STATE OF ARIZONA

AQUIFER PROTECTION PERMIT NO. P-104190
PLACE ID 9991, LTF 94299
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 New Harquahala Generation Company, LLC to operate contingency and evaporation ponds for the storage and evaporation of process wastewater located in 2530 North 491st Avenue, Tonopah, Maricopa County, Arizona, over the groundwater of the Harquahala Basin, in Township 2 North, Range 8 West, Section 31 North East 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:	New Harquahala Generating Facility
Facility Address:	2530 North 491st Avenue, Tonopah, AZ 85354
County:	Maricopa
Annual Registration Fee Flow Rate:	360,000 gallons per day (gpd)
Permittee:	New Harquahala Generating Company, LLC
Permittee Address:	PO Box 727, 2530 North 491st Avenue Tonopah, AZ 85354
Facility Contact:	Kim Steffen
Emergency Phone No.:	(602) 793-8301
Latitude/Longitude:	33° 28' 26" North / 113° 06' 56.6" West
Legal Description:	The SW ¼ of the NE Quarter of Section 31, Township 2 North, Range 8 West of the Gila and Salt River Base Line and Meridian, Maricopa County, Arizona.

1.2. AUTHORIZING SIGNATURE

_____

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

Signed this _____ day of _____, 20_____

THIS AMENDED PERMIT SUPERCEDES ALL PREVIOUS PERMITS

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2.0 SPECIFIC CONDITIONS

[A.R.S. §§ 49-203(4), 49-241(A)]

2.1. FACILITY / SITE DESCRIPTION

[A.R.S. § 49-243(K)(8)]

New Harquahala Generating Company (NHGC) is a 1,060-megawatt natural gas-fired, combined cycle, electric generating plant. The plant is owned by New Harquahala Generating Company, LLC. The power plant consists of three combined cycle power blocks, each including a combustion turbine generator and heat recovery steam generator. Water is used in the plant for heat rejection in a non-contact cooling water system, for evaporative cooling of combustion turbine inlet air, and for makeup water in the steam cycle. The plant is served by five water/wastewater systems: raw water treatment system; cooling water treatment system; oil/water separator; stormwater runoff control system; and a domestic sewage system.

The raw water treatment system is designed to treat raw water from the Central Arizona Project (CAP) and nearby production wells to produce higher quality water for use as boiler feed and to meet other plant needs. Wastewater from the raw water treatment process will be discharged to the cooling water treatment system for reuse. The cooling water treatment system is designed to treat spent cooling water for reuse within the process. The treatment system will consist of two side stream softener clarifiers, three reverse osmosis (RO) systems, two brine concentrators, and two mechanical vapor compression crystallizers. The crystallizer treatment is used for the final dewatering of sludge (brine) produced by the cooling water treatment and replaces the need for traditional evaporation ponds. The solids from the crystallizers will be shipped off site for disposal or recovery.

This permit is for the operation of two double-lined surface impoundments (Contingency Pond and Evaporation Pond) for storage and evaporation of process wastewater effluent from the cooling water treatment system. The configuration of the contingency pond is rectangular, approximately 2.2 acres in size, with a total storage capacity of approximately 6,415,417 gallons. The contingency pond is approximately 415 feet long, 230 feet wide, and 12.5 feet deep with 3:1 sloped sides. The contingency pond is lined with two 60-mil HDPE liners separated by a Leakage Collection and Removal System (LCRS). A minimum of 12 inches of freeboard will be maintained in the contingency pond at all times. The configuration of the Phase 1 evaporation pond is rectangular, with three pond segments totaling approximately 38.3 acres combined, and with a total storage capacity of 83,400,000 gallons. The Phase 1 evaporation pond is approximately 2,600 feet long and 1,200 feet wide. The maximum depth (as measured from the embankment crest to the top of the primary liner in the LCRS sump locations) is 16.5 feet in Pond Segments A and C, and 22.8 feet in Pond Segment B. The evaporation pond has 3:1 sloped sides. The evaporation pond will be lined with two 60-mil HDPE liners separated by an LCRS. A minimum of 24 inches of freeboard will be maintained in the Phase 1 evaporation pond at all times.

There will be a Phase 2 evaporation pond development depending on the capacity requirements. The Phase 2 pond will be identical to the Phase 1 pond, and consisting of approximately 76.6 acres of evaporation pond in six segments. The design, construction, operation, discharge, closure and post closure of Phase 2 pond will be identical to Phase 1. Prior to construction of Phase 2 evaporation pond, ADEQ should be notified as Per CSI No. 4.

The discharge may consist of cooling tower blowdown, pretreatment wastewater, reverse osmosis reject water, concentrated brine, oil/water separator effluent, or a combination of these waste streams from the industrial wastewater treatment system. The pond will receive an intermittent wastewater stream ranging from 36 to 2,382 gallons per minute (gpm), depending on which type of equipment fails or requires maintenance.

The oil/water separator will be used to collect and treat drainage from the floor drains and spill containment sumps. Treated wastewater generated from the oil/water separator will be directed to the cooling water treatment system for reuse. Oil and sludge removed from the separator will be shipped off site to an authorized facility for recycling or disposal.

The stormwater runoff control system includes a berm that diverts stormwater away from the plant site. Within the plant site, enclosed structures, berms, and spill containment sumps were installed to prevent contamination of runoff as a result of precipitation falling directly on the plant site. Stormwater runoff from within the plant site will flow into a stormwater retention basin designed for the 100-year, 24-hour storm event. The retention basin will be used solely to contain stormwater runoff and is exempt pursuant to A.R.S. § 49-250(B)(10).

The plant shall be equipped with an onsite domestic wastewater treatment system that will be designed and operated under a separate APP pursuant to A.R.S. § 49-241(B)(10) and A.A.C. Title 18, Chapter 9.

The site includes the following permitted discharging facilities:

Table 1: DISCHARGING FACILITIES		
Facility	**Latitude**	**Longitude**
Contingency Pond	33° 28' 27" North	113° 06' 56" West
Evaporation Pond (Phase 1)	33° 28' 19" North	113° 06' 54" West
Evaporation Pond (Phase 2 – North)	33° 28' 40" North	113° 07' 23" West
Evaporation Pond (Phase 2 - South)	33° 28' 29" North	113° 07' 23" West

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 established by A.R.S. § 49-242 and is payable to ADEQ each year. The design flow is 360,000 (gallons/day). The annual registration fee flow rate is established by the permitted flow rate identified in Section 1.1. If the facility is not constructed or is incapable of discharge, the permittee may be eligible for reduced fees pursuant to A.A.C. R18-14-104(A), Table 2. Send all correspondence requesting reduced fees to the Groundwater Protection Value Stream. Please reference the permit number, LTF number, and the reason for requesting reduced fees under this rule.

2.1.2. Financial Capability

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

The permittee has demonstrated financial capability under A.R.S. § 49-243(N) and A.A.C. R18-9-A203. The permittee shall maintain financial capability throughout the life of the facility. The estimated closure and post-closure cost for the contingency pond is $358,122.25. Groundwater Protection Value Stream approved the estimated closure cost of $2,364,011 and post-closure cost of $536,468 for the phase 1 Evaporation Pond for a total of $2,900,479. The financial assurance mechanism for the Contingency Pond and Phase 1 evaporation pond was demonstrated for a total of $3,258,601 through A.A.C. R18-9-A203(C)(5). The Groundwater Protection Value Stream also approved the closure cost of $4,728,023 and post-closure cost of $1,072,936 for the phase 2 Evaporation Pond for a total of $5,800,959.

