

STATE OF ARIZONA  
AQUIFER PROTECTION PERMIT 101275  
PLACE ID 1353, LTF 61725  
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 ME Global Inc. to operate the ME Global Inc, Leach Field System located at 5857 South Kyrene Road located in a County island within the City of Tempe, Maricopa County, Arizona, over groundwater of the East Salt River Sub-basin of the Phoenix Active Management Area, in Section 3, Township 1 South, Range 4 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:** ME Global Leach Field System  
**Facility Address:** 5857 South Kyrene Road  
Tempe, Arizona 85283  
**County:** Maricopa

**Permittee:** ME Global Inc.  
**Permittee Address:** 5857 South Kyrene Road  
Tempe, Arizona 85283

**Permitted Flow Rate:** 10,000 gallons per day (gpd)

**Facility Contact:** Engineering and Maintenance Manager  
**Emergency Phone No.:** (480) 730-7545

**Latitude/Longitude:** 33° 22' 17.56" North / 111° 56' 24.72" West  
**Legal Description:** Township 1 South, Range 4 East, Section 3, Gila and Salt River Base Line and Meridian, Maricopa County, Arizona

## 1.2 AUTHORIZING SIGNATURE

\_\_\_\_\_  
**Trevor Baggione, Director**  
Water Quality Division  
Arizona Department of Environmental Quality  
Signed this \_\_\_\_ day of \_\_\_\_\_, 2016

**THIS AMENDED PERMIT SUPERCEDES ALL PREVIOUS PERMITS**

**2.0 SPECIFIC CONDITIONS [ARS §§ 49-203(4) & 49-241(A)]**

**2.1 Facility/Site Description [ARS § 49-243(K)(8)]**

ME Global, Inc. is a secondary iron and steel foundry that produces castings used primarily by the mining industry for both wear-resistant and structural applications. The permittee is authorized to discharge 10,000 gallons per day (gpd) of cooling tower blowdown water from 7 non-contact cooling towers (CT#3 through CT#8, and CT#11) through leach lines designated as the ME Global Leach Field System (LFS). The cooling towers use water from the City of Tempe water and on-site water supply well to cool processes such as furnaces, carbon units, sand coolers, and air compressors in the foundry’s production process via heat exchange. Chemical additives are added to the water to control scaling, bacterial, and algal buildup.

This amendment was submitted to:

- Remove the East Septic System Leach Field (ESSLF), consisting of a 6,074 gallon septic tank, a concrete distribution box, and a PVC distribution line that leads to four brick lined seepage pits and has a working capacity of approximately 3,471 gpd. This system shall be issued a Maricopa County Type IV General Permit for typical sewage from bathrooms.
- Add the new 10,000 gpd LFS.

The site includes the following permitted discharging facility:

Facility	Latitude (North)	Longitude (West)
Leach Field	33° 22' 22.92" N	111° 56' 33.56" W

**Annual Registration Fee [ARS § 49-242(D) 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 10,000 gpd. The permittee shall notify ADEQ of any change in the facility contact information according to Section 2.7.6.

**Financial Capability [ARS § 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 /post closure cost, is \$59,928.00.

**2.2 Best Available Demonstrated Control Technology [ARS § 49-243(B) and A.A.C. R18-9-A202(A)(5)]**

The LFS has a maximum capacity of approximately 10,000 gpd. All current and new chemicals used in the treatment of cooling tower water shall be restricted to only chemicals that do not contain hazardous constituents per A.R.S. 49-201(18) based on the information provided in the MSDSs and shall be accepted for use by the water treatment industry as common industry practice. The disposal system has been designed, and shall be constructed according to ADEQ approved plans. The quality of the discharge eliminates the need for treatment of the cooling tower blowdown water by continuously monitoring discharge quality for specific conductivity (SC), automatically ceasing discharges based on a SC discharge quality alert limit, performing contingency sampling (if necessary), and performing periodic sampling of the discharge and sampling of groundwater at the point of compliance.

**2.2.1. Engineering Design**

The facility was designed per the design report and construction plans prepared, dated and signed (sealed) by Tyson L. Glock, Professional Engineer, of Sunrise Engineering, on April 24, 2015.

**2.2.1.1 Leach Field Disposal System**

The LFS includes a cistern, lift station, distribution box, and four separate distribution lines off of the box leading to four separate subfields.

**2.2.2 Site-specific Characteristics**

Site-specific characteristics were not used to demonstrate compliance with BADCT.

**2.2.3 Pre-Operational Requirements**

Initial Discharge Monitoring per Section 2.5.1.1 and Section 4.1, Tables I-1 and I-2 are required for startup of the new system.

**2.2.4 Operational Requirements**

**2.2.4.1 Description of Discharge Operation**

The seven cooling towers (CT3, CT4, CT5, CT6, CT7, CT8, and CT11) use water from the City of Tempe and on-site water supply well to cool processes such as furnaces, carbon units, sand coolers, and air compressors in the foundry’s production process via heat exchange. The quantity of blowdown water discharged depends on the City of Tempe water quality, ambient temperature, the production rate of the plant, and the number of cooling tower blowdown cycles. The permittee shall control discharge quality to prevent cooling tower blowdown water from being discharged to the aquifer above the Arizona Aquifer Water Quality Standards, thereby eliminating the need for treatment. Discharge will be controlled by continuously monitoring discharge quality for SC, automatically ceasing discharge based on a SC discharge quality alert limit, , and performing periodic sampling of the discharge and sampling of groundwater at the point of compliance.

