

STATE OF ARIZONA
AQUIFER PROTECTION PROGRAM PERMIT NO. P-100421
PLACE ID 2058, LTF 66018
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 BHP Copper Inc. (BHP) to close the San Manuel Mine located approximately 8 miles northwest of San Manuel, Pinal County Arizona, over the groundwater of the San Pedro Basin in Township 8S, Range 16E, Sections 22, 25, 26, 27, 33, 34, 35, 36 and Township 9S, Range 16E, Sections 2, 3, 4, 9, 10, 15, 16 of the Gila and Salt River Base Line 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: San Manuel Mine
Facility Address: 28545 S Veterans Memorial Blvd.
San Manuel, AZ 85631
County: Pinal
Annual Registration Fee Flow Rate: 125,000 gallons per day (gpd)
Permittee: BHP Copper, Inc. (BHP)
Permittee Address: PO Box M
San Manuel, AZ 85631
Facility Contact: Frank Molina, Site Superintendent
Emergency Phone No.: (520) 385-3182
Latitude/Longitude: 32° 41' 58" N, 110° 40' 16" W
Legal Description: Township 8S, Range 16E, Sections 22, 25, 26, 27, 33, 34, 35, 36
and Township 9S, Range 16E, Sections 2, 3, 4, 9, 10, 15, 16 of the
Gila and Salt River Base Line and Meridian

1.2. AUTHORIZING SIGNATURE

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

Signed this _____ day of _____, 20_____

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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 San Manuel Mine operated 51 years from 1948 until underground operations were suspended on June 25, 1999. Mine closure was declared by BHP Copper, Inc. (BHP) to ADEQ on January 22, 2002. The Mine operated two underground mine units for copper sulfide ore, an open pit for copper oxide ore, heap leach and in-situ leaching operations that recovered copper-bearing pregnant leach solution (PLS), and a solvent extraction-electrowinning (SX-EW) Plant. The collection of PLS from the Heap Leach Facility ceased on March 19, 2002.

During operations, 702.9 million tons of rock were mined and hoisted to the surface, including 27.6 million tons of development rock, 624.9 million tons of ore from the San Manuel unit, and 50.4 million tons of ore from the Kalamazoo unit. Approximately 121.5 million tons of ore and overburden were mined from the Open Pit. The copper ore from underground was crushed in a primary crusher at the Mine before shipment to the Plant Site for beneficiation and processing. The SX-EW Plant processed the PLS from the leaching operation.

The San Pedro River is the dominant surface water drainage feature in the region. The flow is intermittent in the vicinity of the mine and the Town of Mammoth, and depends on precipitation and base flow. Two ephemeral washes (Tucson Wash and Mammoth Wash) adjoin the Mine. With the exception of a limited area in the southeast portion of the No. 1 Stockpile, the entire Mine Site is above the 100-year floodplain.

Mine dewatering during the operating life of the underground mine resulted in formation of a significant cone of groundwater depression in the vicinity of the mine. Underground dewatering stopped on February 13, 2002. As of April 2006, the water level in the underground mine as measured in No. 5 Shaft was 1,309 feet above mean sea level (amsl), or approximately 761 feet below the bottom of the Open Pit, and 1,075 to 1,256 feet below the surrounding groundwater table. In February 2022, the water level depth in No. 5 Shaft was 1276 ft (2,036 ft amsl), which is approximately 114 ft below the Open Pit bottom elevation of 2,149.5 ft amsl. Facilities within the mine area are currently within a hydraulic sink for local groundwater flow. Groundwater is currently recovering at a rate of less than 0.3 feet per day as measured at the No. 5 Shaft.

On July 17, 2004, BHP filed an application for an area-wide APP for closure of the Mine. ADEQ issued a permit on August 16, 2006, authorizing the closure of the discharge facilities described below. However, BHP requested that the landfills be incorporated into this APP; therefore, requirements for both the Groundwater Section and Solid Waste Section apply. The solid waste authority has been included in this permit pursuant to A.R.S. § 49-762.07(E) and the 40 Code of Federal Regulations (C.F.R.) part 257 for the landfills.

The site includes the following closed permitted discharging facilities:

Table 1: DISCHARGING FACILITIES		
Facility	Latitude	Longitude
No.1 Stockpile (D-210A)	32° 41' 41" N	110° 40' 04" W
No. 1 Satellite Stockpile (D-210B)	32° 41' 41" N	110° 40' 04" W
No. 1/No. 4 Shaft Waste Rock Dump (D-211A)	32° 41' 47" N	110° 41' 20" W
Ridgeline Waste Rock Dump (D-211B)	32° 41' 33" N	110° 41' 33" W
In-situ Mine (D-251A)	32° 41' 35" N	110° 40' 47" W
Permanent Pit Lake (D-251B)	32° 41' 31" N	110° 40' 52" W
Heap Leach Facility (D-262)	32° 42' 05" N	110° 40' 40" W
Heap PLS Pond (C-263)	32° 42' 05" N	110° 40' 40" W
No. 3 Shaft Development Dump (D-267A)	32° 41' 04" N	110° 41' 31" W
Sulfide Ore Stockpile (D-267B)	32° 41' 22" N	110° 41' 30" N
Red Hill Waste Rock Dump (D-267C)	32° 41' 22" N	110° 41' 30" W
Main Gate Parking Lot Dump (D-268)	32° 40' 53" N	110° 41' 48" W
Plant Feed Pond (C-264)	32° 42' 10" N	110° 41' 15" W

Table 1: DISCHARGING FACILITIES		
Facility	Latitude	Longitude
Raffinate Pond (C-265)	32° 42' 11" N	110° 41' 00" W
Upper Hamilton Pond (C-8A)	32° 42' 56" N	110° 41' 25" W
Middle Hamilton Pond (C-8B)	32° 42' 56" N	110° 41' 25" W
Lower Hamilton Pond (C-8C)	32° 42' 56" N	110° 41' 25" W
Dirkes Dike (C-46)	32° 41' 48" N	110° 41' 48" W
Julian's Catchment (C-45)	32° 41' 20" N	110° 41' 45" W
Bunkhouse Wash (C-200)	32° 41' 50" N	110° 41' 00" W
Wood Landfill (E-14)	32° 41' 08" N	110° 41' 08" W
Solid Waste Landfill (E-39)	32° 41' 07" N	110° 41' 20" W
Wash Pads (NA)	NA	NA
Oxide Truck Wash Pad (C-97B)	32°41'58"N	110°41'19"W
Diesel Truckload Station (C-214)	32°41'50"N	110°41'12"W
No. 1 Shaft (Temporary Heap Drain-down) (C-252)	32°41'46"N	110°41'20"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 closure has been completed. The permittee shall maintain financial capability throughout the life of the facility. The estimated post-closure cost is \$1,871,892. The financial assurance mechanism was demonstrated through a letter of credit issued by Sumitomo Mitsui Banking Corp of New York, NY in accordance with A.A.C. R18-9-A203(C)(5).

2.2. BEST AVAILABLE DEMONSTRATED CONTROL TECHNOLOGY (BADCT)

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

Facilities regulated by this permit shall be designed, constructed, operated, and maintained to meet requirements specified by A.R.S. §49-243(B) and A.A.C. R18-9-A202(A)(5).

2.2.1. Engineering Design

BADCT description for the permitted closed facilities is presented in Section 4.1, Table 9: PERMITTED FACILITIES AND BADCT.

2.2.2. Site-Specific Characteristics

Not applicable.

2.2.3. Pre-Operational Requirements

Not applicable.

2.2.4. Operational Requirements

The discharging facilities shall be operated according to and inspected for compliance with the requirements in Section 4.1, Table 10: REQUIRED INSPECTIONS AND OPERATIONAL MONITORING, and recorded

in a log as required by Section 2.7.2. 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.

2.3. 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.

2.3.1. Discharge Limitations for the Heap Leach Facility and Diversion Structure

The drainage system for the closed Heap Leach Facility shall be constructed and operated in a manner to ensure adequate capacity to manage draindown solutions and stormwater runoff and direct it to the Open Pit and/or designated impoundments (ponds), respectively. Residual heap materials and fluids shall not leave the heap liner or overtop the berms.

2.3.2. Discharge Limitations for the Permanent Pit Lake

Reserved pending alternative uses of the Pit Lake water.

2.4. POINT OF COMPLIANCE (POC)

[A.R.S. § 49-244]

The POCs are established by the following monitoring locations:

Table 2: POC MONITORING LOCATIONS				
POC #	POC Location	ADWR Registration Number	Latitude	Longitude
BK-1	D(8-16)25cdc	55-913552	32° 42' 09" N	110° 39' 58" W
BK-2	D(8-16)36acd	55-913551	32° 41' 42" N	110° 39' 36" W
CON E-3	D(8-16)25cbb	55-534257	32° 42' 22" N	110° 40' 09" W

Alert Level Wells are established by the following monitoring locations:

Table 3: AL WELLS MONITORING LOCATIONS				
POC #	POC Location	ADWR Registration Number	Latitude	Longitude
BF-2	D(8-16)35aac	55-582786	32° 41' 54" N	110° 40' 20" W
BF-3	D(8-16)35aaa	55-208525	32° 41' 52.9" N	110° 40' 17.4" W

Monitoring requirements for each POC are listed in Section 4.2:

- Table 11: REQUIREMENTS FOR POC GROUNDWATER MONITORING – ANNUAL COMPLIANCE
- Table 12: REQUIREMENTS FOR ALERT LEVEL WELLS – ANNUAL GROUNDWATER MONITORING
- Table 13: REQUIREMENTS FOR ALERT LEVEL WELLS – BIENNIAL GROUNDWATER MONITORING

CON E-3 was the POC well for the San Manuel Mine site under the previous APP and shall remain a POC well. In addition, BK-1, and BK-2 shall be POC wells and existing wells BF-2 and BF-3 shall be alert level wells.