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 facilities is presented in Section 4.1, Table 5: PERMITTED FACILITIES AND BADCT.

2.2.2. Site-Specific Characteristics

The facility is located within the Harquahala Irrigation Non-Expansion Area (INA), within the Basin and Range physiographic region of Arizona. Groundwater in this area is produced from basin-fill aquifers within the valleys between up thrown mountains of crystalline rock. Groundwater levels at the facility are between about 380 and 480 feet below ground surface (bgs). Within the INA, groundwater flows generally from northwest to southeast.

2.2.3. Pre-operational Requirements

Prior to the initial discharge of wastewater into the evaporation pond, the permittee/operator shall inspect all wastewater management systems to verify that all components function as designed; and to ensure that the installation of the liner and the LCRS meets the manufacturer's quality assurance and quality control requirements (QA/QC) and the liner system is completed in accordance with ADEQ approved plans.

2.2.4. Operational Requirements

The discharging facilities shall be operated according to and inspected for compliance with the requirements in Section 4.2, Tables 5-10, and recorded in a log as required by Section 2.7.2.

Raw water for cooling tower needs and other processes will be supplied by CAP water. Production wells may be developed for groundwater as a supplemental water source, as needed. Raw water will be treated for boiler feed water and other plant needs. Sludge produced by the raw water treatment process will be de-watered using filter presses and shipped off site to an authorized facility for disposal or recovery. Wastewater from the raw water treatment process will be directed to the cooling water treatment system for reuse. The facility will minimize both water supply system needs and discharges by maximizing internal reuse of water. The wastewater treatment systems will consist of two side stream softener clarifiers, three RO units, two brine concentrators/evaporators, and two crystallizers.

The cooling water treatment system is composed of two parallel treatment trains, each having the capacity to treat more than 50 percent of the total discharge of spent cooling water under maximum conditions. Spent cooling water will be directed from the cooling tower basins into one or both of the treatment trains depending upon production demands. The first component in the treatment train is a side stream softener clarifier (SSC). The side stream softener clarifier will remove hardness from the circulating water allowing the cooling tower to run at increased cycles of concentration and reducing the quantity of makeup water required. Solids from the SSC will be thickened, filtered, and shipped off site for disposal or recovery. About 65 percent of the treated water from the SSC will be returned directly to the cooling towers for reuse. The remaining water

will be sent to polishing filters and a RO system. Treated RO water will also be directed to the cooling towers for reuse. RO reject will be piped to brine concentrators where water will be removed from entrained and dissolved solids via evaporation. The evaporated water will be condensed and returned to the cooling water circuit as makeup water. Concentrated brine will be piped to the crystallizers where the remaining water in the brine will be evaporated, condensed, and returned to the cooling water circuit as makeup water. The concentrated brine will be condensed using mechanical vapor compression, forced circulation crystallizers to produce concentrated salt slurry. The salt slurry will be pumped to the filter presses for dewatering and filtrate will be returned to the crystallizers for further concentration. The solids from the crystallizers will be stored in bins and shipped off site for disposal or recovery at an approved facility.

Some components of the cooling water treatment system have been designed with excess capacity to reduce the number and volume of discharges to the contingency pond. Excess storage capacity and treatment system redundancies will be used to minimize the need to divert flow to the contingency pond. Wastewater discharge to the contingency pond will be returned to the process following completion of system repairs.

Routine maintenance or repair of the contingency pond or evaporation ponds will be scheduled and performed during off peak periods.

Any leakage through the primary liner in the ponds will be conveyed through a drainage geonet layer to the collection sump for extraction. Leakage monitoring shall be performed manually by measuring the depth of liquid in the sump, or by an automated system installed at a later time. Fluid will be removed using a non-dedicated pump and the flow rate shall be measured by an in-line flow meter as the leakage is pumped/re-circulated back into the pond. The collection sump and leakage removal pump shall be sized and operated to prevent leakage from overflowing the LCRS sump and to maintain flow to the LCRS sump. Leakage flow rates shall be calculated based on the amount of liquid removed in gpd for comparison with alert levels specified in Section 4.2, Table 8: LEAKAGE COLLECTION AND REMOVAL SYSTEM ALERT LEVELS AND MONITORING.

If damage is identified during an inspection that could cause or contribute to an unauthorized discharge, proper repairs shall be promptly performed.

Two enhanced evaporation units (“Evaporators”) are installed in the contingency pond. The 700 lb Evaporators have a length, width, and height of 151 x 151 x 107 inches, respectively. The material construction is as follows: Down Draft Assembly and OSHA compliant fan guards are 304 Stainless Steel, with composite inlet bells and high-density polyethylene floats. The system evaporates up to 13 gallons per minute of water in a 70°F ambient air with a 25% relative humidity, with wastewater containing 50,000 total dissolved solids at a liquid temperature of 55°F. For the new evaporation ponds, the site is allowed to install evaporation enhancement system if there will be no change in the permit conditions, and it will not cause any unauthorized discharges or damages to the liner systems. ADEQ should be notified of any evaporation system installations in the evaporation ponds ninety (90) days prior to initiation of construction pursuant to Compliance Schedule provided as Table 4.

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.

2.3.1. Holding Capacity and Freeboard

The contingency pond shall occupy an area approximately 2.2 acres with a maximum storage capacity of 6,415,417 gallons. The contingency pond shall be designed and operated to maintain a minimum of 12 inches of freeboard at all times. The maximum storage capacity and freeboard shall not be exceeded. The evaporation pond in Phase 1 shall occupy an area approximately 38.3 acres with a maximum storage capacity of 83,400,000 gallons. The Phase 1 evaporation pond shall be designed and operated to maintain a minimum of 24 inches of freeboard at all times. The maximum storage capacity and freeboard shall not be exceeded.

2.3.2. Authorized and Unauthorized Materials

Authorized materials discharged to the pond shall be restricted to cooling tower blowdown (spent cooling water) and process wastewater (pretreatment wastewater, reverse osmosis reject water, concentrated brine, oil/water separator effluent, or a combination of these waste streams from the industrial wastewater treatment system) generated from the plant and shall not contain any organic solvents, or other hazardous substances that are not associated with the aforementioned operations. The oil/water separator shall be designed to meet the recommended criteria described in ADEQ's BADCT Guidance Document for Pretreatment with Oil/Water Separators (July 1996) and shall be properly maintained and operated to meet ADEQ performance standards in accordance with BADCT guidance for oil/water separators. Treated effluent from the oil/water separator shall be directed to the wastewater treatment system for reuse. Sludge collected from the oil/water separator shall be properly characterized and disposed of at a state approved facility.

2.3.3. Pond Maintenance

The permittee shall maintain the contingency pond and evaporation ponds to the maximum extent practicable to ensure that there are no liner failures, uncontrollable leaks, overtopping, berm breaches, accidental spills, or other unauthorized discharges into the environment. In the event of an unauthorized discharge or accidental spill, the permittee shall initiate the contingency requirements as described in Section 2.6.3 Discharge Limitations (DL) Violations.