**2.3 Discharge Limitations [ARS §§ 49-201(12), 49-201(14), & 49-243 and A.A.C. R18-9-A205(B)]**

**2.3.1 Leach Field System**

Authorized discharge shall not exceed 10,000 gpd.

**2.3.1.1 Authorized and Unauthorized Materials**

Authorized discharges to the LFS shall consist of non-contact cooling tower blowdown water received from The seven cooling towers (CT3, CT4, CT5, CT6, CT7, CT8, and CT11) which use water from the City of Tempe and on-site water supply well Discharges to the LFS shall not contain any organic solvents or hazardous substances (A.R.S. § 49-201(19)) that are not associated with aforementioned routine operations and the authorized waste streams. ADEQ has reviewed the Material Safety Data Sheets (MSDSs) for the chemicals used in the treatment of cooling tower water and has determined that they do not contain hazardous constituents per A.R.S. 49-201(18). Any new chemicals used in the treatment of cooling tower water shall be restricted to only chemicals that do not contain hazardous constituents per A.R.S. 49-201(18) based on the information provided in the MSDSs and shall be accepted for use by the water treatment industry as common industry practice.

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 Limit Violations) and 2.6.5 (Emergency Response and Contingency Requirements for Spills and Unauthorized Discharges).

**2.3.1.2 Maintenance**

The permittee shall maintain the LFS to ensure that there are no accidental spills, or other unauthorized discharges into the environment.

**2.4 Points of Compliance [ARS § 49-244]**

The Point of Compliance (POC) is established at the following well location:

POC	Locations	Latitude	Longitude
1	Located approximately 100 feet South and downgradient of the leach field area	32° 22' 20.925" N	111° 56' 53.966" W

Groundwater monitoring is required. The Director may amend this permit to designate additional points of compliance if information on groundwater gradients or groundwater usage indicates the need.

**2.5 Monitoring Requirements [ARS § 49-243(K)(1) and A.A.C. R18-9-A206(A)]**

All monitoring required in this permit shall continue for the duration of the permit, regardless of the status of the facility. 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 Initial Discharge Monitoring**

Permittee shall monitor the discharge weekly for 12 weeks, according to Section 4.1 Table I-1, followed by monthly monitoring for one quarter according to Section 4.1 Table I-2. Within 30 days of completing the 12 week test the permittee shall submit a report that shall include the monitoring results of the parameters listed in Section 4.1, Table I-1 and the correlation between the SC and total dissolved solids (TDS), and a proposed SC alert level. Within 30 days of completion of the monthly monitoring, the permittee shall submit a report that shall include the monitoring results of the parameters listed in Section 4.1 Table I-2.

### **2.5.1.2 Routine Discharge Quality Monitoring**

Upon completion of the initial discharge monitoring, the Permittee shall monitor the discharge according to Section 4.2 Tables IA-1 and IA-2.

## **2.5.2. Facility / Operational Monitoring**

The permittee shall maintain and inspect the facility according to Section 4.2, Table III. Results of the inspections shall be recorded in the facility log book and maintained according to Section 2.7.2 (Operation Inspection/Log Book Recordkeeping).

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

The permittee shall conduct both ambient and routine groundwater monitoring for this permit. Ambient groundwater monitoring shall be performed in accordance with Section 2.5.3.1 and routine groundwater monitoring shall be performed in accordance with Section 2.5.3.2.

### **2.5.3.1 Ambient Groundwater Monitoring**

Eight (8) consecutive bi-weekly (or every two weeks) groundwater sampling events are required to establish ambient groundwater quality in the POC well. The ambient monitoring constituents are listed in Section 4.2 Table IIA. The permittee shall not use more than eight (8) sample rounds in the calculation. Within 30 days of the receipt of the final ambient groundwater sampling event results the permittee shall submit to the Department an amendment application, along with copies of all laboratory analytical reports, field notes, QA/QC procedures used in collection and analysis of the samples, and a report including the statistical calculations of the ALs and AQLs for parameters which have an established numeric AWQS. After four sampling events, the permittee may determine to use of the numeric AWQS as the AQL and 80% of the AWQS as the AL and discontinue ambient groundwater monitoring.

#### **2.5.3.1.1 Alert Levels for POC Wells**

For each of the monitored analytes for which a numeric aquifer water quality standard (AWQS) has been adopted, the AL shall be established as follows:

The ALs shall be established and calculated by the following formula or another valid statistical method submitted to WPS in writing and approved for this permit by the WPS:

$$AL = M + K\Phi$$

Where M = mean,  $\Phi$  = 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 (8) consecutive biweekly (or every two weeks) sample rounds. The permittee shall not use more than eight (8) sample rounds in the calculation.
2. Any data where the 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.