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. Facility Closure Monitoring

The facility monitoring during closure consists of site inspections, discharge monitoring, and monitoring groundwater recovery and groundwater quality.

The site inspections, process water, mine water and pit lake monitoring requirements are listed in Section 4.2:

- Table 10: REQUIRED INSPECTIONS AND OPERATIONAL MONITORING
- Table 14: PROCESS SOLUTION AND MINE WATER COMPLIANCE MONITORING REQUIREMENTS
- Table 15: PIT LAKE COMPLIANCE MONITORING REQUIREMENTS

Groundwater monitoring requirements are listed in Section 4.2:

- Table 11: REQUIREMENTS FOR POC GROUNDWATER MONITORING – ANNUAL COMPLIANCE
- Table 12: REQUIREMENTS FOR ALERT LEVEL WELLS – ANNUAL GROUNDWATER MONITORING
- Table 13: REQUIREMENTS FOR ALERT LEVEL WELLS – BIENNIAL GROUNDWATER MONITORING

2.5.2. Discharge Monitoring

2.5.2.1. Spent Process Solution and Mine Water

An analysis of the spent process solution (Diversion Pipeline Monitoring Point), No. 5 Shaft water, and the Permanent Pit Lake shall be performed on an annual basis according to the following table:

Table 4: PROCESS WATER AND MINE WATER MONITORING POINTS				
Monitoring Point Locations	Latitude	Longitude	Reporting Frequency	Monitor Frequency and Parameters
Diversion Pipeline Monitoring Point	32° 41' 55.82" N	110° 40' 21.81" W	Annual	Section 4.2
No. 5 Shaft	32° 41' 14" N	110° 40' 53" W	Annual	Section 4.2
Permanent Pit Lake	To be determined	To be determined	Annual	Section 4.2

2.5.3. 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 a low-flow purging method in accordance with accepted 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.

2.5.3.1. 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, insufficient water in the well for more than two sampling events, 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. Otherwise, the ALs and/or AQLs shall be set following the provisions in Section 2.5.3.3 and Section 2.5.3.4 of this permit.

2.5.3.2. Ambient Groundwater Quality Monitoring for POC Wells

Ambient groundwater monitoring has been completed in existing POC well CON E-3 and in AL wells BF-2 and BF-3. POC wells BK-1 and BK-2 were installed in 2011. The alert levels (ALs) and Aquifer Quality Limits (AQLs) in BK-1 and BK-2 were established to be the same as those set for POC well CON-E3. If new POC wells are required, the permittee shall complete eight rounds of ambient groundwater monitoring.

2.5.3.3. Alert Levels for POC Wells

ALs have been calculated for all contaminants with an established numeric AWQS for each of the three POC wells listed on Table 11: REQUIREMENTS FOR POC GROUNDWATER MONITORING – ANNUAL COMPLIANCE. For any new or replacement POC wells, ALs shall be calculated for all contaminants with an established numeric AWQS, as described below.

Following receipt of the laboratory analyses for the final month of the ambient groundwater monitoring period for each new or replaced POC well, the permittee shall submit the ambient groundwater data in tabulated form to the Groundwater Protection Value Stream 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 11: REQUIREMENTS FOR POC GROUNDWATER MONITORING – ANNUAL COMPLIANCE to be established for each POC well, shall be submitted to the Groundwater Protection Value Stream. 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 Protection Value Stream. The ALs shall be established and calculated by the following formula, or another valid statistical method submitted to Groundwater Protection Value Stream in writing and approved for this permit by the Groundwater Protection Value Stream:

$$AL = M + KS$$

Where M = mean, S = standard deviation, and K = one-sided normal tolerance interval with a 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 met in establishing ALs in the permit:

1. The AL shall be calculated for a parameter using the analyses from a minimum of eight sample events.
2. Any data where the laboratory Practical Quantitation Limit (PQL) exceeds 80% of the AWQS shall not be included in the AL calculation.
3. If a parameter is below the detection limit, the permittee must report the value as “less than” the numeric value for the PQL or detection limit for the parameter, not just as “non-detect”. For those parameters, the permittee shall use a value of one-half the reported detection limit for the AL calculation.
4. If the analytical results from more than 50% of the samples for a specific parameter are non-detect, then the AL shall be set at 80% of the AWQS.
5. If the calculated AL for a specific constituent and well is less than 80% of the AWQS, the AL shall be set at 80% of the AWQS for that constituent in that well.

2.5.3.4. Aquifer Quality Limits for POC Wells

For each of the monitored analytes for which a numeric AWQS has been adopted, the AQL shall be established as follows:

1. If the calculated AL is less than the AWQS, then the AQL shall be set equal to the AWQS.
2. 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

2.5.3.5. Compliance Groundwater Quality Monitoring for POC and AL Wells

Annual compliance groundwater monitoring in each POC well (BK-1, BK-2, and CON E-3) and each AL Well (BF-1 and BF-2) shall be performed within each calendar quarter per the schedule shown in Table 6: QUARTERLY, ANNUAL, BIENNIAL REPORTING DEADLINES. For annual compliance monitoring, the permittee shall analyze groundwater samples for the parameters listed in Section 4.2, Table 11: REQUIREMENTS FOR POC GROUNDWATER MONITORING – ANNUAL COMPLIANCE and Table 12: REQUIREMENTS FOR ALERT LEVEL WELLS – ANNUAL GROUNDWATER MONITORING. In addition to quarterly compliance groundwater monitoring, every two years (biennial) the permittee shall analyze samples from the AL wells for an expanded list of parameters. For the biennial monitoring events in AL wells, the parameters listed in Section 4.2, Table 13: REQUIREMENTS FOR ALERT LEVEL WELLS – BIENNIAL GROUNDWATER MONITORING shall be analyzed.

2.5.4. Surface Water Monitoring and Sampling Protocols

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

2.5.5. 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 2.6 and may propose “other actions” including amending the permit to set higher limits. Analyses shall be performed by a laboratory licensed by the Arizona Department of Health Services, Office of Laboratory Licensure and Certification unless exempted under A.R.S. § 36-495.02. For results to be considered valid, all analytical work shall meet quality control standards specified in the approved methods. A list of 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

2.5.6. 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.

2.5.7. Passive Containment Demonstration

Based on supporting documentation provided in the Application, the permittee has satisfactorily predicted that the San Manuel Open Pit has created a “passive containment capture zone,” as per A.R.S. § 49-243(G). The 2021 update to the numerical model for the Open Pit predicts that the formation of the Permanent Pit Lake will begin in approximately mid-2025, when groundwater appears at the pit bottom, at an elevation of 2,084 ft amsl. Passive containment is predicted to be lost in approximately 2073, when the pit lake reaches an elevation of 2,536 ft amsl. The final equilibrium pit lake elevation is predicted to be reached in 2195, at an elevation of 2,623 ft amsl. Demonstration of passive containment is based solely on natural or engineered topographical, geological or hydrological control measures that can operate without continuous maintenance.

A post-closure audit of the approved groundwater flow model shall be conducted by November 24, 2026, and every 5 years thereafter. The permittee shall compare the current groundwater data to the previous model predictions. Factors to be evaluated in the post-audit include groundwater inflow, the estimated static water level in the pit, the estimated time to reach static water level, and the time and elevation criteria at which the passive containment of the Open Pit will be lost.

The post audit shall contain a report summarizing previous passive containment demonstrations and the revisions made to the model shall be submitted to the GPVS for review. ADEQ will determine whether a full model recalibration is required. If a recalibration is necessary, a report describing the model output and the revisions and/or changes to the model shall be submitted to the GPVS.

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 current contingency and emergency response plan submitted in compliance with the Compliance Schedule Item 3, Section 3.0 Table 8: COMPLIANCE SCHEDULE ITEMS shall be maintained at the location where day-to-day decisions regarding the operation of the facility are made. The permittee shall be aware of and follow the contingency and emergency plans.

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

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

2.6.2. Exceeding of Alert Levels and Performance Levels

2.6.2.1. Exceeding of Performance Levels Set for Operational Conditions

Not applicable.