2.3.4. Pond Usage

The contingency pond and evaporation ponds are designed for storage and evaporation of process wastewater effluent from the cooling water treatment system.

2.3.5. Pond Monitoring Requirements

The contingency pond and evaporation ponds shall be inspected, and the discharge monitored in accordance with Section 2.5 (Monitoring Requirements) and Section 4.0 (Tables of Monitoring Requirements) of this permit. The LCRS shall be monitored in accordance with Section 4.2, Table 9: LEAKAGE COLLECTION AND REMOVAL SYSTEM MONITORING.

2.3.6. Oil/Water Separator

Sludge collected from the oil/water separator shall be properly characterized and disposed of at a state approved facility. Discharge water from the separator shall contain less than 50 mg/L in oil and/or TPH content. Discharge monitoring is not required for this permit. Discharge quality is subject to verification by ADEQ inspectors

2.4. POINT OF COMPLIANCE (POC)

[A.R.S. § 49-244]

The POCs designated for hazardous and non-hazardous substances are located hydraulically downgradient from the edge of the pollutant management area southeast of the contingency pond. The POCs designated for non-hazardous substances are located hydraulically downgradient from the edge of the pollutant management area south of the evaporation ponds.

The installation of groundwater monitoring wells is not necessary at this time. If groundwater monitoring is necessary in the future, the groundwater flow conditions shall be reassessed to determine if the designated POC locations are still appropriate. The list of pollutants and parameters that shall be required to be tested for contingency groundwater sampling is presented in Section 4.2, Table 11: CONTINGENCY GROUNDWATER MONITORING.

The Director may amend the permit as necessary to reflect revised POC locations and may designate additional points of compliance if information on groundwater gradients or groundwater usage indicates the need.

The POCs are established by the following monitoring locations:

Table 2: POINT OF COMPLIANCE LOCATION(S)

POC #	POC Location	Latitude	Longitude
1	Contingency Pond -Non-hazardous: Approximately 250 feet from the southeast corner of the pond	33° 28' 24.38" North	113° 06' 52.03" West
2	Contingency Pond- Hazardous: The southeast corner of the pond	33° 28' 25.62" North	113° 06' 52.59" West
3	Phase 1 Evaporation Pond West: Approximately 200 feet south of the south embankment and 700 feet east of the southwest corner of the pond	33° 28' 13.36" North	113° 06' 57.60" West
4	Phase 1 Evaporation Pond East: Approximately 200 feet from the southeast corner of the pond	33° 28' 13.43" North	113° 06' 40.55" West
5	Phase 2 Evaporation Pond Expansion Area West: Approximately 100 feet south of the south embankment and 700 feet east of the southwest corner of the pond	33° 28' 23.78" North	113° 07' 27.54" West
6	Phase 2 Evaporation Pond Expansion Area East: Approximately 100 feet from the southeast corner of the pond	33° 28' 23.78" North	113° 07' 11.17" West

Monitoring requirements for each POC are listed in Section 4.2, Table 11: CONTINGENCY GROUNDWATER MONITORING.

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

2.5. MONITORING REQUIREMENTS

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

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

2.5.1. Discharge Monitoring

2.5.1.1. Routine Discharge Monitoring

Routine discharge monitoring is not required at time of permit issuance.

2.5.1.2. Contingency Discharge Monitoring

Section 2.6 of this permit contains provisions for collection of samples from the LCRS and wastewater in the contingency pond and evaporation ponds in the event of alert level (AL) exceedances.

2.5.2. Facility / Operational Monitoring

At a minimum, permitted facilities shall be inspected for performance levels listed in Section 4.2. If damage is identified during an inspection that could cause or contribute to an unauthorized discharge pursuant to A.R.S. § 49-201(12), proper repairs shall be promptly performed. Results of these inspections and monitoring activities shall be documented and maintained at the facility location for at least 10 years, and as required by Section 2.7.2 of this permit.

2.5.2.1. Wastewater Containment Structure Monitoring

Beginning at the time that industrial wastewater is discharged to the contingency pond and evaporation ponds and continuing until industrial wastewater is no longer present in the either pond or LCRS, the permittee shall inspect all wastewater containment structures to verify that all systems are functioning properly. At minimum, the contingency pond and evaporation ponds shall be inspected for the performance standards listed in Section 4.2, Table 6: WASTEWATER CONTAINMENT STRUCTURE MONITORING. Inspections shall be performed immediately prior to discharging to the pond, daily while the pond is "in use" (when the pond and/or LCRS contains wastewater), monthly when pond is empty, and after any significant storm event. A log of the monitoring activities and inspection results shall be kept at the facility for ten years from the date of each inspection and available for review by ADEQ personnel as necessary.

If any damage to the contingency or evaporation ponds or the LCRS is identified during an inspection or if the system is rendered inoperable, proper repair procedures shall be performed. All repair procedures, methods, and materials used to return the systems to operational status shall be documented in the Annual Report described in Section 2.7 (Reporting and Recordkeeping Requirements). The Annual Report and related information shall be submitted to ADEQ Water Quality Compliance Section and available at the site for review by ADEQ as necessary. In addition, results of wastewater containment structure monitoring shall be recorded and reported to ADEQ according to Section 2.7 (Reporting and Recordkeeping Requirements) of this permit.

2.5.2.2. Leakage Collection and Removal System Monitoring

Beginning at the time that industrial wastewater is discharged to the contingency pond and evaporation ponds and continuing until industrial wastewater is no longer present in any pond or LCRS (pond is "in use"), the permittee shall monitor the LCRS for the presence of fluids on a daily basis. LCRS monitoring shall continue for seven days after all fluid has been removed from the pond and LCRS.

If fluids are collected in the LCRS during use or operation of any of the ponds, the permittee shall remove accumulated fluids from the collection sump at a rate necessary to prevent fluids from backing up into the drainage layer. If fluid detected exceeds the ALs specified in Part 4.2, Table 8: LEAKAGE COLLECTION AND REMOVAL SYSTEM ALERT LEVELS AND MONITORING, the permittee shall initiate the necessary contingency plan described in Section 2.6 (Contingency Plan Requirements). A log of the monitoring activities and inspection results shall be kept at the facility for ten years from the date of inspection and available for review by ADEQ personnel as necessary. Results of the LCRS

monitoring shall be recorded and reported to ADEQ according to Section 2.7 (Reporting and Recordkeeping Requirements) of this permit.

2.5.3. Groundwater Monitoring and Sampling Protocols

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

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.

2.6. 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

The permittee shall prepare and implement a contingency plan consistent with the circumstances and actions described in Sections 2.6.2 through 2.6.5 and with A.A.C. R18-9-A204. At least one copy of this permit and the contingency plan shall be maintained at the location where day-to-day decisions regarding the operation of the facility are made. The permittee shall revise the contingency plan upon any significant change to the information contained in the plan.