**2.5.3.1.2 Aquifer Quality Limits for POC Wells**

For each of the monitored analytes for which a numeric aquifer water quality standard (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.

**2.5.3.2 Routine Groundwater Monitoring**

Routine groundwater sampling will be required in the POC well upon completing the ambient groundwater sampling. The ALs/AQLs will be set in the routine groundwater sampling based on ADEQ’s evaluation and approval of the proposed ALs/AQLs submitted by the applicant according to the compliance schedule. Upon completion of the ambient groundwater sampling the permittee shall monitor constituents listed in Section 4.2 Table IIB.

**2.5.4. Surface Water Monitoring and Sampling Protocols**

Routine surface water monitoring is not required under 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 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  
1740 W. Adams Street, Room 203 North  
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 ADEQ WPS for approval prior to installation and the permit shall be amended to include any new points.

**2.6 Contingency Plan Requirements [ARS §§ 49-243(K)(3)& (7) and A.A.C. R18-9-A204& A205]****2.6.1 General Contingency Plan Requirements**

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

Any AL that is exceeded or any violation of an AQL discharge limit (DL), or other permit condition shall be reported to ADEQ following the reporting requirements in Section 2.7.3.

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. The permittee is subject to enforcement action for the failure to comply with any contingency actions in this permit. 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 has 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.

**2.6.2 Exceeding of Performance Levels and Alert Levels Set for Operational Conditions****2.6.2.1 Exceeding of Performance Levels Set for Operational Conditions**

1. If an operational performance level (PL) set in Section 4.2, Table III has been exceeded the permittee shall:
  - a. Notify the ADEQ Water Quality Compliance Section (by phone or fax, see Section 2.7.5) within five days of becoming aware of the exceedance.
  - b. Submit a written report to the ADEQ Water Quality Compliance Section within 30 days of becoming aware of the exceedance. The report shall document all of the following:
    - (1) a description of the exceedance and its cause;
    - (2) the period of the exceedance, including exact date(s) and time(s), if known, and the anticipated time period during which the exceedance is expected to continue;
    - (3) any action taken or planned to mitigate the effects of the exceedance or spill, or to eliminate or prevent recurrence of the exceedance or spill;
    - (4) any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS; and
    - (5) any malfunction or failure of pollution control devices or other equipment or process.
2. The facility is no longer on alert status once the operational indicator no longer indicates that a PL is being exceeded. The permittee shall, however, complete all tasks necessary to return the facility to its pre-alert operating condition.

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

1. If an AL set in Section 4.1, Tables I-1 and I-2 and Section 4.2, Tables IA-1 and IA-2 has been exceeded, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:
  - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the exceedance;
  - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences; and
  - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the exceedance, the permittee shall sample individual waste streams composing the wastewater for the parameters in question, if necessary to identify the cause of the exceedance.
2. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 5.0 and specific contingency measures identified in Section 2.6 to resolve any problems identified by the investigation which may have led to an AL exceedance. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6.
3. Within 30 days after an AL exceedance, the permittee shall submit the laboratory results to the ADEQ Water Quality Compliance Section, along with a summary of the findings of the investigation, the cause of the exceedance, and actions taken to resolve the problem.
4. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions or other actions.
5. If after two years of monitoring the parameters listed in Table IA-2 have not been exceeded for four consecutive Semi-annual reporting periods the permittee may request an amendment to the permit to reduce the parameters being monitored.
6. If the AL for average monthly flow in Table IA-1 has been exceeded, the permittee may submit an application for an APP amendment

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

#### **2.6.2.3.1 Alert Levels for Indicator Parameters**

Not Applicable

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

1. If an AL for a pollutant set in Section 4.2, Table IIB has been exceeded, the permittee may conduct verification sampling within 10 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 to quarterly. 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 Section, that although an AL is exceeded, pollutants are not reasonably expected to cause a violation of an AQL. The demonstration may propose a revised AL or monitoring frequency for approval in writing by the Groundwater Section.

- a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the AL being exceeded.
- b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences.
4. Within 30 days after confirmation of an AL exceedance, the permittee shall submit the laboratory results to the Water Quality Compliance Section 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 required as a result of an AL exceedance may be reduced to annually if the results of two sequential sampling events demonstrate that no parameters exceed the AL.
7. If the increased monitoring required as a result of an AL exceedance continues for more than 12 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 12th sampling event.

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

Not required under the terms of this permit.

#### **2.6.3 Discharge Limit Violations**

1. If a DL set in Section 4.2, Tables IA-1 and IA-2 has been violated, the permittee shall immediately investigate to determine the cause of the violation. The investigation shall include the following:
  - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the violation;
  - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences;
  - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the violation, the permittee shall sample individual waste streams composing the wastewater for the parameters in violation, if necessary to identify the cause of the violation.

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. 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.

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

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

1. If an AQL set in Section 4.2, Table IIB has been exceeded, the permittee may conduct verification sampling within 5 days of becoming aware of an AQL 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 that the AQL is violated for any parameter or if the permittee opts not to perform verification sampling, then the permittee shall increase the frequency of monitoring to 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.
3. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, or other actions.
4. The permittee shall notify any downstream or downgradient users who may be directly affected by the discharge.
5. The permittee shall continue to monitor at the increased frequencies until concentrations are below the AQL and AL for three consecutive months.