2.6.2.2. Exceeding of Alert Levels in Groundwater Monitoring

2.6.2.2.1. Alert Levels for Indicator Parameters

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

2.6.2.2.2. Alert Levels for Pollutants with Numeric Aquifer Water Quality Standards

1. If an AL for a pollutant set in Section 4.2, Table 11: REQUIREMENTS FOR POC GROUNDWATER MONITORING – ANNUAL COMPLIANCE and Table 12: REQUIREMENTS FOR ALERT LEVEL WELLS – ANNUAL GROUNDWATER MONITORING 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) to monthly. In addition, the permittee shall immediately initiate an investigation of the cause of the AL exceedance, including inspection of all discharging units and all related pollution control devices, review of any operational and maintenance practices that might have resulted in an unexpected discharge, and hydrologic review of groundwater conditions including upgradient water quality.
3. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 5.0 and specific contingency measures identified in Section 2.6 to resolve any problems identified by the investigation which may have led to an AL exceedance. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6. Alternatively, the permittee may submit a technical demonstration, subject to written approval by the Groundwater Protection Value Stream, that although an AL 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 regularly scheduled frequency if the results of three (3) sequential sampling events demonstrate that the parameter(s) does/do not exceed their respective AL(s), and upon ADEQ approval.
7. If the increased monitoring required as a result of an AL exceedance for those pollutant(s) continues for more than six 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.

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

Not applicable.

2.6.3. Discharge Limit Violation

2.6.3.1. Liner Failure, Containment Structure Failure, or Unexpected Loss of Fluid

In the event of liner failure, containment structure failure, or unexpected loss of fluid as described in Section 2.3, 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 14: PROCESS SOLUTION AND MINE WATER COMPLIANCE MONITORING REQUIREMENTS and report in accordance with Section 2.7.3 (Permit Violation and AL Status Reporting). In the 30-day report required under Section 2.7.3, 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 2.7.2 (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 2.7.3. Include a description of the actions performed in Subsections 1 through 4 listed above. Upon review of the report, ADEQ may request additional 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.

2.6.3.2. Unexpected Loss of Spent Ore from the Heap Leach Facility

If there is an unexpected loss of spent ore rock materials owing to a stability failure of the Heap Leach Facility, such that the spent ore rock materials are released to the vadose zone, beyond containment provided by the Heap liner and the perimeter berms, the permittee shall take the following actions:

1. Within 24 hours of discovery, notify ADEQ Water Quality Compliance Section, Enforcement Unit (WQCS/EU).
2. Within 5 business days of the discovery of a failure that resulted in a release to the surface or subsurface, implement temporary measures to contain released material and collect representative samples of the spent ore and associated runoff if present. Soil samples shall be analyzed for all metals for which a Soil Remediation Level is listed in the ADEQ Soil Remediation Rules (R18-7-200). Within 30 days of the incident, submit a copy of the analytical results to ADEQ, WQCS/EU. The permittee shall send a copy of the cover letter that summarizes the report to the Groundwater Protection Value Stream.
3. 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 Heap Leach 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 Heap Leach Facility. 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 made available for ADEQ to review.
4. Within 30 days of discovery of the incident, submit a report to ADEQ as specified in Section 2.7.3 (Permit Violation and Alert Level Status Reporting). Include a description of the actions performed in (1) through (3) listed above. Upon review of the report, ADEQ may request additional monitoring or remedial actions.
5. Within 60 days of discovery, conduct an assessment of the impacts to the subsoil and/or groundwater resulting from the incident, including geophysical assessment of release to the subsurface. If soil or groundwater is impacted such that there is a reasonable probability that pollutants identified in the assessment, including identification of releases to the environment, remedial actions and/or monitoring, and a schedule for completion or activities. At the direction of ADEQ, the permittee shall implement the approved plan.
6. Within 30 days of completion of corrective actions, submit to ADEQ a written report as specified in Section 2.6.6 (Corrective Actions).

2.6.4. Aquifer Quality Limit Exceedances

1. If an AQL set in Section 4.2, Table 11: REQUIREMENTS FOR POC GROUNDWATER MONITORING – ANNUAL COMPLIANCE has been exceeded, the permittee may conduct verification sampling for those pollutant(s) that were above their respective AQL(s) within 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 – AQUIFER QUALITY LIMIT VIOLATION	
Specified Monitoring Frequency	Monitoring Frequency for AQL Violation
Daily	Daily
Weekly	Daily
Monthly	Weekly
Quarterly	Monthly
Semi-annually	Quarterly
Annually	Quarterly

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

The permittee also shall submit a report according to Section 2.7.3, which includes a summary of the findings of the investigation, the cause of the violation, and actions taken to resolve the problem. A verified 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 2.6.6.

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.

The increased monitoring for those pollutant(s) required as a result of an AQL exceedance may be reduced to the original sampling frequency for each respective pollutant, if the results of three sequential sampling events demonstrate that the parameter(s) does not exceed their respective AQL(s), and upon ADEQ approval.

2.6.5. Emergency Response and Contingency Requirements for Unauthorized Discharges

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

2.6.5.1. Duty to Respond

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

2.6.5.2. Discharge of Hazardous Substances or Toxic Pollutants

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

2.6.5.3. Discharge of Non-Hazardous Materials

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

2.6.5.4. Reporting Requirements

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

2.6.6. Corrective Actions

Specific contingency measures identified in Section 2.6 and actions identified in the approved contingency plan referenced in Section 5.0 have already been approved by ADEQ and do not require written approval to implement.

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

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

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

2.7. REPORTING AND RECORDKEEPING REQUIREMENTS

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

2.7.1. Self-Monitoring Report Form

1. The permittee shall complete the Self-Monitoring Reporting Forms (SMRFs) provided by ADEQ, and submit the completed report through the myDEQ online reporting system. The permittee shall use the format devised by ADEQ.
2. The permittee shall complete the SMRF to the extent that the information reported may be entered on the form. If no information is required during a reporting period, the permittee shall enter “not required” on the form and include an explanation.
3. The tables contained in Section 4.0 list the monitoring parameters and the frequencies for reporting results on the SMRF:
 - a. Table 11: REQUIREMENTS FOR POC GROUNDWATER MONITORING
 - b. Table 12: REQUIREMENTS FOR ALERT LEVEL WELLS – ANNUAL 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;
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).

2.7.3. Permit Violation and Alert Level Status Reporting

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

2.7.4. Operational, Other or Miscellaneous Reporting

The permittee shall record the information as required in Section 4.2, Table 10: REQUIRED INSPECTIONS 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.

The permittee shall, upon completion of annual sampling and inspections, submit a summary report to the ADEQ WQCS and to the ADEQ GWS. This report shall be due at the same time as the Self Monitoring Report Form (SMRF) report for the annual sampling events. The report shall be submitted no later than 90 business days following the end of the first quarter or as stated below. The report shall include, but not limited to the following:

1. Draindown water quality from the Heap Leach Facility, as described in Section 3.0 Compliance Schedule Item 11, Table 8: COMPLIANCE SCHEDULE ITEMS

Laboratory analytical results from the sample of draindown water from the Heap Leach Facility shall be reported. The sample shall be collected from the sampling weir at the Diversion Pipeline Monitoring Point (near the inlet to the Diversion Pipeline). The sample shall be analyzed for the parameters listed in Section 4.2, Table 14: PROCESS SOLUTION AND MINE WATER COMPLIANCE MONITORING REQUIREMENTS

2. Water elevations and water sample analysis in the No. 5 Shaft and Pit Lake, if formed, as described in Section 3.0 Compliance Schedule Item 14, Table 8: COMPLIANCE SCHEDULE ITEMS.

Graphical representations of the current water level elevation in relation to past water level measurements and a comparison to the levels predicted by the 2021 numerical flow model or a revised model shall be reported. In addition, the permittee shall collect a sample of the water in the No. 5 Shaft and in the Pit Lake, if formed, and analyze the sample(s) for the parameters listed in Section 4.2, Table 14: PROCESS SOLUTION AND MINE WATER COMPLIANCE MONITORING REQUIREMENTS and Table 15: PIT LAKE COMPLIANCE MONITORING REQUIREMENTS, respectively. The laboratory analytical results from the water sample(s) shall be included in the annual report.

3. Pit Lake and in-situ mine facilities monitoring, as described in Section 3.0 Compliance Schedule Item 2, Table 8: COMPLIANCE SCHEDULE ITEMS.

The following information shall be reported annually by June 30, after the selected closure plan has been implemented: a description of the performance of the work associated with operation and maintenance of the selected closure plan option, the extent of groundwater recovery within the Open Pit, the quality of groundwater in the Open Pit and underground mine, the costs of maintenance and operation during the period, any modifications made or proposed to the approval plan, and a demonstration of continued compliance with AWQS at the POCs.

The permittee shall, upon completion of the biennial sampling described in Section 4.2 Table 13: REQUIREMENTS FOR ALERT LEVEL WELLS – BIENNIAL GROUNDWATER MONITORING, submit a monitoring summary report to the ADEQ WQCS–DU and to the ADEQ Groundwater Protection Value Stream. This report shall be due at the same time as the SMRF form for the biennial sampling event. The report shall be submitted no later than 90 business days following the end of the first quarter. 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 or AQLs that occurred during the reporting period.
3. Graphical time versus concentration plots of field pH, sulfate, total dissolved solids, and any parameter that exceeded an applicable AL or AQL in the past 8 quarters at each POC well, and tabulated sampling data for all wells required to be sampled by this permit during the last 8 quarters.