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

2.6.2.1.1. Performance Levels Set for Freeboard

In the event that freeboard performance levels required by Section 4.2 Table 6: WASTEWATER CONTAINMENT STRUCTURE MONITORING in a surface impoundment are not maintained, the permittee shall:

1. As soon as practicable, cease or reduce discharging to the impoundment to prevent overtopping. Remove and properly dispose or recycle to other operations the excess fluid in the reservoir until the water level is restored at or below the permitted freeboard limit.
2. Within 5 days of discovery, evaluate the cause of the incident and adjust operational conditions or identify design improvements to the affected system as necessary to avoid future occurrences.
3. Within 30 days of discovery, initiate repairs to the affected system, structure, or other component as necessary to return the system to compliance with this permit, or remove the affected system(s) from service as specified in Section 2.8 (Temporary Cessation) and Section 2.9 (Closure) of this permit. Record any repair procedures, methods, and materials used to restore the facility to operating condition in the facility log/recordkeeping file.
4. If design improvements are necessary, submit an amendment application within 90 days of discovery.
5. The facility is no longer on alert status once the operational indicator no longer indicates that the freeboard performance level is being exceeded. The permittee shall, however, complete all tasks necessary to return the facility to its pre-alert operating condition.

2.6.2.1.2. Performance Levels, other than Freeboard

1. If non-compliance of an operational performance level (PL) listed in Section 4.2, Table 6: WASTEWATER CONTAINMENT STRUCTURE MONITORING has been observed or noted during required inspection and operational monitoring, such that the result could cause or contribute to an unauthorized discharge, the permittee shall immediately investigate to determine the cause of the condition. The investigation shall include the following:

    a) Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the operational performance condition.

b) Review of recent process logs, reports, and other operational control information to identify any unusual occurrences.

2. The PL exceedance, results of the investigation, and any corrective action taken shall be reported to the Groundwater Protection Value Stream, within 30 days of the discovery of the condition. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, or other actions.

3. Within 30 days, the permittee shall initiate actions identified in the contingency plan referenced in Section 2.6.1 General Contingency Plan Requirements and any necessary contingency measures to resolve problems identified by the investigation which may have led to a PL being exceeded. To implement any other corrective action the permittee may choose to obtain prior approval from ADEQ according to Section 2.6.6 Corrective Actions

2.6.2.1.3. Exceedance of Performance Levels Set for Operation of the Oil/Water Separator

If a performance level specified in Section 4.2, Table 10: PERFORMANCE LEVELS FOR OPERATION OF THE OIL/WATER SEPARATOR has been exceeded the permittee shall:

1. Within 5 days of the discovery, investigate the cause of the incident, including an evaluation of the facility operational practices, and an inspection of the oil/water separator.

2. Immediately correct or modify any operational or maintenance problems identified by the investigation and perform activities as necessary to return the facility to its pre-alert operating condition and to avoid future exceedances.

3. If performance standards for the operation of the oil/water separator are exceeded for more than 1 week and have not been corrected, the permittee shall cease discharging to the evaporation pond, properly characterize the effluent and begin disposal of the wastewater to an approved waste disposal facility in accordance with federal, state, and local rules and regulations. No discharges shall be directed to the evaporation pond until the condition that led to the exceedance of the performance standard is corrected and the permittee is no longer exceeding the performance standard.

4. Record in the facility log the findings of the investigation, and a description of the activities performed to correct the problem. The facility log shall be maintained according to Section 2.7.2. Records documenting each incident and actions taken to correct the problem shall be included in the annual report as required in Section 2.7.4 of this permit.

5. Upon review of the report, the ADEQ may request additional monitoring or remedial actions.

2.6.2.2. Exceeding of Alert Levels Set for Discharge Monitoring

Routine discharge monitoring is not required at time of permit issuance.

2.6.2.3. Exceeding of Alert Levels Set for Groundwater Monitoring

Routine groundwater monitoring is not required at time of permit issuance.

2.6.2.4. Exceedance of Alert Level #1 for Normal Liner Leakage

If an Alert Level #1 (AL #1) as specified in Section 4.2, Table 6: WASTEWATER CONTAINMENT STRUCTURE MONITORING, has been exceeded, the permittee shall take the following actions:

1. Within 5 days of AL #1 exceedance, notify Groundwater Protection Value Stream in accordance with Section 2.7.3 Permit Violation and Alert Level Status Reporting. Continue monitoring to determine if the leakage rate is increasing.

2. If the leakage rate continues to exceed AL#1 for 15 days following notification of initial AL #1 exceedance, perform a visual inspection of the liner above the solution level, to determine the location of the leaks in the primary liner.

3. Within 45 days of AL #1 exceedance, if liner damage is evident, the permittee shall complete liner repairs.

4. Within 45 days of AL #1 exceedance, if the visual inspection does not identify the location of leaks, formulate a corrective action plan to determine their location and repair them.

5. Within 90 days of AL #1 exceedance and following formulation of a corrective action plan, the permittee shall complete liner repairs.

6. Within 75 days of AL #1 exceedance (if repairs were completed in Step 3), or 120 days of AL #1 exceedance (if corrective action plan was implemented per Steps 4 and 5), if no alert level exceedance is observed for 30 consecutive days, notify Groundwater Protection Value Stream and document assessment and/or repairs in the log book.

7. Within 120 days of AL #1 exceedance (if repairs were completed in Step 3), or 165 days of AL #1 exceedance (if corrective action plan was implemented per Steps 4 and 5), if 30 consecutive days without an AL #1 exceedance is not achieved, notify Groundwater Protection Value Stream and reassess the entire liner system and complete any necessary repairs as described in Steps 2 and 3 (and if necessary Steps 4 and 5 also). Repeat the assessment and liner repair cycle until requirements of Step No. 6 are attained.

8. A liner leakage assessment and repair report shall be included in the next annual report described in Section 2.7.4.1 (Annual Reporting) of this permit. The permittee may also submit the liner leakage assessment report to the ADEQ prior to the annual report due date. This liner leakage assessment and repair report shall be submitted to Groundwater Protection Value Stream. Upon review of the report, ADEQ may require that the permittee take additional corrective actions to address the problems identified from the assessment of the liner and perform other applicable repair procedures.

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

If the Liner Leakage Discharge Limit (AL #2) specified in Section 4.2, Table 6: WASTEWATER CONTAINMENT STRUCTURE MONITORING has been exceeded, the permittee shall:

1. As soon as practicable, cease all discharge to the impoundment, implement control measures to prevent new solution buildup that may subsequently report to the impoundment, and immediately notify Groundwater Protection Value Stream of the AL #2 exceedance.

2. Within 15 days of initial AL #2 exceedance, perform a visual inspection of the liner above the solution level to identify the location of the leak(s). The permittee shall complete liner repairs and discharge to the impoundment shall not be re-initiated until the leak(s) have been identified and repaired.

3. Within 60 days of initial AL #2 exceedance if leaks were found and fixed and if no AL #2 exceedance is observed for 30 consecutive days, submit a liner leakage assessment and repair report to ADEQ. The report shall include the results of the initial liner evaluation, methods used to locate the leak(s), repair procedures and quality assurance/quality control implemented to restore the liner to optimal operational status, and other information necessary to ensure the future occurrence of the incidence will be minimized.

4. Within 30 days of initial AL #2 exceedance if the visual inspection does not identify the location of leaks and AL #2 exceedance continues, formulate a corrective action plan to determine their location and repair them. The corrective action plan will take into account the schedule for a 3rd party contractor to perform electronic leak detection or other methods if required.

