
7. Within 30 days of completion of corrective actions, submit to Groundwater Protection Value Stream, a written report as specified in Section 2.6.6 (Corrective Actions).
8. Upon review of the report, ADEQ may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions, or other actions.

### **2.5.3.2. Overtopping of a Surface Impoundment**

If overtopping of fluid from a permitted surface impoundment occurs, and results in a discharge pursuant to A.R.S. § 49-201(12), the permittee shall:

1. As soon as practicable, cease all discharges to the surface impoundment to prevent any further releases to the environment.
2. Within 24 hours of discovery, notify Groundwater Protection Value Stream.
3. Within 24 hours, collect representative samples of the fluid contained in the surface impoundment. Samples shall be analyzed for the parameters specified in Section 4.2, Table 9 and Table 10. Within 30 days of the incident, submit a copy of the analytical results to Groundwater Protection Value Stream.
4. As soon as practicable, remove and properly dispose of excess water in the impoundment until the water level is restored at or below the appropriate freeboard as described in Section 4.2, Table 12. Record in the facility log/recordkeeping file the amount of fluid released, a description of the removal method and volume of any fluid removed from the impoundment and/or captured from the release area. The facility log/recordkeeping file shall be maintained according to Section 2.6.2 (Operation Inspection/Log Book/Recordkeeping File).
5. Within 30 days of discovery, evaluate the cause of the overtopping and identify the circumstances that resulted in the incident. Implement corrective actions and adjust operational conditions as necessary to resolve the problems identified in the evaluation. Repair any systems as necessary to prevent future occurrences of overtopping.
6. Within 30 days of discovery of overtopping, submit a report to ADEQ as specified in Section 2.6.3(2) (Permit Violation and Alert Level Status Reporting). Include a description of the actions performed in Subsections 1 through 5 listed above. Upon review of the report, ADEQ may request additional monitoring or remedial actions.
7. Within 60 days of discovery, and based on sampling in Item No. 3 above, conduct an assessment of the impacts to the subsoil and/or groundwater resulting from the incident.
8. If soil or groundwater is impacted such that it could cause or contribute to an exceedance of an AQL at the applicable point of compliance, submit to ADEQ for approval, a corrective action plan to address such impacts, including identification of remedial actions and/or monitoring, and a schedule for completion of activities. At the direction of ADEQ, the permittee shall implement the approved plan.

9. Within 30 days of completion of corrective actions, submit to ADEQ, a written report as specified in Section 2.6.6 (Corrective Actions). Upon review of the report, ADEQ may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions, or other actions.

#### **2.5.3.3. Inflows of Unexpected Materials to a Surface Impoundment**

The types of materials that are expected to be placed in the permitted surface impoundments are specified in Section 2.2 (Discharge Limitations). If any unexpected materials flow to a permitted surface impoundment, the permittee shall:

1. As soon as practicable, cease all unexpected inflows to the surface impoundment(s).
2. Within 24-hours of discovery, notify Groundwater Protection Value Stream.
3. Within five (5) days of the incident, identify the source of the material and determine the cause for the inflow. Characterize the unexpected material and contents of the affected impoundment, and evaluate the volume and concentration of the material to determine if it is compatible with the surface impoundment liner. Based on the evaluation of the incident, repair any systems or equipment and/or adjust operations, as necessary to prevent future occurrences of inflows of unexpected materials.
4. Within 30 days of an inflow of unexpected materials, submit a report to ADEQ as specified in Section 2.6.3(2) (Permit Violation and Alert Level Status Reporting). Include a description of the actions performed in Subsections 1 through 3 listed above.
5. Upon review of the report, ADEQ may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions, or other actions including remediation.

#### **2.5.3.4. Slope and Berm Failures**

If a slope or berm failure involving heap or dump leach facilities, waste rock dumps, tailings facilities, or retention structures (dams) occurs which affects the ability of the facility to operate in accordance with this permit or results in an unauthorized discharge, the permittee shall promptly close the active area in the vicinity of the failure, and conduct a field investigation of the failure to analyze its origin and extent, its impact on the facility operations, temporary and permanent repairs and changes in operational plans considered necessary. Within 30 days of a slope or berm failure, the permittee shall submit a written report, which includes the documentation specified in Section 2.6.3 of this permit. The permittee shall initiate the actions necessary to mitigate the impacts of the failure, consistent with Department approval.