4. An updated table of all monitor wells and piezometers in the Discharge Impact Area including, but not limited to, location of well, depth of well, and current depth to water.
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, and screened interval.
6. The water level data shall be used to construct a potentiometric surface map and two vertical profiles. The vertical profiles shall be at longitudinal and transverse orientations with respect to the direction of groundwater flow. The Longitudinal Section shall show water level from CR-2, CR-3, No. 5 Shaft, BF-1, BF-2, BF-3, the future Pit Lake (if present), CDH-111, and Santa Maria. The Transverse Section shows water level from CR-1, the Pit Lake (if present), and CDH-112.

Design Report #3 related to future construction on the Pit Lake and In-Situ Mine areas shall be submitted to ADEQ GPVS according to the Compliance Schedule Item 7 in Section 3.0, Table 8: COMPLIANCE SCHEDULE ITEMS. This report shall be signed by a Professional Engineer.

2.7.5. Reporting Location

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

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

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

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

2.7.6. Reporting Deadline

The following table lists the quarterly, annual, and biennial SMRF report due dates:

Table 6: QUARTERLY, ANNUAL, BIENNIAL REPORTING DEADLINES	
Monitoring Conducted During Quarter:	Report Due By:
January-March	April 30
April-June	July 30
July-September	October 30
October-December	January 30
Annual: January-December	April 30 of following year
Biennial: January-December	April 30 of following year

The following table lists the due date for the annual operation, other, or miscellaneous report per Section 2.7.4:

Table 7: ANNUAL REPORTING DEADLINES	
Monitoring conducted during the year:	Annual Report due by:
January-December of the following year	April 30

2.7.7. Changes to Facility Information in Section 1.0

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

2.8. Temporary Cessation

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

Not applicable.

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 gave written notice of permanent closure to the Groundwater Protection Value Stream of the intent to cease operation without resuming activity for which the facility was designed or operated January 15, 2002. Submittal of SMRFs is still required; report “closure in process” in the comment section.

2.9.1. Closure Plan

Following notification of closure, BHP Copper submitted for approval to the GWS a detailed Closure Plan (Closure Plan Demonstration and Compliance Schedule) to meet the requirements of A.R.S. § 49-252 and A.A.C. R18-9-A209(B)(3).

Individual BADCT closure and design plans for the waste rock dumps, Heap Leach Facility, and Diversion Structure were submitted to ADEQ (BHP Copper San Manuel Mine Site Design Report No. 1). The closure plans for facilities subject to BADCT methods were also addressed in Design Report No. 1. BHP submitted the BADCT closure design plans for the SX-EW Area, No. 1 Stockpile, and the perimeter areas in BHP Copper San Manuel Mine Site Design Report No. 2. All non-discharging and discharging facilities were closed between 2003 and May 2006 except for the In-Situ Mine and the future Pit Lake. The General Closure Plan and Cost Estimate for the Pit Lake and In-Situ Mine Facilities was submitted to ADEQ on June 30, 2006 as noted in Compliance Schedule Item 1 presented in Section 3.0, Table 8: COMPLIANCE SCHEDULE ITEMS.

The permittee has submitted a report regarding a numerical groundwater flow model (Appendix E – Numerical Groundwater Flow Model included as part of the General Information: Area-Wide Application for Closure of the San Manuel Mine Site, BHP Copper San Manuel Operations, Pinal County, Arizona, dated September 15, 2003) to ADEQ as part of the closure application. The report describes the model including the purpose of the model, a conceptual hydrogeologic model of the mine area, a general description of the model code used and the reason for selection of the code, the model design and criteria included in the design, the model calibration, a sensitivity analysis of the model parameters, and the model predictions. This model was most recently updated by BHP in 2021.

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

2.9.2. Closure Completion

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

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

BHP shall follow the terms of post-closure as stated in this permit. More details regarding the closure plan referenced in Section 5.0 are on file at ADEQ. The Closure Plan for the Mine did not meet clean closure at the time of closure notification, and further action is necessary to keep the facility in compliance with aquifer water quality standards at the applicable point of compliance. As specified in Table 8: COMPLIANCE SCHEDULE ITEMS, a Mine Site Facility Closeout Report was submitted to ADEQ. This report documented the demolition activities and handling of hazardous materials. It provided a final report on the materials remaining at the Mine, the types of hazardous materials removed from the Mine, and the fate of those hazardous materials. The report provided a summary of soil sampling and remediation results.

As-built reports documenting liner installation, re-grading earthwork, channel construction, quality control, and inspection records as described in Table 8: COMPLIANCE SCHEDULE ITEMS were submitted to ADEQ following the completion of closure of the waste rock dumps, Heap Leach Facility, Diversion Structure, and the No. 1 Stockpile. Construction plans and as-built reports shall be submitted to ADEQ for any new construction related to the closure of the In-situ Mine and future Pit Lake.

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(36) 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 Post-closure Monitoring and Contingency Plan was provided on July 12, 2018 as per the Compliance Schedule Item 3 presented in Table 8: COMPLIANCE SCHEDULE ITEMS. The permittee submitted to ADEQ for approval a post-closure monitoring and maintenance plan which eliminates, to the greatest extent practicable, any reasonable probability of further discharge from the facility and of exceeding AWQS at the applicable POCs. The preferred option prior to passive containment being lost consists of the installation and pumping of extraction wells upgradient of the POC wells. There shall be five extraction wells upgradient of the POC wells and installation of pumps capable of extracting 30 gpm from each well and a surface pump system to allow removal of the untreated groundwater to the Pit Lake area for evaporation. Details of the wells required by Compliance Schedule, Item 7 Table 8: COMPLIANCE SCHEDULE ITEMS are to be submitted prior to passive containment being lost. The plan described the following:

1. The duration of post-closure care;
2. The monitoring procedures to be implemented by the permittee, including monitoring frequency, type, and location;
3. A description of the operating and maintenance procedures to be implemented for aquifer quality protection devices, such as liners, treatment systems, pump-back systems, and monitoring wells;
4. A schedule and description of physical inspections to be conducted at the facility following closure;
5. An estimate of the cost of post-closure maintenance and monitoring; and
6. A description of limitations on future land or water uses, or both, at the facility site as a result of facility operations.

The permittee has begun to implement the Post-closure Plan approved by the Department.

2.10.2. Post-Closure Completion

The permittee shall notify ADEQ, GWS, in writing when the post-closure activities have been completed.

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.

NOTE: Except as exempted by A.R.S. § 32-144.A.7 (employees of mining companies), professional documents, such as reports, plans and specifications, are to be signed by an Arizona registered engineer or geologist (A.R.S. § 32-125).

Table 8: COMPLIANCE SCHEDULE ITEMS

No.	Compliance Schedule Item	Description	Due By:
1	<p align="center">General closure plan and cost estimate for the Pit Lake and In-Situ Mine facilities</p>	<p>BHP shall submit to ADEQ, GPVS, three copies of a work plan pertaining to the work as outlined below. Following work plan approval, BHP shall prepare the referenced report, including capital and operating costs, and submit three copies to ADEQ, GPVS.</p> <p>The contents shall include items, such as but not be limited to, the following:</p> <ol style="list-style-type: none"> 1. A list of alternative BADCT options with a detailed description of each method, a list of materials involved, and associated costs of each option. 2. Based on the options analyses, select the preferred BADCT closure method that is cost effective, will attenuate and/or remove pollutants, and will achieve compliance with AWQS at the existing and proposed points of compliance listed in Section 4.2, Tables 13 and 14. 3. The plan shall manage mine water to minimize the potential for future degradation of the aquifer. 4. Develop monitoring and inspection methodology and frequency of monitoring and inspection. 5. List estimated capital and operating costs for the selected BADCT option for long-term operation and maintenance under the proposed plan. 	<p align="center">BHP submitted General Closure Plan and Cost Estimate for the Pit Lake and In-Situ Mine Facilities prepared by SRK Consulting dated June 30, 2006</p>
2	<p align="center">Annual monitoring report for Pit Lake and In-situ Mine facilities</p>	<p>Submit an annual report to ADEQ, GPVS, describing the performance of the work associated with operation and maintenance of the selected option, the extent of groundwater recovery within the Open Pit, the quality of groundwater in the Open Pit and underground mine, the costs of maintenance and operation during the period, any modifications made or proposed to the approved plan, and a demonstration of continued compliance with AWQS at the POCs.</p>	<p align="center">Submit annually, by April 30th each year</p>
3	<p align="center">Contingency Plan</p>	<p>BHP shall submit to ADEQ, GPVS, three copies of a work plan as outlined below for approval. Upon approval, BHP shall prepare the referenced report, and submit three copies of each report to ADEQ, GPVS.</p> <p>The contents shall include items, such as but not be limited to, the following:</p> <ul style="list-style-type: none"> • Update post-closure monitoring methodology, reporting schedule, and contingency plans. • Develop site-wide monitoring plan to demonstrate on-going compliance with AWQS at the POC. • Upon approval of the work plan, implement the post-closure monitoring program and the long-term water management plan. 	<p align="center">BHP submitted Consolidated Post Closure Contingency Plan dated July 12, 2018</p>