5. Within 75 days of initial AL #2 exceedance and following formulation of a corrective action plan, the permittee shall complete liner repairs

6. Within 105 days of AL #2 exceedance and implementation of the corrective action plan per Steps 4 and 5, if no AL #2 exceedance is observed for 30 consecutive days, notify Groundwater Protection Value Stream and document assessment and/or repairs in the log book.

7. Within 105 days of initial AL #2 exceedance, (if repairs were completed in Step 3), or 150 days of AL #2 exceedance (if corrective action plan was implemented per Steps 4, 5, and 6) if 30 consecutive days without an AL #2 exceedance is not achieved, repeat Steps 1 through 7 until AL #2 is not exceeded for 30 consecutive days. When the Steps 1 through 7 are repeated, the notification date is reset. Discharge to the impoundment shall not be re-initiated until the leak(s) have been identified and repaired.

8. Liner leakage assessment and repair reports required by Section 2.6.2.2, shall be referenced in the next annual report described in Section 2.7.4.1 (Annual Reporting) of this permit.

2.6.3. Discharge Limit Violation

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

In the event of overtopping, liner failure, containment structure failure, or unexpected loss of fluid 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 9: LEAKAGE COLLECTION AND REMOVAL SYSTEM MONITORING 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. Overtopping of a Surface Impoundment

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

1. As soon as practicable, cease all discharges to the surface impoundment to prevent any further releases to the environment.

2. Within 24 hours of discovery, notify Groundwater Protection Value Stream.

3. Within 24 hours, collect representative samples of the fluid contained in the surface impoundment. Samples shall be analyzed for the parameters specified in Section 4.2, Table 9: LEAKAGE COLLECTION AND REMOVAL SYSTEM MONITORING. Within 30 days of the incident, submit a copy of the analytical results to Groundwater Protection Value Stream.

4. As soon as practicable, remove and properly dispose of excess water in the impoundment until the water level is restored at or below the appropriate freeboard as described in Section 4.2, Table 6: WASTEWATER CONTAINMENT STRUCTURE MONITORING. Record in the facility log/recordkeeping file the amount of fluid released, a description of the removal method and volume of any fluid removed from the impoundment and/or captured from the release area. The facility log/recordkeeping file shall be maintained according to Section 2.7.2 (Operation Inspection/Logbook/Recordkeeping File).

5. Within 30 days of discovery, evaluate the cause of the overtopping and identify the circumstances that resulted in the incident. Implement corrective actions and adjust operational conditions as necessary to resolve the problems identified in the evaluation. Repair any systems as necessary to prevent future occurrences of overtopping.

6. Within 30 days of discovery of overtopping, submit a report to ADEQ as specified in Section 2.7.3(2) (Permit Violation and Alert Level Status Reporting). Include a description of the actions performed in Subsections 1 through 5 listed above. Upon review of the report, ADEQ may request additional monitoring or remedial actions.

7. Within 60 days of discovery, and based on sampling in Item No. 3 above, conduct an assessment of the impacts to the subsoil and/or groundwater resulting from the incident.

8. If soil or groundwater is impacted such that it could cause or contribute to an exceedance of an AQL at the applicable point of compliance, submit to ADEQ for approval, a corrective action plan to address such impacts, including identification of remedial actions and/or monitoring, and a schedule for completion of activities. At the direction of ADEQ, the permittee shall implement the approved plan.

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

2.6.3.3. Inflows of Unexpected Materials to a Surface Impoundment

The types of materials that are expected to be placed in the permitted surface impoundments are specified in Section 2.3 (Discharge Limitations). If any unexpected materials flow to a permitted surface impoundment, the permittee shall:

1. As soon as practicable, cease all unexpected inflows to the surface impoundment(s).

2. Within 24-hours of discovery, notify Groundwater Protection Value Stream.

3. Within five (5) days of the incident, identify the source of the material and determine the cause for the inflow. Characterize the unexpected material and contents of the affected impoundment, and evaluate the volume and concentration of the material to determine if it is compatible with the surface impoundment liner. Based on the evaluation of the incident, repair any systems or equipment and/or adjust operations, as necessary to prevent future occurrences of inflows of unexpected materials.

4. Within 30 days of an inflow of unexpected materials, submit a report to ADEQ as specified in Section 2.7.3(2) (Permit Violation and Alert Level Status Reporting). Include a description of the actions performed in Subsections 1 through 3 listed above.

5. Upon review of the report, ADEQ may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions, or other actions including remediation.

2.6.4. Aquifer Quality Limit Exceedances

Not applicable to this permit at the time of issuance.

2.6.5. Emergency Response and Contingency Requirements for Unauthorized Discharges

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

2.6.5.1. Duty to Respond

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

2.6.5.2. Discharge of Hazardous Substances or Toxic Pollutants

In the event of any unauthorized discharge pursuant to A.R.S. § 49-201(12) of suspected hazardous substances (A.R.S. § 49-201(19)) or toxic pollutants (A.R.S. § 49-243(I)) on the facility site, the permittee shall promptly isolate the area and attempt to identify the discharged material. The permittee shall record information, including name, nature of exposure and follow-up medical treatment, if necessary, on persons who may have been exposed during the incident. The permittee shall notify the Groundwater Protection 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 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

Not applicable.

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 6: WASTEWATER CONTAINMENT STRUCTURE MONITORING in the facility log book as per Section 2.7.2.

2.7.4.1. Annual Report

If an Alert Level #1 has been exceeded discussed in Section 2.6.2.4, the permittee shall submit an annual report that summarizes the results of the liner assessment. The Liner Leakage Assessment Report shall also include information including but not limited to the following: number and location of holes identified; and a table summarizing alert level exceedances including the frequency and quantity of fluid removed, and corrective actions taken.

2.7.5. Reporting Location

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
1110 West Washington Street
Phoenix, Arizona 85007
Phone (602) 771-4571

2.7.6. Reporting Deadline

Table 3: ANNUAL REPORTING DEADLINE	
Monitoring Conducted:	**Report Due By:**
Annual: January – December	January 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)]

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

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

2.9. Closure

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

For a facility addressed under this permit, the permittee shall give written notice of closure to the Groundwater Protection Value Stream of the intent to cease operation without resuming activity for which the facility was designed or operated.

2.9.1. Closure Plan

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

If results of the implemented closure plan achieves clean-closure, ADEQ will 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(30) and Title 49, Chapter 2, Article 3;
4. Further action is necessary to meet property use restrictions.

2.10. Post-Closure

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

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

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

2.10.1. Post-Closure Plan

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

2.10.2. Post-Closure Completion

Not required at the time of permit issuance.

3.0 COMPLIANCE SCHEDULE

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

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

NOTE: Arizona law requires that engineering and geological documents such as cost estimates, drawings, specifications, maps, plans, and reports be signed and sealed by an Arizona registered professional engineer or an Arizona registered geologist, pursuant to the Arizona Board of Technical Registration statutes, unless a statutory exclusion or exemption applies. See A.R.S. § 32-101 to -152; A.A.C. R4-30-101 to -306.