#### **2.6.5 Emergency Response and Contingency Requirements for Spills and Unauthorized Discharges [ARS §§ 49-201(12) & 49-241]**

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

The permittee shall act immediately to correct any condition resulting from a discharge (ARS § 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 (ARS § 49-201(12)) of suspected hazardous substances (ARS § 49-201(19)) or toxic pollutants (ARS § 49-201(37)) on the facility, the permittee shall promptly isolate the area and attempt to identify the spilled 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 ADEQ within 24 hours upon discovering the discharge of hazardous material which: a) has the potential to cause an AWQS or AQL to be exceeded; 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 (ARS § 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 facility shall be cleaned up as soon as possible. The permittee shall notify the ADEQ within 24 hours upon discovering the discharge of non hazardous material which: a) has the potential to cause an AQL to be

exceeded; or b) could pose an endangerment to public health or the environment.

#### 2.6.5.4 Reporting Requirements

The permittee shall submit a written report for any unauthorized discharges reported under Sections 2.6.5.2 and 2.6.5.3 to the ADEQ WQCS 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 that notice. Upon review of the submitted report, ADEQ may require additional monitoring or corrective actions. Any unauthorized discharge pursuant to ARS § 49-201(12) that is addressed in accordance with the contingency requirements in Section 2.6.5 will not be deemed to be a violation of this permit or of the APP statute or implementing regulations

#### 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 ADEQ Water Permits Section (WPS) prior to implementing a corrective action to accomplish any of the following goals in response to exceeding an AL or violation of an 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; or
6. Mechanical integrity of injection recovery wells.

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

### 2.7 Reporting and Recordkeeping Requirements [ARS § 49-243(K)(2) and A.A.C. R18-9-A206 (B) & A207]

#### 2.7.1 Self Monitoring Report Forms

1. The permittee shall complete the SMRFs provided by ADEQ, and submit them to the ADEQ WQCS, Data Unit.
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 quarter, the permittee shall enter "not required" on the SMRF and submit the report to ADEQ. The permittee shall use the format devised by ADEQ.
3. The tables contained in Sections 4.2 list the parameters to be monitored and the frequency for reporting results for compliance monitoring.
  - Table IA-1, for Routine Discharge Monitoring Flow
  - Table IA-2, Routine Discharge Monitoring
  - Table IIB, Routine Groundwater Monitoring
4. In addition to the SMRF, the information contained in A.A.C. R18-9-A206(B)(1) shall be included for exceeding an AL or violation of an AQL, DL, or any other permit condition being reported in the current reporting period.
  - Table I-1, 12 Week Test for Indicator Parameters (Report)
  - Table I-2, Monthly Test for Indicator Parameters (Report)
  - Table IIA, Ambient Groundwater Monitoring (Report)
  - Table III, Facility Inspection Monitoring Log Book only

**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 10 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 time inspection was conducted;
3. Condition of applicable facility components;
4. Discovery time and date of 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 ADEQ WQCS in writing within 5 days (except as provided in Section 2.6.5) of becoming aware of a violation of any permit condition, discharge limitation, or of an Alert Level being exceeded.
2. The permittee shall submit a written report to the ADEQ WQCS within 30 days of becoming aware of the violation of any permit condition or discharge limitation. 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 its 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 Aquifer Water Quality Standard;
  - 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 complete the SMRF provided by the Department to reflect facility inspection requirements designated in Section 4.2 and submit to the ADEQ Water Quality Compliance Section, Data Unit quarterly along with other reports required by this permit. Facility inspection reports shall be submitted no less frequently than quarterly, regardless of operational status.

**2.7.5 Reporting Location**

All documents other than SMRFs required by this permit to be submitted to the Water Quality Compliance Section shall be directed to:

Arizona Department of Environmental Quality  
Water Quality Compliance Section  
Mail Code: 5415B-1  
1110 W. Washington Street  
Phoenix, AZ 85007  
Phone: (602) 771-4681

All documents other than SMRFs required by this permit to be submitted to the Water Permits Section shall be directed to:

Arizona Department of Environmental Quality  
 Water Permits Section  
 Mail Code: 5415B-3  
 1110 W. Washington Street  
 Phoenix, AZ 85007  
 Phone: (602) 771-4428

All SMRFs shall be submitted to:

Arizona Department of Environmental Quality  
 Water Quality Compliance Section, Data Unit  
 Mail Code: 5415B-1  
 1110 W. Washington Street  
 Phoenix, AZ 85007  
 Phone (602) 771-4614

**2.7.6 Reporting Deadline**

The following table lists the quarterly report due dates:

<b>Monitoring conducted during quarter:</b>	<b>Quarterly Report due by:</b>
January-March	April 30
April-June	July 30
July-September	October 30
October-December	January 30

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

<b>Monitoring conducted:</b>	<b>Report due by:</b>
Semi-annual: January-June	July 30
Semi-annual: July-December	January 30

**2.7.7 Changes to Facility Information in Section 1.0**

The ADEQ WPS and WQCS shall be notified within 10 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 [ARS § 49-243(K)(8) and A.A.C. R18-9-A209(A)]**

The permittee shall give written notice to the ADEQ WQCS before ceasing operation of any facility covered by this permit for a period of 60 days or greater.