Table 8: COMPLIANCE SCHEDULE ITEMS

No.	Compliance Schedule Item	Description	Due By:
4	<p align="center">As-built reports for the closure of the Raffinate and Plant Feed ponds in the SX-EW area</p>	<p>BHP shall submit to ADEQ, GPVS, three copies of a work plan pertaining to the work as outlined below. Following work plan approval, BHP shall prepare the referenced report, including capital and operating cost estimates, and submit three copies to ADEQ, GPVS.</p> <p>The contents shall include items, such as but not be limited to, the following:</p> <ul style="list-style-type: none"> • A brief summary of BADCT options analyses, pollutant control/management options, erosion controls, soil cover at barrow sites and post-closure discharge characterization approaches. • As-built construction reports and maps with final topography on the closure and regarding of the Raffinate Pond (C-265) and the Plant Feed Pond (C-264). • Construction QA/QC reports • Results of characterization sampling and testing of pond sludges and ground below the liners • Installation and quality control inspection records. • Documentation of the earthwork including field changes to designs originally submitted to ADEQ GPVS in Design Report No. 2. • Describe minimization of long-term maintenance, and the loading/ infiltration from stormwater. 	<p align="center">BHP submitted September 15, 2006</p>
5	<p align="center">As-built reports for the closure of the Heap Leach Facility</p>	<p>BHP shall submit to ADEQ, GPVS, three copies of a work plan pertaining to the work as outlined below. Following work plan approval, BHP shall prepare the referenced report, including capital and operating costs, and submit three copies to ADEQ, GPVS.</p> <p>The contents shall include items, such as but not be limited to, the following:</p> <ul style="list-style-type: none"> • A brief summary of the Heap Leach Facility history. • A brief summary of material characterization, BADCT options analyses, and selected closure design. • As-built construction QA/QC reports, plans, and maps with final topography, materials list with quantities excavated or installed (liner, pipe, rip-rap, concrete, etc.) for the Heap Leach Facility and Diversion Structure (Diversion Pipeline and Channel). • Document final earthwork, re-grading, cover, and new construction performed for closure. Document field changes to designs originally submitted to ADEQ GPVS 	<p align="center">BHP submitted July 14, 2006</p>

Table 8: COMPLIANCE SCHEDULE ITEMS

No.	Compliance Schedule Item	Description	Due By:
6	As-built reports for the closure of the No. 1 Stockpile	<p>BHP shall submit to ADEQ, GPVS, three copies of a work plan pertaining to the work as outlined below. Following work plan approval, BHP shall prepare the referenced report, including capital and operating costs, and submit three copies to ADEQ, GPVS.</p> <p>The contents shall include items, such as but not be limited to, the following:</p> <ul style="list-style-type: none"> • A brief summary of the No. 1 Stockpile history. • A brief summary of material characterization, BADCT options analyses, and selected closure design. • As-built construction QA/QC reports, plans, and maps with final topography, materials list with quantities excavated or installed (liner, pipe, rip-rap, concrete, etc.) for the Heap Leach Facility and Diversion Structure (Diversion Pipeline and Channel). • Document final earthwork, re-grading, cover, and new construction performed for closure. Document field changes to designs originally submitted 	<p align="center">Submitted October 31, 2006</p>
7	Design Report No. 3	<p>BHP shall submit to ADEQ, GPVS, three copies of a work plan pertaining to the work as referenced. Following work plan approval, BHP shall prepare the referenced report, including capital and operating costs, and submit three copies to ADEQ, GPVS.</p> <p>The contents shall include items, such as but not be limited to, the following:</p> <ul style="list-style-type: none"> • As follow-up to the BADCT selection work under the <i>General Closure Plan and Cost Estimate for the Pit Lake and In-Situ Mine Facilities</i> in this Compliance Schedule, provide additional detail representing the selected design for construction. Include plans, reports, and maps for the selected closure BADCT, including analysis of cost vs. discharge reduction for comparison of various DCTs considered. • For the selected BADCT option, prepare conceptual engineering design and construction plans with management protocols for long-term water management of the Pit Lake, if needed, based on the outcome of the <i>General Closure Plan and Cost Estimate</i> referenced above in the Compliance Schedule. • The “as-built” report for this work shall be submitted to ADEQ, GPVS within 3 months following completion of the construction work referenced in <i>Design Report No. 3</i>. 	<p align="center">Prior to passive containment being lost as described in Compliance Schedule Item 14</p>

Table 8: COMPLIANCE SCHEDULE ITEMS

No.	Compliance Schedule Item	Description	Due By:
8	Mine site facility closeout report	<p>BHP shall submit to ADEQ, GPVS, three (3) copies of a work plan pertaining to the work as referenced. Following work plan approval, BHP shall prepare the referenced report, including capital and operating costs, and submit three (3) copies to ADEQ, GPVS.</p> <p>The contents shall demonstrate the extent of BHP compliance with A.A.C. R18-9-A209B, dated November 12, 2005. The demonstrations shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> • A compilation of materials removed from the mine site and those stored on site. • The fate of these materials. • Documentation of facility demolition and material disposal, and the handling of hazardous materials. • Provide analytical results of soil sampling and remediation. <p>Include photographs, daily reports of demolition activities, shipping manifests, asbestos hazard assessments, and the analytical results of soil samples.</p> <p>Submit the proposed Discharge Limitations along with the closure amendment application; the Discharge Limitations review will be included in the amendment review.</p>	<p>BHP submitted July 16, 2007</p> <p>BHP submitted June 30, 2010</p>
HYDROLOGY			
9	HEAP LEACH: Monitoring of Draindown Water Quality from the Heap Leach Facility	<p>The permittee shall submit an annual report to GPVS containing the laboratory analytical results from the sample of draindown water from the Heap Leach Facility. The sample shall be collected from sampling weir in the Diversion Pipeline Monitoring Point (near the inlet to the Diversion Pipeline). The sample shall be analyzed for the parameters listed in Section 4.2, Table 16.</p>	<p>Annually on April 30th</p>
10	POC WELL: Report: Evaluation of groundwater levels and screen intervals for POC and AL wells	<p>For those POC and AL wells in which the groundwater level is above the screened level, the permittee must notify the GPVS within 5 days and evaluate the ability to obtain valid representative groundwater samples. The findings of this evaluation shall be documented in a report and submitted to the GPVS. Upon review of this report, the GPVS may request the submission of an amendment for well replacement and/or inclusion of an alert level for groundwater levels to be established in the permit.</p>	<p>Report to be submitted within 90 days following notification.</p>

Table 8: COMPLIANCE SCHEDULE ITEMS

No.	Compliance Schedule Item	Description	Due By:
11	<p>No. 5 SHAFT AND PERMANENT PIT LAKE</p> <p>Monitoring of Water Level Elevations and Water Quality in the No. 5 Shaft and in the permanent Pit Lake (if a pit lake has formed).</p>	<p>The permittee shall submit an annual report to GPVS that includes the elevation of the water level in the No. 5 Shaft and the elevation of the permanent Pit Lake, if formed. The report shall include a graph showing the current water level elevation in relation to the past water level measurements and a comparison to the levels predicted by the 2009 numerical flow model or a revised model. The report shall include a prediction of the elevation and date when passive containment will be lost. In addition, the permittee shall collect a sample of the water in the No. 5 Shaft and in the Pit Lake, if a permanent pit lake is formed, and analyze the sample for the parameters listed in Section 4.2, Table 16 and Table 17, respectively. The laboratory analytical results from the water sample(s) shall be included in the annual report.</p>	<p>Annually on April 30.</p>
12	<p>PCCZ Demonstration and Groundwater Model Audit</p>	<p>Passive Containment Demonstration Post-audit of the approved groundwater flow model. The post-audit report shall be submitted to the ADEQ for review and approval as described in Section 2.5.7 of the permit. The report shall be signed and sealed by an Arizona Registered Professional.</p>	<p>Nov. 24, 2026 and every 5 years thereafter</p>