Table 4: COMPLIANCE SCHEDULE ITEMS			
No.	**Description**	**Due By:**	**Permit Amendment Required?**
1	The permittee shall submit a demonstration that the financial assurance mechanism listed in Section 2.1, Financial Capability, is being maintained as per A.R.S. 49-243.N.4 and A.A.C. R18-9-A203(H) for all estimated closure and post-closure costs including updated costs submitted under Section 3.0, No. 2 below. The demonstration shall include a statement that the closure and post-closure strategy has not changed, the discharging facilities listed in the permit have not been altered in a manner that would affect the closure and post-closure costs, and discharging facilities have not been added. **NOTE:** When submitting the closure and post-closure costs (CSI #2) the permittee may provide a statement for the type of mechanism they intended provide. The financial assurance mechanism, may then be submitted following ADEQ's approval of the closure and post-closure costs.	February 1, 2029 and every 6 years thereafter	No
2	The permittee shall submit updated cost estimates for facility closure and post-closure, as per A.A.C. R18-9-A201(B)(5) and A.R.S. 49-243.N.2.a. NOTE: When submitting the closure and post-closure costs the permittee may provide a statement for the type of mechanism they intended provide (CSI #1). The financial assurance mechanism, may then be submitted following ADEQ's approval of the closure and post-closure costs.	February 1, 2029 and every 6 years thereafter	Yes
3	Submit financial capability demonstration relating to the Phase 2 Pond Expansion for the approved closure and post-closure amount of $4,728,023 and $ 1,072,936 respectively, for a total of $5,800,959. The total cost shall be updated using the inflation factor published on the ADEQ website at https://azdeq.gov/node/542	180 days prior to construction	Yes
4	Notify Groundwater Protection Value Stream prior to construction of Phase 2 Evaporation Pond.	90 days prior to initiation of construction	No
5	Notification to Install an Evaporation Enhancement System in the Evaporation Ponds	90 days prior to initiation of construction	Yes, minor amendment

6	Final Construction Report and QA/QC documentation, including final design or as-built plans. These should confirm that the facility was constructed in accordance with the design report, engineering plans and specifications submitted in the application for this permit.	Submit within 60 days of completion of construction of the ponds and LCRS.	No
7	Discharge Characterization	Collect a representative sample within 60 days of the start of operation of the second generating unit. Submit laboratory report to ADEQ within 60 days of the date of sample collection.	No
8	Material Safety Data Sheets (MSDSs)	Submit within 60 days of the start of plant operations.	No
9	Final Report for Aerators Installation	Within 60 days of completion of the installation	No

4.0 TABLES OF MONITORING REQUIREMENTS

BADCT Table, Piezometer Monitoring Table, LCRS Monitoring Table, etc.

4.1. PERMITTED FACILITIES AND BADCT

Table 5: PERMITTED FACILITIES AND BADCT

Facility Name and BADCT
Ponds
Contingency Pond: The contingency pond shall be constructed in accordance with ADEQ approved plans, dated September 14, 2001, containing the following design: The subgrade shall consist of a minimum of six inches of native or natural materials compacted to 95 percent maximum dry density (Standard Proctor). The lower composite liner shall be a single 60-mil High Density Polyethylene (HDPE) flexible membrane liner over six inches of 3/8-inch minus native or natural materials compacted to achieve a demonstrated saturated hydraulic conductivity no greater than 10-6 cm/sec using ASTM standards. The upper flexible membrane liner shall be composed of a single 60-mil HDPE liner and shall be ultraviolet resistant for all areas exposed to sunlight. The liner system shall be protected from wind damage by placement of a sand layer or sand snakes (tubes filled with sand) on the upper liner to prevent the liner from being lifted in high winds. Fencing shall be installed around the pond for protection from windblown debris or unauthorized entry. The lower and upper HDPE liners shall be separated by a LCRS consisting of a drainage layer of HDPE geonet and perforated piping. The drainage layer shall achieve a hydraulic conductivity of 10-2 cm/sec or greater and shall be placed at a minimum slope of 3 percent slope to promote drainage to the collection sump. The sump will have a capacity of approximately 4,672 cubic feet (34,947 gallons) in size, and will be used for solution extraction and leakage monitoring. The sump shall be equipped with a pump with sufficient capacity to re-circulate fluids and maintain flow in the LCRS to prevent sump overflow. All materials used in the construction of the impoundments shall be chemically compatible with the solutions discharged into them. The terminating edge of All liner components shall be secured by an engineered trench. **Evaporation Pond (Phase 1 and 2):** The evaporation ponds shall be constructed in accordance with ADEQ approved plans, dated September 18, 2022, containing the following design: The subgrade shall consist of a minimum of 12 inches of native or natural materials compacted to 95 percent maximum dry density (Standard Proctor). The lower composite liner shall be a single 60-mil High Density Polyethylene (HDPE) flexible membrane liner over a geosynthetic clay liner with a hydraulic conductivity no greater than 10-6 cm/sec using ASTM standards. NOTE: The proposed alternative to the composite liner system (lower liner) described in the APP Application, contemplates the incorporation of a material called MicroDrain® Integrated Drainage System (IDS). The MicroDrain® IDS material is a proprietary material manufactured by AGRU America, Inc., which consists of a 60-mil HDPE textured geomembrane base sheet that has an integrated drainage layer that consists of a grid of studs on the top side of the sheet. Product information and performance data for the MicroDrain® IDS materials were included in a technical memorandum dated February 2, 2023. The upper flexible membrane liner shall be composed of a single 60-mil HDPE liner and shall be ultraviolet resistant for all areas exposed to sunlight. The liner system shall be protected from wind damage by placement of a ballast system on the upper liner to prevent the liner from being lifted in high winds. Fencing shall be installed around the pond for protection from windblown debris or unauthorized entry. The lower and upper HDPE liners shall be separated by a LCRS consisting of a drainage layer of HDPE geonet and perforated piping. The drainage layer shall achieve a hydraulic conductivity of 10-2 cm/sec or greater and shall be placed at a minimum slope of 3 percent slope to promote drainage to the collection sump. Each of the five (5) LCRS sumps and trenches will handle an approximate volume of 880 cubic feet (6,578 gallons) , and will be used for solution extraction and leakage monitoring. The sump shall be equipped with a pump with sufficient capacity to re-circulate fluids and maintain flow in the LCRS to prevent sump overflow. All materials used in the construction of the impoundments shall be chemically compatible with the solutions discharged into them. The terminating edge of all liner components shall be secured by an engineered trench.