#### **2.5.4. Aquifer Quality Limit Exceedances**

1. If an AQL set in Section 4.2, Table 9 or Table 10 has been exceeded, the permittee may conduct verification sampling for those pollutant(s) that were above their respective AQL(s) within five (5) days of becoming aware of the exceedance. The permittee may use results of another sample taken between the date of the last sampling event and the date of receiving the result as verification.
2. If verification sampling does not confirm an AQL exceedance, no further action is needed under this Section.
3. If verification sampling confirms that an AQL was exceeded for any parameter or if the permittee opts not to perform verification sampling, then, the permittee shall increase the frequency of monitoring for those parameters as follows:

Table 5: ACCELERATED MONITORING	
Specified Monitoring Frequency	Monitoring Frequency for AQL Violation
Daily	Daily
Weekly	Daily
Monthly	Weekly
Quarterly	Monthly
Semi-annually	Quarterly
Annually	Quarterly

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

The permittee also shall submit a report according to Section 2.6.3, which includes a summary of the findings of the investigation, the cause of the violation, and actions taken to resolve the problem. A verified exceedance of an AQL will be considered a violation unless the permittee demonstrates within 30 days that the exceedance was not caused or contributed to by pollutants discharged from the facility. Unless the permittee has demonstrated that the exceedance was not caused or contributed to by pollutants discharged from the facility, the permittee shall consider and ADEQ may require corrective action that may include control of the source of discharge, cleanup of affected soil, surface water, or groundwater, and mitigation of the impact of pollutants on existing uses of the aquifer. Corrective actions shall either be specifically identified in this permit, included in an ADEQ approved contingency plan, or separately approved according to Section 2.5.6.

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.

The permittee shall notify any downstream or downgradient users who may be directly affected by the discharge.

**2.5.5. Emergency Response and Contingency Requirements for Unauthorized Discharges**

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

**2.5.5.1. 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.

**2.5.5.2. Discharge of Hazardous Substances or Toxic Pollutants**

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

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

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

### **2.5.5.4. Reporting Requirements**

The permittee shall submit a written report for any unauthorized discharges reported under Sections 2.5.5.2 and 2.5.5.3 to the Groundwater Protection Value Stream within 30 days of the discharge or as required by subsequent ADEQ action. The report shall summarize the event, including any human exposure, and facility response activities and include all information specified in Section 2.6.3. 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.

## **2.5.6. Corrective Actions**

Specific contingency measures identified in Section 2.5 and actions identified in the approved contingency plan referenced in Section 5.0 have already been approved by ADEQ and do not require written approval to implement.

With the exception of emergency response actions taken under Section 2.5.5, the permittee shall obtain written approval from the Groundwater Protection Value Stream prior to implementing a corrective action to accomplish any of the following goals in response to exceedance of an AL, AQL, DL, or other permit condition:

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

Within 30 days of completion of any corrective action, the operator shall submit to the Groundwater Protection Value Stream, a written report describing the causes, impacts, and actions taken to resolve the problem.

## **2.6. REPORTING AND RECORDKEEPING REQUIREMENTS**

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

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

1. The permittee shall complete the Self-Monitoring Reporting Forms (SMRFs) provided by ADEQ, and submit the completed report through the myDEQ online reporting system. The permittee shall use the format devised by ADEQ.
2. The permittee shall complete the SMRF to the extent that the information reported may be entered on the form. If no information is required during a reporting period, the permittee shall enter "not required" on the form, include an explanation, and submit the form to the Groundwater Protection Value Stream.

3. The tables contained in Section 4.0 list the monitoring parameters and the frequencies for reporting results on the SMRF:
  - a. Table 9: QUARTERLY COMPLIANCE GROUNDWATER MONITORING
  - b. Table 10: ANNUAL COMPLIANCE GROUNDWATER MONITORING

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

### **2.6.2. 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;
6. Any other information required by this permit to be entered in the log book; and
7. Monitoring records for each measurement shall comply with A.A.C. R18-9-A206(B)(2).