4.0 TABLES OF MONITORING REQUIREMENTS

4.1. PERMITTED FACILITIES AND BADCT

Table 9: PERMITTED FACILITIES AND BADCT		
Facility Name	Latitude/Longitude	Facility BADCT
No.1 Stockpile (D-210A)	32° 41' 41" N/110° 40' 04" W	The BADCT for the closure of this facility included the following: <ul style="list-style-type: none"> - Characterization sampling conducted; - Removed sulfide material on side berms and consolidated to No. 1/No. 4 Waste Rock Dump or No. 3 Shaft Development Dump; - Re-graded side slopes to 3H:1V with all stormwater directed to erosion control structures; - Re-vegetated and provided erosion control.
No. 1 Satellite Stockpile (D-210B)	32° 41' 41" N/110° 40' 04" W	The BADCT for the closure of this facility included the following: <ul style="list-style-type: none"> - Characterization sampling conducted; - Increased No. 1 Satellite Stockpile footprint to accommodate 3H:1V configuration; - Re-graded side slopes to 3H:1V with all stormwater directed to stormwater structures or to the Open Pit; - Re-vegetated and provided erosion control.
No. 1/No. 4 Shaft Waste Rock Dump (D-211A)	32° 41' 47" N/110° 41' 20" W	The BADCT for the closure of this facility included the following: <ul style="list-style-type: none"> - Characterization sampling conducted; - Expanded footprint of existing dump with sulfide waste rock from Ridgeline Waste Rock Dump; - Placed a soil cover of 2 feet over residual sulfide materials; - No soil cover was placed over the bedrock areas; - Re-graded to achieve approximate 3H:1V slope on exterior side-slopes to promote efficient runoff and manage long-term erosion; - Re-vegetated slopes and provided erosion control.
Ridgeline Waste Rock Dump (D-211B)	32° 41' 33" N/110° 41' 33" W	The BADCT for the closure of this facility included the following: <ul style="list-style-type: none"> - Characterization sampling conducted; - Selectively removed sulfidic materials and relocated them to the No. 1/No. 4 Shaft Waste Rock Dump and No. 3 Shaft Development Dump, both within the Open Pit catchment area; - Re-graded remaining dump materials to provide an approximate 3H:1V slope; - Placed a soil cover of 2 feet over the residual sulfide material; - Re-vegetated slopes and provided erosion control.
In-situ Mine (D-251A)	32° 41' 35" N/110° 40' 47" W	This facility includes the former operating area of the well field for the in-situ operation. The in-situ mine is situated within the Open Pit and originally consisted of an in-situ leach field with injection and production wells, solution pipelines, motor control centers, pumping stations, tanks, and other infrastructure. All of the injection and production infrastructure has been removed by BHP. BADCT shall utilize extraction wells upgradient of the POC wells and a surface water pump system to allow removal of the untreated groundwater to the Pit Lake as described in the General Closure Plan and Cost Estimate for the Pit Lake and In-situ Mine Facilities prepared by SRK Consulting dated June 30, 2006.

Table 9: PERMITTED FACILITIES AND BADCT

Facility Name	Latitude/Longitude	Facility BADCT
Future Pit Lake (D-251B)	32° 41' 31" N/110° 40' 52" W	<p>This facility is the maximum future area of the Pit Lake. Currently, a small ephemeral pond forms in the sump at the bottom of the pit following a significant storm event. The water in the sump evaporates after a storm event. BADCT shall utilize extraction wells upgradient of the POC wells and a surface water pump system to allow removal of the untreated groundwater to the Pit Lake as described in the General Closure Plan and Cost Estimate for the Pit Lake and In-situ Mine Facilities prepared by SRK Consulting dated June 30, 2006.</p>
Heap Leach Facility (D-262)	32° 42' 05" N/110° 40' 40" W	<p>The BADCT for the closure of this facility included the following:</p> <ul style="list-style-type: none"> - Characterization sampling conducted; - Maintained existing surface water run-on controls; - Extended existing HDPE liner with 60 mil HDPE north and south liner extensions including 1 foot of low permeability underliner and 1.5 feet of non-calcareous crushed rock overliner materials; - Separated storm water and draindown solutions via a Heap Leach Facility perimeter channel for storm water and a toe drain system and Diversion Pipeline (part of Diversion Structure) for heap draindown solutions; - Re-graded and re-contoured heap leach materials to achieve approximate 3H:1V side slopes; - Placed soil cover of 2 feet and limestone rock armor of 1 foot, and - Re-vegetated and provided erosion control. <p>The Diversion Structure consists of a Diversion Channel and a Diversion Pipeline and is new construction as part of the closure of the Heap Leach Facility. The construction of the Diversion Structure includes the following:</p> <ul style="list-style-type: none"> - Excavated earthen Diversion Channel to Open Pit catchment area from the discharge end of the Heap Leach Facility; - Installed a 24-inch diameter HDPE discharge pipeline (Diversion Pipeline) within the invert of the Diversion Channel to carry draindown solutions to the escarpment area along the edge of the Open Pit. The pipeline discharge point is in San Manuel Formation which offers basic pH and acid-neutralization; - Placed fill material over the Diversion Pipeline and armor the Diversion Channel for erosion control; - BADCT shall incorporate management of spent process solution with the long-term, site-wide water management strategy and the closure plan for the In-Situ Mine and future Pit Lake.
Heap PLS Pond (C-263)	32° 42' 05" N/110° 40' 40" W	<p>The BADCT for the closure of this lined facility included the following:</p> <ul style="list-style-type: none"> - Characterization sampling conducted on residual materials on liner; - Removed free liquids from the pond (if present) through pumping and transfer to the heap leach surface; - Salvaged removable equipment; - Removed and disposed of solid residue on the synthetic liner; - Characterization sampling conducted on ground materials below the Liner; - If contamination found under the liner, pulled it back to accommodate

Table 9: PERMITTED FACILITIES AND BADCT

Facility Name	Latitude/Longitude	Facility BADCT
		excavation and disposal of contamination in the Heap Leach Facility; - Whether or not excavation of contamination is required from under the liner, the liner was folded into the base of the pond and buried; - Backfill, including placement of low permeability capping material, was placed and graded to shed stormwater away from the site; - Re-vegetated and provided erosion control. - Incorporate remaining impoundment area into BADCT for Heap Leach Facility.
No. 3 Shaft Development Dump (D-267A)	32° 41' 04" N/110° 41' 31" W	The BADCT for the closure of this facility included the following: - Characterization sampling conducted; - Expanded footprint of existing dump with waste rock from the Ridgeline Waste Rock Dump and other waste rock dump areas; - Re-graded to achieve approximate 3H:1V slopes for final dump configuration to stabilize slopes; - Placed a soil cover of 2 feet over residual sulfide materials; and - Re-vegetated slopes and provided erosion control.
Sulfide Ore Stockpile (D-267B)	32° 41' 22" N/110° 41' 30" W	The BADCT for the closure of this facility included the following: - Characterization sampling conducted; - Removed the Sulfide Ore Stockpile material and relocated materials to the No. 3 Shaft Development Dump.
Red Hill Waste Rock Dump (D-267C)	32° 41' 22" N/110° 41' 30" W	The BADCT for the closure of this facility included the following: - Characterization sampling conducted; - Re-contoured and re-vegetated the top portion of the Red Hill Waste Rock Dump after removal of the Sulfide Ore Stockpile; and - Provided surface water drainage on the top portion of the Red Hill Waste Rock Dump.
Main Gate Parking Lot Dump (D-268)	32° 40' 53" N/110° 41' 48" W	The BADCT for the closure of this facility included the following: - Characterization sampling conducted; - Re-graded side-slopes to a slope of 3H:1V; - Placed soil cover of 2 feet over dump materials; and - Re-vegetated slopes and provided erosion control.
Plant Feed Pond (C-264)	32° 42' 10" N/110° 41' 15" W	The BADCT for the closure of these facilities included the following: - Removed and disposed of solid residue on the synthetic liner for these lined facilities; - Characterization sampling conducted on ground materials below the liner; - If contamination found under the liner, pulled it back to accommodate excavation and disposal of contamination in the Heap Leach Facility; - After the residual soil conditions meet applicable remediation standards, the liner shall be placed back into the excavation or be removed for appropriate disposal elsewhere, and the excavation backfilled; - Backfill, including placement of low permeability capping material, was placed and graded to shed stormwater away from the site; - Re-vegetated and provided erosion control.
Raffinate Pond (C-265)	32° 42' 11" N/110° 41' 00" W	
Julian's Catchment (C-45)	32° 41' 20" N/110° 41' 45" W	