4.2. COMPLIANCE OR OPERATIONAL MONITORING

Table 6: WASTEWATER CONTAINMENT STRUCTURE MONITORING			
The permittee shall record the inspection performance levels in a log book as per Section 2.7.2, and report any violations or exceedances as per Section 2.7.3. In the case of an exceedance, identify which structure exceeds the performance level in the log book.			
Parameter	**Performance Alert Level**	**Inspection Frequency**	**Reporting Frequency**
Contingency Pond Freeboard	Minimum of 12 inches	Daily while the pond is "in use". (as defined in Section 2.5.2.1).	Quarterly and as otherwise required by Section 2.7.3
Evaporation Ponds Freeboard	Minimum of 24 inches	Daily while the pond is "in use". (as defined in Section 2.5.2.1).	Quarterly and as otherwise required by Section 2.7.3
Pond - Fluid Level	No unexpected or sudden loss	Daily while the pond is "in use". After a significant storm or other natural disaster, regardless of operating status.	Annually and as otherwise required by Section 2.7.3
Upper Liner Integrity	No visible tears, punctures, cracks, deformities, or other damage due to sunlight, wind, weather, debris, vegetation, animals, or other adverse conditions	Immediately prior to use of pond. Daily while pond is "in use". Monthly when pond is empty. After a significant storm or other natural disaster, regardless of operating status.	Quarterly and as otherwise required by Section 2.7.3
Berm Integrity	No visible structural damage, breach, erosion of embankments, or seepage	Immediately prior to use of pond. Daily while pond is "in use". Monthly when pond is empty. After a significant storm or other natural disaster, regardless of operating status.	Quarterly and as otherwise required by Section 2.7.3
Leak Collection and Removal System (LCRS)	No obstruction in the inspection sump, fluid level maintained blow sump capacity, pump(s) maintained in good operational condition	Immediately prior to use of pond. Daily while pond is "in use". Monthly when pond is empty. After a significant storm or other natural disaster, regardless of operating status.	Quarterly and as otherwise required by Section 2.7.3
Flow Meter, Solution-Level Sensor, Chart Recorder, or other measuring device	Maintained for operational conditions	Immediately prior to use of pond. Daily while pond is "in use". Monthly when pond is empty.	Quarterly and as otherwise required by Section 2.7.3

Table 7: LEAKAGE COLLECTION AND REMOVAL SYSTEM IDENTIFICATION		
Sump Identification	**Latitude**	**Longitude**
Contingency Pond LCRS	33° 28' 26" North	113° 06' 56" West
Phase 1 Evaporation Pond A West LCRS Sump	33° 28' 23" North	113° 07' 03" West
Phase 1 Evaporation Pond A East LCRS Sump	33° 28' 23" North	113° 06' 59" West
Phase 1 Evaporation Pond B LCRS Sump	33° 28' 23" North	113° 06' 53" West
Phase 1 Evaporation Pond C West LCRS Sump	33° 28' 23" North	113° 06' 48" West
Phase 1 Evaporation Pond C East LCRS Sump	33° 28' 23" North	113° 06' 44" West
Phase 2 North Evaporation Pond Western Pond Segment, West LCRS Sump	33° 28' 43" North	113° 07' 33" West
Phase 2 North Evaporation Pond Western Pond Segment, East LCRS Sump	33° 28' 43" North	113° 07' 29" West
Phase 2 North Evaporation Pond Central Pond Segment LCRS Sump	33° 28' 43" North	113° 07' 23" West
Phase 2 North Evaporation Pond Eastern Pond Segment, West LCRS Sump	33° 28' 43" North	113° 07' 18" West
Phase 2 North Evaporation Pond Eastern Pond Segment, East LCRS Sump	33° 28' 43" North	113° 07' 14" West
Phase 2 South Evaporation Pond Western Pond Segment, West LCRS Sump	33° 28' 33" North	113° 07' 33" West
Phase 2 South Evaporation Pond Western Pond Segment, East LCRS Sump	33° 28' 33" North	113° 07' 29" West
Phase 2 South Evaporation Pond Central Pond Segment LCRS Sump	33° 28' 33" North	113° 07' 23" West
Phase 2 South Evaporation Pond Eastern Pond Segment, West LCRS Sump	33° 28' 33" North	113° 07' 18" West
Phase 2 South Evaporation Pond Eastern Pond Segment, East LCRS Sump	33° 28' 33" North	113° 07' 14" West

Table 8: LEAKAGE COLLECTION AND REMOVAL SYSTEM ALERT LEVELS AND MONITORING						
LCRS Sump	**Parameter**	**AL 1 gpd[1]**	**AL 2 gpd[2]**	**Monitoring Method**	**Monitoring Frequency[3]**	**Reporting Frequency**
Contingency Pond	Liquid Pumped[4]	745	24,023	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Phase 1 Evaporation Ponds						
Evaporation Pond A – West LCRS Sump	Liquid Pumped	5,981	59,810	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Evaporation Pond A – East LCRS Sump	Liquid Pumped	5,981	59,810	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Evaporation Pond B LCRS Sump	Liquid Pumped	9,003	90,026	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Evaporation Pond C – West LCRS Sump	Liquid Pumped	5,981	59,810	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Evaporation Pond C – East LCRS Sump	Liquid Pumped	5,981	59,810	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Proposed Phase 2 Evaporation Ponds (approximations only)						
Phase 2 North Evaporation Pond Western Pond Segment, West LCRS Sump	Liquid Pumped	5,981	59,810	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Phase 2 North Evaporation Pond Western Pond Segment, East LCRS Sump	Liquid Pumped	5,981	59,810	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Phase 2 North Evaporation Pond Central Pond Segment LCRS Sump	Liquid Pumped	9,003	90,026	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Phase 2 North Evaporation Pond Eastern Pond Segment, West LCRS Sump	Liquid Pumped	5,981	59,810	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Phase 2 North Evaporation Pond Eastern Pond Segment, East LCRS Sump	Liquid Pumped	5,981	59,810	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Phase 2 South Evaporation Pond Western Pond Segment, West LCRS Sump	Liquid Pumped	5,981	59,810	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Phase 2 South Evaporation Pond Western Pond Segment, East LCRS Sump	Liquid Pumped	5,981	59,810	Manual	Daily	As required per Section 2.7.3 and 2.7.4

Phase 2 South Evaporation Pond Central Pond Segment LCRS Sump	Liquid Pumped	9,003	90,026	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Phase 2 South Evaporation Pond Eastern Pond Segment, West LCRS Sump	Liquid Pumped	5,981	59,810	Manual	Daily	As required per Section 2.7.3 and 2.7.4
Phase 2 South Evaporation Pond Eastern Pond Segment, East LCRS Sump	Liquid Pumped	5,981	59,810	Manual	Daily	As required per Section 2.7.3 and 2.7.4

[1] AL 1 is the daily threshold value at which the permittee shall place into action the appropriate requirements specified in Section 2.6.2.2 (Exceeding of ALs for LCRS Monitoring/Operation).

[2] AL 2 is the daily threshold value at which the permittee shall place into action the appropriate requirements specified in Section 2.6.2.2 (Exceeding of ALs for LCRS Monitoring/Operation).

[3] LCRS inspection and leakage quantification shall be performed daily while the pond is "in use" (when industrial wastewater is present in the contingency pond and/or LCRS). Evacuation of fluids in the sump shall be performed as necessary for accurate monitoring and effective operation of the collection system. Routine analysis of sump fluids is not required. However, characterization of sump fluids is required as a contingency action in Section 2.6.

[4] The "Liquid Pumped" value to be reported as the amount of liquid pumped from the LCRS sump in gallons per day (gpd).