### **2.6.3. Permit Violation and Alert Level Status Reporting**

1. The permittee shall notify the Groundwater Protection Value Stream within five (5) days (except as provided in Section 2.5.5) of becoming aware of an AL exceedance, or violation of any permit condition, AQL, or DL for which notification requirements are not specified in Sections 2.5.2 through 2.5.5.
2. The permittee shall submit a written report to the Groundwater Protection Value Stream within 30 days of becoming aware of the violation of any permit condition, AQL, or DL. The report shall document all of the following:
  - a. Identification and description of the permit condition for which there has been a violation and a description of the cause;
  - b. The period of violation including exact date(s) and time(s), if known, and the anticipated time period during which the violation is expected to continue;
  - c. Any corrective action taken or planned to mitigate the effects of the violation, or to eliminate or prevent a recurrence of the violation;
  - d. Any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS;
  - e. Proposed changes to the monitoring which include changes in constituents or increased frequency of monitoring; and
  - f. Description of any malfunction or failure of pollution control devices or other equipment or processes.

#### **2.6.4. Operational, Other or Miscellaneous Reporting**

The permittee shall record the information as required in Section 4.2, Table 12: FACILITY INSPECTION AND OPERATIONAL MONITORING in the facility log book as per Section 2.6.2, and report to the Groundwater Protection Value Stream any violations or exceedances as per Section 2.6.3.

The permittee shall, upon completion of the annual sampling described in Section 4.2, Table 10, submit a monitoring summary report to the Groundwater Protection Value Stream. This report shall be due at the same time as the SMRF form for the annual sampling event. The report shall include, but not be limited to the following:

1. A description of any deviations from standard sampling protocols during the reporting period.
2. A summary of all exceedances of ALs and AQLs that occurred during the reporting period.
3. Graphical time versus concentration plots of field pH, sulfate, total dissolved solids, and any parameter which exceeded an applicable AL or AQL in the past eight (8) quarters at each POC well, and tabulated sampling data for all wells required to be sampled by this permit during the last eight (8) quarters.
4. An updated table of all monitor wells in or within ¼-mile of the Pollutant Management Area including, but not limited to, location of well, depth of well, depth to water, and water level elevation.
5. A summary of any groundwater monitor wells replaced in the reporting period including, but not limited to, location of well, depth of well, depth to water, water level elevation, and screened interval.

See Section 4.2, Table 12 for required inspections and operational monitoring. Any exceedances of operational performance levels shall be documented in the facility Logbook in accordance with Section 2.6.2. In the case of a violation or exceedance, a report to ADEQ shall be made in accordance with Section 2.6.3.

##### **2.6.4.1. Annual Report**

If an Alert Level #1 has been exceeded discussed in Section 2.5.2.2, the permittee shall submit an annual report that summarizes the results of the liner assessment. The Liner Leakage Assessment Report shall also include information including but not limited to the following: number and location of holes identified; and a table summarizing alert level exceedances including the frequency and quantity of fluid removed, and corrective actions taken.

#### **2.6.5. Reporting Location**

All Self-Monitoring Report Forms (SMRFs) shall be submitted through the myDEQ portal accessible on the ADEQ website at: <http://www.azdeq.gov/welcome-mydeq>

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

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

**2.6.6. Reporting Deadline**

The following table lists the quarterly report due dates:

Table 6: 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 7: (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

**2.6.7. Changes to Facility Information in Section 1.0**

The Groundwater Protection Value Stream shall be notified within ten days of any change of facility information including Facility Name, Permittee Name, Mailing or Street Address, Facility Contact Person, or Emergency Telephone Number.

**2.7. Temporary Cessation**

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

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

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

At the time of notification the permittee shall submit for ADEQ approval a plan for maintenance of discharge control systems and for monitoring during the period of temporary cessation. Immediately following ADEQ approval, the permittee shall implement the approved plan. If necessary, ADEQ shall amend permit conditions to incorporate conditions to address temporary cessation. During the period of temporary cessation, the permittee shall provide written notice to the Groundwater Protection Value Stream of the operational status of the facility every three years. If the permittee intends to permanently cease operation of any facility, the permittee shall submit closure notification, as set forth in Section 2.8 below.