Table 9: PERMITTED FACILITIES AND BADCT

Facility Name	Latitude/Longitude	Facility BADCT
Upper, Middle, and Lower Hamilton Ponds (C-8A; C-8B; C-8C)	32° 42' 56" N/110° 41' 25" W	<p>The BADCT for the closure of these unlined facilities included the following:</p> <ul style="list-style-type: none"> - Characterization sampling conducted; - Assessment and corrective action, if required, of potential soil contamination; - Abandoned (cut and cap) storm water drains and redirected former dust-suppression water in a diversion ditch into the subsidence area; - Backfilled former ponds and graded them to drain surface water runoff; - Capped pond area with a low permeability cover; and - Incorporated area in BADCT closure for the No. 3 Shaft Development Dump.
Dirkes Dike (C-46)	32° 41' 48" N/110° 41' 48" W	<p>The BADCT for the closure of this unlined facility included the following:</p> <ul style="list-style-type: none"> - Characterization sampling conducted; - Assessment and corrective action, if required, of potential soil contamination; - Backfilled former ponds and graded them to drain surface water runoff; - Capped pond area with a low permeability cover; and - Re-vegetated.
Bunkhouse Wash (C-200)	32° 41' 50" N/110° 41' 00" W	<p>The BADCT for the closure of these unlined facilities included the following:</p> <ul style="list-style-type: none"> - Characterization sampling conducted; - Assessment and corrective action, if required, of potential soil contamination; - Grading to drain surface runoff and minimize infiltration of precipitation; - Incorporated closure into BADCT for No. 1/No. 4 Shaft Waste Rock Area.
Wood Landfill (E-14)	32° 41' 08" N/110° 41' 08" W	<p>The BADCT for this facility included the following:</p> <ul style="list-style-type: none"> - Re-grade and contour slopes for drainage; - Placed a soil cover no less than 30 inches over the facility site; - Installed berms and drainage channels to minimize ponding; - Re-vegetated area; - File restrictive covenant with Pinal County and ADEQ.
Solid Waste Landfill (E-39)	32° 41' 07" N/110° 41' 20" W	<p>The BADCT for this facility included the following:</p> <ul style="list-style-type: none"> - Re-grade and contour slopes for drainage; - Placed a soil cover no less than 30 inches over the facility site; - Installed berms and drainage channels to minimize ponding; - Re-vegetated area; - File restrictive covenant with Pinal County and ADEQ.
Wash Pads	NA	<p>The BADCT for closure and removal of these facilities shall included the following:</p> <ul style="list-style-type: none"> - Removed above-grade pumps and piping; - Drained and cleaned wash water collection areas; - Disposed of recovered oil (if present) and sediment according to characterization results indicating appropriate disposal to include disposal at the Heap Leach Facility; - Demolished superstructures and left foundations at or below existing ground surface; - Characterization sampling conducted to check potential contamination of the site; - Assessed need for soil corrective action (oil and grease);

Table 9: PERMITTED FACILITIES AND BADCT

Facility Name	Latitude/Longitude	Facility BADCT
		<ul style="list-style-type: none"> - Penetrated concrete structures or elements that could accumulate water; - Covered foundation with suitable fill and grade slopes for drainage control; - Re-vegetated area.
Oxide Truck Wash Pad	32° 41' 58" N/ 110° 41' 19" W	<p>The BADCT for this facility included the following:</p> <ul style="list-style-type: none"> - Removed above-grade pumps and piping; - Drained and cleaned wash water collection areas; - Disposed of recovered oil (if present) and sediment according to characterization results indicating appropriate disposal to include disposal at the Heap Leach Facility; - Demolished superstructures and leave foundations at or below existing ground surface; - Characterization sampling conducted to check potential contamination of the site; - Assessed need for soil corrective action (oil and grease); - Penetrated concrete structures or elements that could accumulate water; - Covered foundation with suitable fill and grade slopes for drainage control; - Re-vegetated area.
Diesel Truckload Station (C-214)	32° 41' 50" N/110° 41' 12" W	<p>The BADCT for this facility included the following:</p> <ul style="list-style-type: none"> - Demolished superstructures and foundations and assessed removal of contaminated materials; - Characterization sampling; - Assessed need for soil corrective action, - Backfilled and placed a soil cover of 2 feet over the facility site, and graded slopes for drainage control; - Re-vegetated area.
No. 1 Shaft (Temporary Heap Drain-down)(C-252)	32° 41' 46" N/ 110° 41' 20" W	<p>The BADCT for this facility shall include the following:</p> <ul style="list-style-type: none"> - Disconnected and removed pipeline delivering Heap draindown to No. 1 Shaft; - Backfilled the shaft; - Assessed soil along the pipeline route for corrective action; - Excavated polluted soils and disposed of in an appropriate manner; - Placed concrete cap over No. 1 Shaft below grade; - Covered with fill and grade slopes for drainage control; - Re-vegetated area.

4.2. COMPLIANCE OR OPERATIONAL MONITORING

Table 10: REQUIRED INSPECTIONS AND OPERATIONAL MONITORING

Facility	Quarterly inspections and annual reporting	Performance level
Diversion Structure	Inspect diversion channel and pipeline quarterly and after significant storm event. Check rip-rap integrity. Monitor flow rate.	Free draining to the pit.
In-Situ Mine and (Future) Pit Lake	(To be determined)	(To be determined)
Ridgeline Waste Rock Dump	Inspect stormwater drainage network and soil cover quarterly and after a significant storm event.	Drainage network free of obstructions. Maintain soil cover.
No. 1/No. 4 Shaft Waste Rock Dump	Inspect stormwater drainage network and soil cover quarterly and after significant storm events.	Drainage network free of obstructions. Maintain soil cover
No. 3 Shaft Development Dump	Inspect stormwater drainage network and soil cover quarterly and after significant storm events.	Drainage network free of obstructions. Maintain soil cover.
No. 1 Stockpile and No. 1 Satellite Stockpile	Inspect stormwater drainage network quarterly and after significant storm events.	Drainage network free of obstructions.
Main Gate Parking Lot Dump	Inspect and maintain erosion control structures quarterly and after significant storm event.	Drainage network free of obstructions.
Heap Leach Facility	Inspect stormwater drainage network and soil cover quarterly and after a significant storm event.	Drainage network free of obstructions. Maintain soil cover.
Mine Site - General	Inspect stormwater drainage network and soil cover quarterly and after a significant storm event.	Drainage network free of obstructions. Maintain soil cover.
CON E-3	Inspect wellhead integrity	Lock on wellhead cap. No visible damage on wellhead
BK-1	Inspect wellhead integrity	Lock on wellhead cap. No visible damage on wellhead
BK-2	Inspect well head integrity	Lock on wellhead cap. No visible damage on wellhead
BF-1	Inspect wellhead integrity	Lock on wellhead cap. No visible damage on wellhead
BF-2	Inspect wellhead integrity	Lock on wellhead cap. No visible damage on wellhead
BF-3	Inspect wellhead integrity	Lock on wellhead cap. No visible damage on wellhead
Solid Waste Landfill	Drainage control, and cover integrity. Operational response actions shall be recorded in the logbook and reported in the Annual Report.	Drainage control system free of obstructions and breaches. Cover in place over debris. Lock on wellhead cap. No visible damage on wellhead.
Wood Landfill	Inspect drainage control and cover integrity. Operational response actions shall be recorded in the logbook and reported in the Annual Report.	Drainage control system free of obstructions and breaches. Cover in place over debris

Table 11: REQUIREMENTS FOR POC GROUNDWATER MONITORING – ANNUAL COMPLIANCE ¹						
Parameter	BK-1		BK-2		CON-E	
	AQL ²	AL ³	AQL	AL	AQL	AL
Depth to Water (in feet)	Monitor ⁴	Monitor	Monitor	Monitor	Monitor	Monitor
Water Level Elevation (feet amsl)	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
pH (S.U.)	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Temperature (°F)	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Total Dissolved Solids	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Specified Conductance (µmhos/cm)	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Sulfate	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Total Alkalinity	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Chloride	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Fluoride	4.0	3.2	4.0	3.2	4.0	3.2
Free Cyanide	0.2	0.16	0.2	0.16	0.2	0.16
Nitrate + Nitrite	10	8.0	10	8.0	10	8.0
Calcium	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Potassium	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Sodium	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Total Petroleum Hydrocarbons (TPH)	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Metals (Dissolved)						
Aluminum	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Antimony	0.006	0.004	0.006	0.004	0.006	0.004
Arsenic	0.05	0.04	0.05	0.04	0.05	0.04
Barium	2.0	1.6	2.0	1.6	2.0	1.6
Beryllium	0.004	0.0032	0.004	0.0032	0.004	0.0032
Cadmium	0.005	0.004	0.005	0.004	0.005	0.004
Chromium	0.10	0.08	0.10	0.08	0.10	0.08
Cobalt	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Copper	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Iron	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Lead	0.050	0.040	0.050	0.040	0.050	0.040
Magnesium	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Manganese	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Mercury	0.0020	0.0016	0.0020	0.0016	0.0020	0.0016
Nickel	0.1	0.08	0.1	0.08	0.1	0.08
Selenium	0.050	0.040	0.050	0.040	0.050	0.040
Thallium	0.002	0.0016	0.002	0.0016	0.002	0.0016
Zinc	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Radionuclides						
Adjusted Gross Alpha Particle Activity (pCi/L) ⁵	15	12	15	12	15.0	12.0
Radium 226 + Radium 228 (pCi/L)	5.0	4.0	5.0	4.0	5.0	4.0

¹ All Concentrations are in milligrams per liter (mg/L) unless otherwise specified. Metals shall be analyzed as dissolved metals.

² AQL – Aquifer Quality Limit

³ AL – Alert Limit

⁴ Monitor: Monitoring required, but not AQL or AL established in the permit.

⁵ If the gross alpha particle activity is greater than the AL or AQL, then test for adjusted gross alpha particle activity. The adjusted gross alpha particle activity is the gross alpha particle activity including radium 226, minus radon and total uranium (the sum of the uranium 238, uranium 235 and uranium 234 isotopes) reported in pCi/L.