Table 9: LEAKAGE COLLECTION AND REMOVAL SYSTEM MONITORING		
LCRS Monitoring (Fluid Analysis) is required as a contingency action as described in Section 2.7.2. Samples shall be collected from the LCRS and the pond at the same time to allow for direct comparison.		
Parameter[5]	**Inspection Frequency[6]**	**Reporting Frequency[7]**
pH	See Footnote 6	See Footnote 7
Alkalinity	See Footnote 6	See Footnote 7
Total Dissolved Solids (TDS)	See Footnote 6	See Footnote 7
Total Nitrogen[8]	See Footnote 6	See Footnote 7
Calcium	See Footnote 6	See Footnote 7
Chloride	See Footnote 6	See Footnote 7
Fluoride	See Footnote 6	See Footnote 7
Magnesium	See Footnote 6	See Footnote 7
Potassium	See Footnote 6	See Footnote 7
Sodium	See Footnote 6	See Footnote 7
Sulfate	See Footnote 6	See Footnote 7
Antimony	See Footnote 6	See Footnote 7
Arsenic	See Footnote 6	See Footnote 7
Barium	See Footnote 6	See Footnote 7
Beryllium	See Footnote 6	See Footnote 7
Boron	See Footnote 6	See Footnote 7
Cadmium	See Footnote 6	See Footnote 7
Chromium	See Footnote 6	See Footnote 7
Lead	See Footnote 6	See Footnote 7
Mercury	See Footnote 6	See Footnote 7
Nickel	See Footnote 6	See Footnote 7
Selenium	See Footnote 6	See Footnote 7
Thallium	See Footnote 6	See Footnote 7
Zinc	See Footnote 6	See Footnote 7
Total Petroleum Hydrocarbons (TPH)	See Footnote 6	See Footnote 7
Volatile Organic Compounds[9]		
Semi-Volatile Organic Compounds[10]		
Radionuclides[11]		

[5] Metals shall be analyzed for total metal concentration.
[6] Refer to Section 2.6.2.4 for Exceeding of Alert Levels for LCRS Monitoring/Operation.
[7] Refer to Section 2.6.5.4 and Section 2.7 for Reporting and Recordkeeping requirements.
[8] Total nitrogen includes nitrates + nitrites + total Kjeldahl nitrogen (TKN).
[9] If any constituent in a group of these compounds (VOCs) were detected in the representative sample for initial discharge characterization, analysis of this group of compounds is required
[10] If any constituent in a group of these compounds (semi-VOCs) were detected in the representative sample for initial discharge characterization, analysis of this group of compounds is required.
[11] If any constituent in a group of these compounds (radionuclides) were detected in the representative sample for initial discharge characterization, analysis of this group of compounds is required.

Table 10: PERFORMANCE LEVELS FOR OPERATION OF THE OIL/WATER SEPARATOR				
Parameter	**Performance Level**	**Monitoring Method**	**Monitoring Frequency**	**Reporting Frequency**
Oil/Water Separator Integrity	No Damage or Leakage	Observation	Quarterly	Quarterly and as otherwise required by Section 2.7
Sediment Removal	Sludge accumulation shall not impede effective operation	Observation	Quarterly	Quarterly and as otherwise required by Section 2.7
Oil/Water Separator effluent	No oil sheen or petroleum odor	Observation	Quarterly	Quarterly and as otherwise required by Section 2.7
All Piping, pumps, valves, controls and gauges as applicable	Documented to be in proper working order	Observation	Quarterly	Quarterly and as otherwise required by Section 2.7

Table 11: CONTINGENCY GROUNDWATER MONITORING					
Parameter[12]	**AL**[13]	**AQL**[14]	**Units**	**Sampling Frequency**	**Reporting Frequency**
Depth to water Level – high	0.0	Monitor[15]	ft[16]	Quarterly	Quarterly
Depth to water Level – low	57.0	Monitor	ft	Quarterly	Quarterly
Water Level Elevation	Monitor	Monitor	ft	Quarterly	Quarterly
Temperature – field	Monitor	Monitor	°F[17]	Quarterly	Quarterly
pH – field & lab	Monitor	Monitor	SU[18]	Quarterly	Quarterly
Specific Conductance	Monitor	Monitor	µmhos/cm[19]	Quarterly	Quarterly
Total Dissolved Solids (TDS)	Reserved[20]	Monitor	mg/l[21]	Quarterly	Quarterly
Alkalinity	Monitor	Monitor	meq/l[22]	Quarterly	Quarterly
Sulfate	531	Monitor	mg/l	Quarterly	Quarterly
Chloride	Monitor	Monitor	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	mg/l	Quarterly	Quarterly
Nitrate-Nitrite (as N)	8.0	10.0	mg/l	Quarterly	Quarterly
Calcium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Magnesium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Potassium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Sodium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Iron	Monitor	Monitor	mg/l	Quarterly	Quarterly
Aluminum	Monitor	Monitor	mg/l	Quarterly	Quarterly
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.6	2.0	mg/l	Quarterly	Quarterly
Beryllium	Reserved	Reserved	mg/l	Quarterly	Quarterly

[12] Metals shall be analyzed as dissolved metals

[13] AL = Alert Level

[14] AQL = Aquifer Quality Limits

[15] Monitoring required, but no limits have been established

[16] ft = feet

[17] °F = degrees Fahrenheit

[18] SU = standard unit

[19] µmhos/cm = micro omhos per centimeter

[20] Reserved = To be determined by ambient groundwater sampling per the compliance schedule

[21] mg/l = milligrams per liter

[22] meq/l = milliequivelents per liter

Table 11: CONTINGENCY GROUNDWATER MONITORING (continued)					
Parameter[12]	**AL[13]**	**AQL[14]**	**Units**	**Sampling Frequency**	**Reporting Frequency**
Cadmium	Monitor	0.0083	mg/l	Quarterly	Quarterly
Chromium	Reserved	Reserved	mg/l	Quarterly	Quarterly
Cobalt	Reserved	Monitor	mg/l	Quarterly	Quarterly
Copper	0.0356	Monitor	mg/l	Quarterly	Quarterly
Lead	0.04	0.05	mg/l	Quarterly	Quarterly
Manganese	Monitor	Monitor	mg/l	Quarterly	Quarterly
Mercury	Reserved	Reserved	mg/l	Quarterly	Quarterly
Nickel	0.08	0.1	mg/l	Quarterly	Quarterly
Selenium	0.04	0.05	mg/l	Quarterly	Quarterly
Thallium	Reserved	Reserved	mg/l	Quarterly	Quarterly
Zinc	Monitor	Monitor	mg/l	Quarterly	Quarterly
Gross Alpha Particle Activity	12	15	PCi/l[23]	Quarterly	Quarterly
Radium 226 & Radium 228 combined	4	5	PCi/l	Quarterly	Quarterly
Uranium	Monitor[24]	Monitor	PCi/l[25]	Quarterly	Quarterly
Total Petroleum Hydrocarbons (TPH)	12	Monitor	mg/l[26]	Quarterly	Quarterly
Benzene	0.004	0.005	mg/l	Quarterly	Quarterly
Toluene	0.8	1.0	mg/l	Quarterly	Quarterly
Ethylbenzene	0.56	0.7	mg/l	Quarterly	Quarterly
Total Xylenes	8	10	mg/l	Quarterly	Quarterly

[23] PCi/l = Picocuries per liter

[24] Monitoring required, but no limits have been established

[25] PCi/l = Picocuries per liter

[26] mg/l = milligrams per liter

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:	September 30, 2022
Contingency plan, dated	October 1, 2021
Public Notice, dated:	Not applicable

6.0 NOTIFICATION PROVISIONS

6.1. 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.

6.2. 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.

6.3. 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.

6.4. 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.

6.5. 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.

6.6. 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.

6.7. Inspection and Entry

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

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

6.8. 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.

6.9. 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).