**2.8. Closure**

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

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

**2.8.1. Closure Plan**

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

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

**2.8.2. Closure Completion**

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

1. Clean-closure cannot be achieved at the time of closure notification or within one year thereafter under a diligent schedule of closure actions;
2. Further action is necessary to keep the facility in compliance with the AWQS at the applicable POC or, for any pollutant for which the AWQS was exceeded at the time this permit was issued, further action is necessary to prevent the facility from further degrading the aquifer at the applicable POC with respect to that pollutant;
3. Remedial, mitigative or corrective actions or controls are necessary to comply with A.R.S. § 49-201(30) and Title 49, Chapter 2, Article 3;
4. Further action is necessary to meet property use restrictions.
5. SMRF submittals are still required until Clean Closure is issued.

**2.9. 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.

**2.9.1. Post-Closure Plan**

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

**2.9.2. Post-Closure Completion**

Not required at the time of permit issuance.



**3.0 COMPLIANCE SCHEDULE**

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

Unless otherwise indicated, for each compliance schedule item listed below, the permittee shall submit the required information to the Groundwater Protection Value Stream.

Table 8: COMPLIANCE SCHEDULE ITEMS			
No.	Description	Due By:	Permit Amendment Required?
1	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. The demonstration shall include a statement that the closure and post-closure strategy has not changed, the discharging facilities listed in the permit have not been altered in a manner that would affect the closure and post-closure costs, and discharging facilities have not been added. The demonstration shall also include information in support of the surety bond as required in A.A.C. R18-9-A203(C)(8).	July 1, 2027 and every 6 years thereafter.	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.	July 1, 2027 and every 6 years thereafter.	Yes
3	The permittee shall establish a standby trust fund in accordance with A.A.C. R18-9-A203(C)(2)(g) using the trust template provided by ADEQ and identify the financial institution that is responsible for the trust in accordance with A.A.C. R18-9-A203(B)(3)(c). The permit will be amended upon approval in accordance with R18-9-A203(F).	Within 60 days of receiving a written request and standby trust template from ADEQ.	Yes
4	The permittee shall submit a Construction Quality Assurance (CQA) Report for phase 2C of Heap Leach Pad construction. The Report shall document that the Heap Leach Pad was built in accordance with the final technical documents, and shall include as-built design drawings and the results of all required testing. As-built documentation shall supersede all previous design documents and still meet all permit requirements.	Within 90 days after completion of construction for Phase 2C	No
6	The permittee shall evaluate potential mitigation actions to address nitrate concentrations in groundwater at all affected POC wells, including groundwater pumping from these areas. The Permittee shall include a schedule for implementation of any proposed mitigation actions. The permittee shall propose periodic nitrate trend analysis, evaluation, and reporting to track the impact of mitigation actions. This CSI shall remain open until ADEQ determines that the nitrate concentrations have been adequately investigated and has approved the mitigation action(s).	An updated status report is due every quarter following the schedule in Section 2.6.6	No
7	The permittee shall submit a Construction Quality Assurance (CQA) Report for 3A Heap Leach Pad Phase 1 construction. The Report shall document that the Phase 3A Heap Leach Pad was built in accordance with the final technical documents, and shall include as-built design drawings and the results of all required testing. As-built documentation shall supersede all previous design documents and still meet all permit requirements.	Within 90 days after completion of construction of the 3A Heap Leach Pad Phase 1	No

8	The permittee shall submit a Construction Quality Assurance (CQA) Report for Phase 3 Process/Contingency Pond construction. The Report shall document that the Phase 3 Process/Contingency Pond was built in accordance with the final technical documents, and shall include as-built design drawings and the results of all required testing. As-built documentation shall supersede all previous design documents and still meet all permit requirements.	Within 90 days after completion of construction of the Phase 3 Process/Contingency Pond	No
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4.0 TABLES OF MONITORING REQUIREMENTS

4.1. PERMITTED FACILITIES AND BADCT

4.2. COMPLIANCE OR OPERATIONAL MONITORING

Table 9: QUARTERLY COMPLIANCE GROUNDWATER MONITORING

Sampling Point Number	Sampling Point Identification	Latitude (North)	Longitude (West)
1	POC 1 (MW-1)	35° 05' 37.50"	114° 26' 56.93"
2	POC 2 (MW-2)	35° 05' 37.36"	114° 26' 54.54"
3	POC 3 (MW-3)	35° 05' 40.70"	114° 26' 49.52"
4	POC 4 (MW-4)	35° 05' 43.65"	114° 27' 16.13"
5	POC 5 (MW-5)	35° 05' 41.62"	114° 26' 44.78"