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’s 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 WQCS 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 [ARS §§ 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 ADEQ WQCS of the permittee’s 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 ADEQ WPS, a Closure Plan which meets the requirements of ARS § 49-252 and A.A.C. R18-9-A209(B)(3). If the closure plan achieves clean closure immediately, ADEQ shall issue a letter of approval to the permittee. If the closure plan contains a schedule for bringing the facility to a clean closure configuration at a future date, ADEQ may incorporate any part of the schedule as an amendment to this permit.

### **2.9.2 Closure Completion**

Upon completion of closure activities, the permittee shall give written notice to the Water Permits Section 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 aquifer water quality standards at the applicable point of compliance;
3. Continued action is required to verify that the closure design has eliminated discharge to the extent intended;
4. Remedial or mitigative measures are necessary to achieve compliance with Title 49, Ch. 2; or
5. Further action is necessary to meet property use restrictions.

### **2.10 Post-closure [ARS §§ 49-243(K)(6) & 49-252 and A.A.C. R18-9 A209(C)]**

The need for post-closure activities shall be assessed by ADEQ after the report documenting completion of closure activities has been submitted. If any condition other than clean closure is achieved by closure activities, then post closure conditions shall apply and this permit shall be amended to outline post closure requirements.

#### **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 [ARS § 49-243(K)(5) and A.A.C. R18-9-A208]**

For the compliance schedule item listed below, the permittee shall submit the required information, including a cover letter that lists the compliance schedule items, to the Groundwater Section. A copy of the cover letter must also be submitted to the ADEQ Water Quality Compliance Section.

No.	Description	Due by:	Permit Amendment Required?
3.1	POC Well Construction logs: Geologic and well construction logs shall be submitted to the WPS. The logs shall include ADWR well-registration number, and the “as-built” latitude and longitude coordinates of the well.	Within forty-five (45) days of well installation	No
3.2	Ambient Groundwater Monitoring in POC Well: The POC well shall be sampled for ambient water quality every two weeks after well installation and development until 8 events of ambient sampling data is available. Sampling shall include all constituents in the ambient Groundwater Table IIA.	Begin ambient groundwater monitoring in the first month following POC well installation.	No
3.3	Submit an amendment application, along with copies of all laboratory analytical reports, field notes, QA/QC procedures used in collection and analysis of the samples, and a report including the statistical calculations of the applicable ALs, AQLs and DLs.	Submit within 30 days of receipt of laboratory report for final ambient sample.	Yes
3.4	Compliance Groundwater Monitoring: Routine compliance groundwater monitoring as detailed in Section 4.2, Table IIB. To receive the SMRFs (Table IIB) the permittee shall notify the Water Quality Compliance Section, Data Unit.	Within 15 days of commencement of Groundwater Monitoring.	No
3.5	The permittee shall submit a closure work plan for the East Septic System (ESS). Conduct the approved closure activities following the cessation of discharge to the ESS. The ESS shall be removed from this permit and permitted under a type IV General Permit with Maricopa County.	Submit a closure work plan for the ESS within 30 days from issuance of the final APP. Conduct approved closure activities within 60 days following the cessation of discharge of cooling tower blowdown to the ESS. Submit a permit amendment application for removal of the ESS.	Yes
3.6	The permittee shall submit monitoring report that shall include sampling results for the parameters listed in Section 4.1 Table I-1 the correlation between the SC and TDS, and a proposed AL for SC.	Submit within 30 days of completion of the 12 Week Initial Discharge Monitoring.	No
3.7	The permittee shall submit monitoring report that shall include sampling results for the parameters listed in Section 4.1 Table I-2 and confirmation of the SC alert level	Submit within 30 days of completion of the Monthly Initial Discharge Monitoring	No
3.8	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, and an updated financial assurance demonstration for the updated cost estimate as per A.A.C. R18-9-A203.	Every 6 years from the date of permit signature, for the duration of the permit.	Yes

