

**STATE OF ARIZONA  
AQUIFER PROTECTION PERMIT NO. P-105202  
PLACE ID 16908, LTF 63314  
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, EPCOR Water Arizona, Inc. is hereby authorized to operate the Verrado Water Reclamation Facility (WRF) located at 1871 N. Lancaster Street, Buckeye, Arizona, Maricopa County, over groundwater of the West Salt River Valley Sub-basin in the Phoenix Active Management Area, in Township 2N, Range 2W, and Section 31, NE¼, SE¼, SE¼ of the Gila and Salt River Baseline and Meridian.

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

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

**1.1 PERMITTEE INFORMATION**

**Facility Name:** Verrado Water Reclamation Facility

**Facility Address:** 1871 N. Lancaster Street  
Buckeye, Arizona 85326

**County:** Maricopa

**Permittee:** EPCOR Water Arizona, Inc.

**Permittee Address:** 2355 West Pinnacle Peak Road, Suite #300  
Phoenix, Arizona 85027

**Facility Contact:** John Calkins, Director of Compliance

**Emergency Phone No.:** (623) 445-2406

**Permitted Flow Rate:** 830,000 gallons per day (gpd).

**Latitude/Longitude:** 33° 28' 06" N / 112° 29' 52" W

**Legal Description:** Township 2N, Range 2W, Section 31, NE¼, SE¼, SE¼ of the Gila and Salt River Baseline and Meridian

**1.2 AUTHORIZING SIGNATURE**

\_\_\_\_\_  
**Trevor Baggio, 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 [A.R.S. §§ 49-203(4), 49-241(A)]**

**2.1 Facility / Site Description [A.R.S. § 49-243(K)(8)]**

The EPCOR Water Arizona Inc. is authorized to operate the Verrado Water Reclamation Facility (WRF), which is permitted to collect and treat a maximum average monthly flow of 0.83 million gallons per day (mgd). The treatment process consists of an upgraded influent pump station, a new mechanical step screen, a new equalization basin, a modification to the aeration basin, an anoxic basin for nitrification and denitrification, two (2) clarifiers, four disk filters, chemical feed, two (2) chlorine contact basins, de-chlorination, and a pump station.

The WRF produces reclaimed water meeting the Class A+ Reclaimed Water Standards as per Title 18, Chapter 11, article 3. The effluent may be delivered for beneficial purposes (reuse) under a valid reclaimed water permit or to the two (2) vadose zone wells at the aquifer recharge facility (ARF), located approximately one mile north-northwest of the facility, or to the outfall within the Lost Creek Wash. When discharged only for reuse, the effluent is delivered directly from the chlorine contact chamber and will not be dechlorinated. When discharged to the ARF and/or to the AZPDES outfall within the Lost Creek Wash, the effluent shall be dechlorinated. However, during times in which the effluent is discharged for reuse and/or into the ARF, and/or to the Lost Creek Wash, the effluent is required to be dechlorinated. The sludge will be stored in the modified sludge holding tank, and then pumped to a belt press for dewatering. The dewatered sludge is disposed off-site at an approved landfill.

The purpose of this significant amendment is to add a new discharge point to an outfall within the Lost Creek Wash.

The depth to groundwater is approximately 230 feet below ground surface (bgs) at the WRF and 330 feet bgs at the ARF. Groundwater at the WRF appears to flow south-southeastward, and at the ARF is appears to flow north-northeastward toward a hydraulic sink.

All industrial hookups and other non-residential hookups to the treatment system shall be authorized according to the applicable federal, state or local regulations.

The site includes the following permitted discharging facilities:

Facility	Latitude	Longitude
Verrado Water Reclamation Facility	33° 28' 04" N	112° 29 ' 53" W
Vadose Zone Well #1	33° 28' 45.6" N	112° 30 ' 27.4" W
Vadose Zone Well #2	33° 28' 45.3" N	112° 30 ' 27.2" W
Outfall 001	33° 29' 23.39" N	112° 30 ' 38.73" W

**Annual Registration Fee [A.R.S. § 49-242]**

The Annual Registration Fee for this permit is established by A.R.S. § 49-242 and is payable to the Arizona Department of Environmental Quality (ADEQ) each year. The design flow is 0.83 million gallons per day.