  

Parameter	Alert Level	Aquifer Quality Limit	Units <sup>1</sup>	Sampling Frequency	Reporting Frequency
Depth to Groundwater	Monitor <sup>2</sup>	Monitor	Feet below ground surface	Quarterly	Quarterly
Water Level Elevation	Monitor	Monitor	Feet above mean sea level	Quarterly	Quarterly
pH - field	Monitor	Monitor	Standard Units	Quarterly	Quarterly
Specific Conductance - field	Monitor	Monitor	umhos/cm	Quarterly	Quarterly
Temperature - field	Monitor	Monitor	F°	Quarterly	Quarterly
Total Dissolved Solids	Monitor	Monitor	mg/l	Quarterly	Quarterly
Sulfate	Monitor	Monitor	mg/l	Quarterly	Quarterly
Nitrate-Nitrite as N <sup>3</sup>	8.0	10.0	mg/l	Quarterly	Quarterly
Nitrite	0.8	1.0	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Copper	Monitor	Monitor	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
Fluoride (POC 1)	Not Established	4.125	mg/l	Quarterly	Quarterly
Selenium	0.04	0.05	mg/l	Quarterly	Quarterly

<sup>1</sup> Metals shall be analyzed as dissolved metals

<sup>2</sup> Monitor means that monitoring is required, but no AQL or AL is established in the permit.

<sup>3</sup> Nitrate-Nitrite as N may be determined as the sum of nitrate plus nitrite expressed as N.

Table 10: ANNUAL COMPLIANCE GROUNDWATER MONITORING

Sampling Point Number	Sampling Point Identification		Latitude (North)	Longitude (West)	
1	POC 1 (MW-1)		35° 05' 37.50"	114° 26' 56.93"	
2	POC 2 (MW-2)		35° 05' 37.36"	114° 26' 54.54"	
3	POC 3 (MW-3)		35° 05' 40.70"	114° 26' 49.52"	
4	POC 4 (MW-4)		35° 05' 43.65"	114° 27' 16.13"	
5	POC 5 (MW-5)		35° 05' 41.62"	114° 26' 44.78"	
Parameter	Alert Level	Aquifer Quality Limit	Units <sup>4</sup>	Sampling Frequency	Reporting Frequency
Total Alkalinity	Monitor	Monitor	mg/l	Annual	Annual
Carbonate	Monitor	Monitor	mg/l	Annual	Annual
Bicarbonate	Monitor	Monitor	mg/l	Annual	Annual
Hydroxide	Monitor	Monitor	mg/l	Annual	Annual
Chloride	Monitor	Monitor	mg/l	Annual	Annual
Calcium	Monitor	Monitor	mg/l	Annual	Annual
Magnesium	Monitor	Monitor	mg/l	Annual	Annual
Potassium	Monitor	Monitor	mg/l	Annual	Annual
Sodium	Monitor	Monitor	mg/l	Annual	Annual
Aluminum	Monitor	Monitor	mg/l	Annual	Annual
Cobalt	Monitor	Monitor	mg/l	Annual	Annual
Copper	Monitor	Monitor	mg/l	Annual	Annual
Iron	Monitor	Monitor	mg/l	Annual	Annual
Manganese	Monitor	Monitor	mg/l	Annual	Annual
Silver	Monitor	Monitor	mg/l	Annual	Annual
Zinc	Monitor	Monitor	mg/l	Annual	Annual
Radon 222	Monitor	Monitor	pCi/L	Annual	Annual
Uranium-total	Monitor	Monitor	µg/l	Annual	Annual
Uranium Isotopes <sup>5</sup>	Monitor	Monitor	pCi/L	Annual	Annual
TPH	Monitor	Monitor	mg/l	Annual	Annual

<sup>4</sup> Metals shall be analyzed as dissolved metals

<sup>5</sup> Uranium Isotope activity results must be used for calculating Adjusted Gross Alpha.