**4.0 TABLES OF MONITORING REQUIREMENTS**

**4.1 PRE-OPERATIONAL MONITORING (or CONSTRUCTION REQUIREMENTS)**

Table I-1, Initial Discharge Monitoring

Table I-2, Initial Discharge Monitoring

**4.2 COMPLIANCE (or OPERATIONAL) MONITORING**

Table IA-1, Routine Discharge Monitoring for Flow

Table IA-2, Routine Discharge Monitoring

Table IIA, Ambient Groundwater Monitoring

Table IIB, Routine Groundwater Monitoring

Table III, Facility Inspection Monitoring

DRAFT

## 4.1 PRE-OPERATIONAL MONITORING (or CONSTRUCTION REQUIREMENTS)

**TABLE I-1  
INITIAL DISCHARGE MONITORING<sup>1</sup>**

Sampling Point Number	Sampling Point Identification			Latitude	Longitude
1	Flow Meter Installed on wastewater line between the lift station and distribution box			33° 22' 17.71" N	111° 56' 27.43" "W
Number of Cooling Tower Blowdown Recirculation Cycles	Cooling towers operating at the time of sample collection			Weekly	IDMR <sup>2</sup>
Parameter	AL <sup>3</sup>	DL <sup>4</sup>	Units	Sampling Frequency	Reporting Frequency
Total Flow: Daily <sup>5</sup>	Not Established <sup>6</sup>	Not Established	gpd <sup>7</sup>	Daily	IDMR
Total Flow: Monthly Average <sup>8</sup>	9,500	10,000	gpd	Monthly Calculation	IDMR
Sampling Point Number	Sampling Point Identification			Latitude	Longitude
2	Waste Water Distribution Box			33° 22' 13" N	111° 56' 23" "W
Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
pH (field)	Not Established	Not Established	SU	Weekly <sup>9</sup>	IDMR
Specific Conductance (SC)	3,300 <sup>10</sup>	Not Established	µmhos/cm	Weekly	IDMR
Total Nitrogen <sup>11</sup>	8.0	10.0	mg/l <sup>12</sup>	Weekly	IDMR
Total Dissolved Solids (TDS)	Not Established	Not Established	mg/l	Weekly	IDMR
Sulfate	Not Established	Not Established	mg/l	Weekly	IDMR
<b>Metals (dissolved):</b>					
Arsenic	0.04	0.05	mg/l	Weekly	IDMR
Barium	1.60	2.00	mg/l	Weekly	IDMR
Beryllium	0.0032	0.004	mg/l	Weekly	IDMR
Cadmium	0.004	0.005	mg/l	Weekly	IDMR
Chromium	0.08	0.1	mg/l	Weekly	IDMR
Lead	0.04	0.05	mg/l	Weekly	IDMR
Selenium	0.04	0.05	mg/l	Weekly	IDMR

<sup>1</sup>Monitoring may be discontinued after initial discharge monitoring report has been completed as per 2.5.1.1 and 3.6 in the compliance Schedule.

<sup>2</sup> IDMR= Initial Discharge Monitoring Report

<sup>3</sup>AL = Alert Level

<sup>4</sup>DL = Discharge Limit

<sup>5</sup>Flow shall be measured using a continuous recording flow meter which totals the flow daily.

<sup>6</sup>Not Established means monitoring is required but no limits are specified.

<sup>7</sup>gpd = gallons per day

<sup>8</sup>Monthly average of daily flow values.

<sup>9</sup> Weekly= one sample shall be taken once a week for 12 weeks.

<sup>10</sup> AL only for 12 week test

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

<sup>12</sup> mg/L = milligrams per liter

4.1 PRE-OPERATIONAL MONITORING (or CONSTRUCTION REQUIREMENTS)

TABLE I-2  
INITIAL DISCHARGE MONITORING <sup>13</sup>

Sampling Point Number	Sampling Point Identification			Latitude	Longitude
1	Flow Meter Installed on wastewater line between the lift station and distribution box			33° 22' 17.71" N	111° 56' 27.43" "W
Number of Cooling Tower Blowdown Recirculation Cycles	Cooling towers operating at the time of sample collection			Monthly	MDMR <sup>14</sup>
Parameter	AL <sup>15</sup>	DL <sup>16</sup>	Units	Sampling Frequency	Reporting Frequency
Total Flow: Daily <sup>17</sup>	Not Established	Not Established	gpd <sup>18</sup>	Daily	MDMR
Total Flow: Monthly Average <sup>19</sup>	9,500	10,000	gpd	Monthly Calculation	MDMR
Sampling Point Number	Sampling Point Identification			Latitude	Longitude
2	Waste Water Distribution Box			33° 22' 13" N	111° 56' 23" "W
Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
pH (field)	Not Established	Not Established	SU <sup>20</sup>	Monthly <sup>21</sup>	MDMR
Specific Conductance (SC) (field)	Reserved	Not Established	µmhos/cm	Monthly	MDMR
Total Nitrogen <sup>22</sup>	8.0	10.0	mg/l	Monthly	MDMR
Total Dissolved Solids (TDS)	Not Established	Not Established	mg/l	Monthly	MDMR
Sulfate	Not Established	Not Established	mg/l	Monthly	MDMR
Fluoride	Not Established	Not Established	mg/l	Monthly	MDMR
<b>Metals (total):</b>					
Arsenic	0.04	0.05	mg/l	Monthly	MDMR
Barium	1.60	2.00	mg/l	Monthly	MDMR
Cadmium	0.004	0.005	mg/l	Monthly	MDMR
Chromium	0.08	0.1	mg/l	Monthly	MDMR
Lead	0.04	0.05	mg/l	Monthly	IDMR
Selenium	0.04	0.05	mg/l	Monthly	IDMR

<sup>13</sup>Commence monitoring under this Table upon completion of the 12 Week test as per Section 2.5.1.1. Monitoring may be discontinued after initial discharge monitoring report has been completed as per 2.5.1.1 and 3.7 in the compliance Schedule.