Table 11: REQUIREMENTS FOR POC GROUNDWATER MONITORING – ANNUAL COMPLIANCE ¹						
Parameter	BK-1		BK-2		CON-E	
	AQL ²	AL ³	AQL	AL	AQL	AL
Uranium (mg/L)	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor

Table 12: REQUIREMENTS FOR ALERT LEVEL WELLS – ANNUAL GROUNDWATER MONITORING⁶

Parameter	AWQS ⁷	BF-2		BF-3	
		AQL ⁸	AL ⁹	AQL	AL
Depth to Water (in feet)	Not Applicable	Monitor ¹⁰	Monitor	Monitor	Monitor
Groundwater Elevation (feet amsl)	Not Applicable	Monitor ⁴	Monitor	Monitor	Monitor
pH (S.U.)	Not Applicable	Monitor	Monitor	Monitor	Monitor
Temperature (°F)	Not Applicable	Monitor	Monitor	Monitor	Monitor
Total Dissolved Solids	Not Applicable	Monitor	Monitor	Monitor	Monitor
Electrical Conductance (µmhos/cm)	Not Applicable	Monitor	Monitor	Monitor	Monitor
Fluoride	4.0	Monitor	3.2	Monitor	3.2
Nitrate + Nitrite	10.0	Monitor	8.0	Monitor	8.0
Sulfate	Not Applicable	Monitor	Monitor	Monitor	Monitor
Arsenic	0.05	Monitor	0.040	Monitor	0.040
Cadmium	0.005	Monitor	0.004	Monitor	0.004
Copper	Not Applicable	Monitor	Monitor	Monitor	Monitor
Selenium	0.05	Monitor	0.082	Monitor	0.16
Thallium	0.002	Monitor	0.0016	Monitor	0.0016

⁶ All Concentrations are in milligrams per liter (mg/L) unless otherwise specified. Metals shall be analyzed as dissolved metals.

⁷ AWQS – Aquifer Water Quality Standard

⁸ AQL – Aquifer Quality Limit

⁹ AL – Alert Limit

¹⁰ Monitor – Monitoring required, but no AQL or AL established in the permit.

Table 13: REQUIREMENTS FOR ALERT LEVEL WELLS – BIENNIAL GROUNDWATER MONITORING¹¹

Parameter	AWQS ¹²	BF-2		BF-3	
		AQL ¹³	AL ¹⁴	AQL	AL
Depth to Water (in feet)	Not Applicable	Monitor ¹⁵	Monitor	Monitor	Monitor
Groundwater Elevation (feet amsl)	Not Applicable	Monitor	Monitor	Monitor	Monitor
pH (S.U.)	Not Applicable	Monitor	Monitor	Monitor	Monitor
Temperature (°F)	Not Applicable	Monitor	Monitor	Monitor	Monitor
Total Dissolved Solids	Not Applicable	Monitor	Monitor	Monitor	Monitor
Specific Conductance (µmhos/cm)	Not Applicable	Monitor	Monitor	Monitor	Monitor
Sulfate	Not Applicable	Monitor	Monitor	Monitor	Monitor
Total Alkalinity	Not Applicable	Monitor	Monitor	Monitor	Monitor
Chloride	Not Applicable	Monitor	Monitor	Monitor	Monitor
Fluoride	4.0	Monitor	3.2	Monitor	3.2
Free Cyanide	0.20	Monitor	0.16	Monitor	0.16
Nitrate + Nitrite	10.0	Monitor	8.0	Monitor	8.0
Calcium	Not Applicable	Monitor	Monitor	Monitor	Monitor
Potassium	Not Applicable	Monitor	Monitor	Monitor	Monitor
Sodium	Not Applicable	Monitor	Monitor	Monitor	Monitor
Total Petroleum Hydrocarbon (TPH)	Not Applicable	Monitor	Monitor	Monitor	Monitor
Metals (Dissolved)					
Antimony	0.006	Monitor	0.0048	Monitor	0.0048
Arsenic	0.050	Monitor	0.040	Monitor	0.040
Barium	2.0	Monitor	1.6	Monitor	1.6
Beryllium	0.004	Monitor	0.0032	Monitor	0.0032
Cadmium	0.005	Monitor	0.004	Monitor	0.004
Chromium	0.10	Monitor	0.08	Monitor	0.08
Copper	Not Applicable	Monitor	Monitor	Monitor	Monitor
Iron	Not Applicable	Monitor	Monitor	Monitor	Monitor
Lead	0.050	Monitor	0.040	Monitor	0.040
Magnesium	Not Applicable	Monitor	Monitor	Monitor	Monitor
Manganese	Not Applicable	Monitor	Monitor	Monitor	Monitor
Mercury	0.002	Monitor	0.0016	Monitor	0.0016
Nickel	0.10	Monitor	0.08	Monitor	0.08
Selenium	0.050	Monitor	0.082	Monitor	0.16
Thallium	0.002	Monitor	0.0016	Monitor	0.0016
Zinc	Not Applicable	Monitor	Monitor	Monitor	Monitor
Radionuclides					
Adjusted Gross Alpha Particle Activity (pCi/L) ¹⁶	15.0	Monitor	12.0	Monitor	12.0
Radium 226 + Radium 228 (pCi/L)	5.0	Monitor	4.0	Monitor	4.0
Uranium	Not Applicable	Monitor	Monitor	Monitor	Monitor

¹¹ All Concentrations are in milligrams per liter (mg/L) unless otherwise specified. Metals shall be analyzed as dissolved metals.

¹² AWQS – Aquifer Water Quality Standard

¹³ AQL – Aquifer Quality Limit

¹⁴ AL – Alert Limit

¹⁵ Monitor – Monitoring required, but no AQL or AL established in the permit.

¹⁶ If the gross alpha particle activity is greater than the AL or AQL, then test for adjusted gross alpha particle activity. The adjusted gross alpha particle activity is the gross alpha particle activity including radium 226, minus radon and total uranium (the sum of the uranium 238, uranium 235 and uranium 234 isotopes reported in pCi/L).

Table 14: PROCESS SOLUTION AND MINE WATER ¹⁷ COMPLIANCE MONITORING REQUIREMENTS ¹⁸	
PARAMETER	MONITORING FREQUENCY
Flow (estimated in gallons per minute)	Quarterly
Specific Conductance (µmhos/cm)	Quarterly
Temperature (°F)	Quarterly
pH (S.U.)	Quarterly
Total Dissolved Solids	Annual
Sodium	Annual
Potassium	Annual
Calcium	Annual
Magnesium	Annual
Sulfate	Annual
Chloride	Annual
Fluoride	Annual
Beryllium	Annual
Thallium	Annual
Bicarbonate alkalinity as CaCO ₃	Annual
Aluminum	Annual
Antimony	Annual
Arsenic	Annual
Barium	Annual
Cadmium	Annual
Chromium	Annual
Cobalt	Annual
Copper	Annual
Iron	Annual
Lead	Annual
Manganese	Annual
Mercury	Annual
Nickel	Annual
Selenium	Annual
Total Petroleum Hydrocarbons	Annual
Adjusted Gross Alpha Particle Activity (pCi/L) ¹⁹	Biennial
Radium 226 + Radium 228 (pCi/L)	Biennial
Uranium	Biennial

¹⁷ Mine water = Water quality samples from the No. 5 Shaft.

¹⁸ Metals shall be analyzed as dissolved metals. All concentrations are in milligrams per liter (mg/L) unless otherwise specified.

¹⁹ If the gross alpha particle activity is greater than the AL or AQL, then test for adjusted gross alpha particle activity. The adjusted gross alpha particle activity is the gross alpha particle activity including radium 226, minus radon and total uranium (the sum of the uranium 238, uranium 235 and uranium 234 isotopes reported in pCi/L).

Table 15: PIT LAKE COMPLIANCE MONITORING REQUIREMENTS ²⁰	
PARAMETER	MONITORING FREQUENCY
Water Level Elevation (amsl)	Quarterly
pH (S.U.)	Quarterly
Temperature (° F)	Quarterly
Total Dissolved Solids	Annual
Sulfate	Annual
Total Alkalinity	Annual
Chloride	Annual
Fluoride	Annual
Nitrate + Nitrite	Annual
Calcium	Annual
Magnesium	Annual
Potassium	Annual
Sodium	Annual
Iron	Annual
Aluminum	Annual
Antimony	Annual
Arsenic	Annual
Barium	Annual
Beryllium	Annual
Cadmium	Annual
Chromium	Annual
Cobalt	Annual
Copper	Annual
Lead	Annual
Manganese	Annual
Mercury	Annual
Nickel	Annual
Selenium	Annual
Thallium	Annual
Zinc	Annual
Free Cyanide	Annual
Total Petroleum Hydrocarbons	Annual
Adjusted Gross Alpha Particle Activity (pCi/L) ²¹	Biennial
Radium 226 + Radium 228 (pCi/L)	Biennial
Uranium	Biennial

²⁰ Metals shall be analyzed as dissolved metals. All concentrations are in milligrams per liter (mg/L) unless otherwise specified.

²¹ If the gross alpha particle activity is greater than the AL or AQL, then test for adjusted gross alpha particle activity. The adjusted gross alpha particle activity is the gross alpha particle activity including radium 226, minus radon and total uranium (the sum of the uranium 238, uranium 235 and uranium 234 isotopes reported in pCi/L).



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: December 2, 2021

Contingency Plan, dated: July 12, 2018

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. §§ 41-1009, 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).