Table 11: ANNUAL COMPLIANCE GROUNDWATER MONITORING (Continued)

Sampling Point Number	Sampling Point Identification				Latitude (North)	Longitude (West)			
1	POC 1 (MW-1)				35° 05' 37.50"	114° 26' 56.93"			
2	POC 2 (MW-2)				35° 05' 37.36"	114° 26' 54.54"			
3	POC 3 (MW-3)				35° 05' 40.70"	114° 26' 49.52"			
4	POC 4 (MW-4)				35° 05' 43.65"	114° 27' 16.13"			
5	POC 5 (MW-5)				35° 05' 41.62"	114° 26' 44.78"			
Parameter	Alert Level	Aquifer Quality Limit	Units		Sampling Frequency	Reporting Frequency			
Antimony	0.0048	0.006	mg/l		Annual	Annual			
Barium	1.6	2.0	mg/l		Annual	Annual			
Beryllium	0.0032	0.004	mg/l		Annual	Annual			
Cadmium	0.004	0.005	mg/l		Annual	Annual			
Chromium	0.08	0.1	mg/l		Annual	Annual			
Iron	Monitor	Monitor	mg/l		Annual	Annual			
Lead	0.04	0.05	mg/l		Annual	Annual			
Manganese	Monitor	Monitor	mg/l		Annual	Annual			
Mercury	0.0016	0.002	mg/l		Annual	Annual			
Nickel	0.08	0.1	mg/l		Annual	Annual			
Silver	Monitor	Monitor	mg/l		Annual	Annual			
Thallium	0.0016	0.002	mg/l		Annual	Annual			
Adjusted Gross Alpha <sup>6</sup> (pCi/L)									
POC 1		POC 2		POC 3		POC 4		POC 5	
AL <sup>7</sup>	AQL <sup>8</sup>	AL	AQL	AL	AQL	AL	AQL	AL	AQL
Monitor	21.738	Monitor	13.149	Monitor	17.894	12	15	12	15
Radium 226 + Radium 228 <sup>9</sup> (pCi/L)									
POC 1		POC 2		POC 3		POC 4		POC 5	
AL	AQL	AL	AQL	AL	AQL	AL	AQL	AL	AQL
Monitor	6.097	Monitor	4.189	Monitor	6.634	4.1	5	4	5

<sup>6</sup>If the gross alpha particle activity is greater than the AL or AQL, then calculate the adjusted gross alpha particle activity. The adjusted gross alpha particle activity is the gross alpha particle activity, including radium 226, and any other alpha emitters, if present in the water sample, minus radon and total uranium (the sum of uranium 238, uranium 235 and uranium 234 isotopes). The gross alpha analytical procedure (evaporation technique: EPA Method 900.0) drives off radon gas in the water samples. Therefore, the Adjusted Gross Alpha should be calculated using the following formula: (Laboratory Reported Gross Alpha MINUS Sum of the Uranium Isotopes).

<sup>7</sup> AL = Alert Level

<sup>8</sup> AQL = Aquifer Quality Limit

<sup>9</sup> The sampling and reporting frequency for Adjusted Gross Alpha and Radium 226 + Radium 228 is annual.

Table 12: FACILITY INSPECTION AND OPERATIONAL MONITORING

The permittee shall record the inspection performance levels in a log book as per Section 2.6.2, and report any violations or exceedances as per Section 2.6.3. In the case of an exceedance, identify which structure exceeds the performance level in the log book.