<sup>14</sup> IDMR= Initial Discharge Monitoring Report

<sup>15</sup>AL = Alert Level

<sup>16</sup>DL = Discharge Limit

<sup>17</sup>Flow shall be measured using a continuous recording flow meter which totals the flow daily.

<sup>18</sup>gpd = gallons per day

<sup>19</sup>Monthly average of daily flow values.

<sup>20</sup> SU = standard units

<sup>21</sup> Monthly Sampling= one sample will be taken every month for one quarter.

<sup>22</sup>Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

**4.0 TABLES OF MONITORING REQUIREMENTS**

**4.2 COMPLIANCE (or OPERATIONAL) MONITORING**

**TABLE IA-1  
ROUTINE DISCHARGE MONITORING<sup>23</sup>**

Sampling Point Number	Sampling Point Identification			Latitude	Longitude
1	Flow Meter Installed on wastewater line between the lift station and distribution box			33° 22' 17.71" N	111° 56' 27.43" "W
Parameter	AL <sup>24</sup>	DL <sup>25</sup>	Units	Sampling Frequency	Reporting Frequency
Total Flow <sup>26</sup> : Daily <sup>27</sup>	Not Established <sup>28</sup>	Not Established	gpd <sup>29</sup>	Daily	Quarterly
Total Flow: Monthly Average <sup>30</sup>	9,500	10,000	gpd	Monthly Calculation	Quarterly

<sup>23</sup>Commence monitoring under this table upon completion of the Initial Monthly Discharge Monitoring as per Section 2.5.1.2. and 3.6 in the Compliance Schedule.

<sup>24</sup>AL = Alert Level

<sup>25</sup>DL = Discharge Limit

<sup>26</sup>Total flow for subsurface trench system disposal

<sup>27</sup>Flow shall be measured using a continuous recording flow meter which totals the flow daily.

<sup>28</sup>Not Established means monitoring is required but no limits are specified.

<sup>29</sup>gpd = gallons per day

<sup>30</sup>Monthly average of daily flow values.

4.0 TABLES OF MONITORING REQUIREMENTS

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA-2  
ROUTINE DISCHARGE MONITORING<sup>31</sup>

Sampling Point Number	Sampling Point Identification			Latitude	Longitude
2	Wastewater Distribution Box			33° 22' 13" N	111° 56' 23" W
Parameter	AL <sup>32</sup>	DL <sup>33</sup>	Units	Sampling Frequency	Reporting Frequency
pH (field)	Not Established <sup>34</sup>	Not Established	SU	Quarterly	Semi-annually
Specific Conductance (SC)(field)	Not Established	Not Established	µmhos/cm	Quarterly	Semi-annually
Total Nitrogen <sup>35</sup>	8.0	10.0	mg/l <sup>36</sup>	Quarterly	Semi-annually
Total Dissolved Solids (TDS)	Not Established	Not Established	mg/l	Quarterly	Semi-annually
Fluoride	Not Established	Not Established	mg/l	Quarterly	Semi-annually
Sulfate	Not Established	Not Established	mg/l	Quarterly	Semi-annually
<b>Metals (total):</b>					
Arsenic	0.04	0.05	mg/l	Quarterly	Semi-annually
Barium	1.60	2.00	mg/l	Quarterly	Semi-annually
Beryllium	0.0032	0.004	mg/l	Quarterly	Semi-annually
Cadmium	0.004	0.005	mg/l	Quarterly	Semi-annually
Chromium	0.08	0.1	mg/l	Quarterly	Semi-annually
Lead	0.04	0.05	mg/l	Quarterly	Semi-annually
Selenium	0.04	0.05	mg/l	Quarterly	Semi-annually

<sup>31</sup>Commence monitoring under this table upon completion of the Monthly Initial Discharge Monitoring Test per Section 2.5.1.2. and 3.7 in the Compliance Schedule.

<sup>32</sup>AL = Alert Level

<sup>33</sup>DL = Discharge Limit

<sup>34</sup>Not Established means monitoring is required but no limits are specified.

<sup>35</sup>Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

<sup>36</sup> mg/L = milligrams per liter

## 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

**TABLE IIA**  
**AMBIENT GROUNDWATER MONITORING<sup>37</sup>**

Sampling Point Number	Sampling Point Identification	Latitude	Longitude
3	Approximately 100 feet south and downgradient of the leach field area	32° 22' 20.925" N	111° 56' 53.966" W
Parameter	Units	Sampling Frequency <sup>38</sup>	Reporting Frequency
pH (field)	Standard Units	Every 2 weeks	AGMR <sup>39</sup>
Total Dissolved Solids (TDS)	mg/l	Every 2 weeks	AGMR
Specific Conductance (field)	µmhos/cm	Every 2 weeks	AGMR
Fluoride	mg/l	Every 2 weeks	AGMR
Total Nitrogen	mg/l	Every 2 weeks	AGMR
Sulfate	mg/l	Every 2 weeks	AGMR
<b>Metals (Dissolved):</b>			
Arsenic	mg/l	Every 2 weeks	AGMR
Barium	mg/l	Every 2 weeks	AGMR
Cadmium	mg/l	Every 2 weeks	AGMR
Chromium	mg/l	Every 2 weeks	AGMR
Lead	mg/l	Every 2 weeks	AGMR
Selenium	mg/l	Every 2 weeks	AGMR

<sup>37</sup> Monitor under this Table per Section 2.5.3.1 and 3.2 in the Compliance Schedule.