Facility Name / Pollution Control Structure / Parameter	Operational Requirement / Performance Alert Level	Inspection Frequency	Reporting Frequency
POC Wells	Well cap and seals are intact. No discernable corrosion or deterioration of the well(s). No discernable materials accumulating in the well. Any dedicated well equipment are functional and intact.	Monthly	See Section 2.6.3 and 2.4.3.1
Surface Impoundment Vegetation Removal	No vegetation present in the impoundment(s) or within five feet of the impoundment(s)	Monthly	See Section 2.6.3
Pregnant Solution Pond, South Contingency Pond, West Contingency Pond, and Phase 3 Process/Contingency Pond	Visually inspect and take appropriate action if any evidence of blocked overflow pipes/spillway structures.  Physical inspection of the pond to ensure two (2) feet of freeboard is maintained.	Daily	See Section 2.6.3
	Visually inspect the LCRS pump to confirm proper operating conditions, and determine the liquid level in the sump.  Measure flow rate in the LCRS; confirm that it is less than the specified AL1 and AL2 (See Table 2 and Sections 2.5.2.2 and 2.5.2.3); and take appropriate action if an exceedance is observed.	Weekly	
	Visually inspect and take appropriate action if any evidence of: -perforated, cut, torn or damaged liner and impairment of anchor trench integrity; -impairment of embankment integrity as applicable; -excessive erosion in conveyances and diversions; -excess accumulation of debris in conveyances and diversions; and -impairment of access.  As applicable at pump locations, inspect pumps, valves and structures for pump operation and structural integrity.	Quarterly	
Phase 2A, Phase 2B, and Phase 1 of 3A Heap Leach Pad	Visually inspect the LCRS pumps to confirm proper operating conditions, and determine the liquid level in the sump. Pump excess solution into the wet well riser.	Weekly	See Section 2.6.3
	Visually inspect and take appropriate action if any evidence of stockpile deformations, including surface cracks, slides, sloughs, or differential settlement affecting slope stability.	Monthly	
	Visual inspection and evaluation of the overall integrity of the leach pad, including a physical appraisal to ensure pad design capacity and safety criteria are not exceeded.  Additionally, all conveyance ditches that convey solutions from or to the Heap Leach Pad must be inspected to evaluate the integrity of the structure over time.	Quarterly	
	Visually inspect the Heap Leach Pad after major storm/surface water flow events for overall structural integrity and adherence to safety criteria.	Other	

Table 13: DISCHARGE CHARACTERIZATION PARAMETERS FOR THE PROCESS/CONTINGENCY PONDS (In mg/L unless otherwise noted) <sup>10</sup>		
Temperature - field (F°)	Magnesium	Mercury
pH - field & lab (S.U.)	Potassium	Nickel
Specific Conductance field and lab (µmhos/cm)-field	Sodium	Selenium
Total Dissolved Solids -lab	Aluminum	Silver
Total Alkalinity	Antimony	Thallium
Carbonate	Arsenic	Zinc
Bicarbonate	Barium	Adjusted Gross Alpha (pCi/L) <sup>11</sup>
Hydroxide	Beryllium	Radium 226+ 228 (pCi/L)
Sulfate	Cadmium	Radon 222 (pCi/L)
Chloride	Chromium	Uranium-total (µg/l)
Fluoride	Cobalt	Uranium Isotopes(pCi/L) <sup>12</sup>
Nitrate-Nitrite as N	Copper	TPH
Phosphate	Cyanide (Free)	Calcium
Lead	Iron	Manganese
		Nitrite

<sup>10</sup> Metals shall be analyzed as dissolved metals.

<sup>11</sup> The adjusted gross alpha particle activity is the gross alpha particle activity, including radium 226, and any other alpha emitters, if present in the water sample, minus radon and total uranium (the sum of uranium 238, uranium 235 and uranium 234 isotopes). The gross alpha analytical procedure (evaporation technique: EPA Method 900.0) drives off radon gas in the water samples. Therefore, the Adjusted Gross Alpha should be calculated using the following formula: (Laboratory Reported Gross Alpha MINUS Sum of the Uranium Isotopes).

<sup>12</sup> Uranium Isotope activity results must be used for calculating Adjusted Gross Alpha.



**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: November 20, 2020
- Contingency Plan, dated: November 20, 2020
- Final Hydrologist Report, dated: Not applicable
- Final Engineering Report, dated: March 22, 2021
- Public Notice, dated: **Insert date**
- Public Hearing, dated: Not applicable
- Responsiveness Summary, dated: Not applicable

**6.0 NOTIFICATION PROVISIONS**

**6.1. Annual Registration Fees**

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

**6.2. Duty to Comply**

[A.R.S. §§ 49-221 through 263]

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

**6.3. Duty to Provide Information**

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

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

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

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

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

**6.5. Technical and Financial Capability**

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

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

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

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

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

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

**6.7. Monitoring and Records**

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

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

**6.8. Inspection and Entry**

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

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

**6.9. Duty to Modify**

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

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

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

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

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

**7.0. ADDITIONAL PERMIT CONDITIONS**

**7.1. Other Information**

[A.R.S. § 49-243(K)(8)]

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

**7.2. Severability**

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

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

**7.3. Permit Transfer**

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