<sup>38</sup> The permittee shall not use more than eight (8) sample rounds in the calculation..

<sup>39</sup> AGMR= Ambient Groundwater Monitoring Report

## 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

**TABLE IIB**  
**ROUTINE GROUNDWATER MONITORING<sup>40</sup>**

Sampling Point Number	Sampling Point Identification			Latitude	Longitude
3	Approximately 100 feet south and downgradient of the proposed leach field area			32° 22' 20.925" N	111° 56' 53.966" W
Parameter	AL	AQL	Units	Sampling Frequency <sup>41</sup>	Reporting Frequency
pH (field)	Not Established <sup>42</sup>	Not Established	Standard Units	Semi-annually	Semi-annually
Total Dissolved Solids (TDS)	Not Established	Not Established	mg/l	Semi-annually	Semi-annually
Specific Conductance (lab)	Not Established	Not Established	µmhos/cm	Semi-annually	Semi-annually
Fluoride	Reserved	Reserved	mg/l	Semi-annually	Semi-annually
Total Nitrogen	Reserved	Reserved	mg/l	Semi-annually	Semi-annually
Sulfate	Not Established	Not Established	mg/l	Semi-annually	Semi-annually
<b>Metals (Dissolved):</b>					
Arsenic	Reserved	Reserved	mg/l	Semi-annually	Semi-annually
Barium	Reserved	Reserved	mg/l	Semi-annually	Semi-annually
Cadmium	Reserved	Reserved	mg/l	Semi-annually	Semi-annually
Chromium	Reserved	Reserved	mg/l	Semi-annually	Semi-annually
Lead	Reserved	Reserved	mg/l	Semi-annually	Semi-annually
Selenium	Reserved	Reserved	mg/l	Semi-annually	Semi-annually

<sup>40</sup> Monitor under this Table upon completion of the Ambient Groundwater Monitoring as per Section 2.5.1.2 and 3.4 in the Compliance Schedule.

<sup>41</sup> One sample shall be taken once a month.

<sup>42</sup>Not Established means monitoring is required but no limits are specified.

**4.0 TABLES OF MONITORING REQUIREMENTS**

**4.2 COMPLIANCE (or OPERATIONAL) MONITORING**

**TABLE III  
FACILITY INSPECTION MONITORING<sup>43</sup> - Log Book<sup>44</sup>**

<b>Parameter</b>	<b>Performance Standards<sup>45</sup></b>	<b>Monitoring Frequency</b>	<b>Reporting Frequency</b>
Pumps Integrity	Good working condition	Weekly	Quarterly
Leach field	Good working condition No daylighting	Weekly	Quarterly
POC Wells	Good working condition	Weekly	Quarterly
Flowmeters	Good working condition	Weekly	Quarterly
Facility Piping and Cistern	Good working condition	Weekly	Quarterly
SC Monitoring Device	Good working condition	Weekly	Quarterly

DRAFT

---

<sup>44</sup> 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.

<sup>45</sup> Performance Standards monitoring method shall be field observation.

## 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 ADEQ:

- 1 Significant Amendment Application: April 27, 2015
- 2 Final Engineering Memo:
- 3 Final Hydro Memo
- 4 Public Notice:
- 5 Public Hearing dated N/A
- 6 Responsiveness Summary:

DRAFT

**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 upon the amount of daily influent or discharge of pollutants in gpd as established by ARS § 49-242(E).

**6.2 Duty to Comply [ARS §§ 49-221 through 49-263]**

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 [ARS §§ 49-243(K)(2) & (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 [ARS §§ 49-243(B)(2) & (B)(3)]**

The permittee shall not cause or contribute to a violation of an aquifer water quality standard at the applicable point of compliance for the facility. Where, at the time of issuance of the Permit, an aquifer already exceeds an aquifer water quality standard 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 [ARS §§ 49-243(K)(8) & 49-243(N) and A.A.C. R18-9-A202(B) & R18-9-A203(E) & (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(D), 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 (5) 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 [ARS § 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 ARS §§ 49-221, 49-223, and 49-241 through 49-252.

**6.8 Inspection and Entry [ARS §§ 41-1009, 49-203(B), & 49-243(K)(8)]**

In accordance with ARS §§ 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 [ARS § 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 specified by this permit.

**6.10 Permit Action: Amendment, Transfer, Suspension, & Revocation [ARS §§ 49-201 & 49-241 through 251 and A.A.C. R18-9-A211 through A213]**

This permit may be amended, transferred, renewed, or revoked for cause, under the rules of ADEQ.

The permittee shall notify the ADEQ WPS 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 [ARS § 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 [ARS §§ 49-201 & 49-241 through 251 and A.A.C. R18-9-A211, R18-9-A212, & 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.

**7.2 Permit Transfer**

This permit may not be transferred to any other person except after notice to and approval of the transfer by ADEQ. 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).