**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 dollar amount demonstrated for financial capability is \$56,500. The financial capability was demonstrated through R18-9-A203(B)(1)and(3) and (C)(2).

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

The Water Reclamation Facility is designed, constructed, operated, and maintained to meet the treatment performance criteria for new facilities as specified in A.A.C. R18-9-B204. The facility shall meet the performance requirement for industrial pre-treatment as per A.A.C. R18-9-B204(6)(b).

**2.2.1 Engineering Design**

The WRF was designed as per the design report prepared, stamped and signed (sealed) by Glen Roth, P.E., (Civil #20329) and Sheba Hafiz, DSWA and Associates Firms, Inc., dated June 26, 2006.

**2.2.2 Site-specific Characteristics**

Site specific characteristics were not used to determine BADCT.

**2.2.3 Pre-operational Requirements**

Not applicable.

**2.2.4 Operational Requirements**

1. The permittee shall maintain a copy of the up-to-date operations and maintenance manual at the WRF site at all times; the manual shall be available upon request during inspections by ADEQ personnel.
2. The pollution control structures shall be inspected for the items listed in Section 4.2, Table III - Facility Inspection (Operational Monitoring).
3. If any damage of the pollution control structures is identified during inspection, proper repair procedures shall be performed. All repair procedures and material(s) used shall be documented in the facility log book as per Section 2.7.2 and reported to ADEQ in the event of a violation or exceedance as per 2.7.3.

**2.2.5 Reclaimed Water Classification**  
**[A.A.C. R18-9-703(C)(2)(a), A.A.C. R18-11-303 through 307]**

The treatment facility is rated as producing reclaimed water meeting the Class A+ Reclaimed Water Quality Standards (A.A.C. R18-11, Article 3) which may be used for any allowable Class A, B, or C use under a valid reclaimed water permit (A.A.C. R18-9, Article 7).

**2.2.6 Certified Areawide Water Quality Management Plan Conformance**  
**[A.A.C. R18-9-A201(B)(6)(a)]**

Facility operations must conform to the approved Certified Areawide Water Quality Management Plan according to the 208 consistency determination in place at the time of permit issuance.

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

1. The permittee is authorized to operate the WRF with a maximum monthly average flow of 0.83 mgd.
2. The permittee shall notify all users that the materials authorized to be disposed of through the WRF are typical household sewage and pre-treated commercial wastewater and shall not include motor oil, gasoline, paints, varnishes, hazardous wastes, solvents, pesticides, fertilizers or other materials not generally associated with toilet flushing, food preparation, laundry facilities and personal hygiene.

3. The permittee shall operate and maintain all permitted facilities to prevent unauthorized discharges pursuant to A.R.S. § 49-201(12) resulting from failure or bypassing of applicable BADCT pollutant control technologies.
4. Specific discharge limitations are listed in Section 4.2, Tables IA and IB.

**2.4 Point of Compliance (POC) [A.R.S. § 49-244]**

Two hazardous/non-hazardous points of compliance have been designated for these facilities as follows:

Point of Compliance	Well Type	Latitude	Longitude	Descriptive Location	Well Purpose
1	Groundwater Monitoring	33° 28' 02" N	112° 29' 52" W	Southeast corner of the WRF	Point of Compliance
2	Groundwater Monitoring	33° 28' 46" N	112° 30' 28" W	MW #1, within 300 feet east of the vadose zone recharge wells	Point of Compliance
3	Conceptual	33° 29' 19.11" N	112° 30' 17.08" W	Approximately 650 feet southeast of the PMA of the new outfall location	Point of Compliance

Groundwater monitoring is required at POC # 2 per Section 4.2, Table II. Groundwater monitoring is not required at POC#1 and POC #3 unless an additional point of compliance is required. POC#1 is used to monitor reuse flows. The Director may amend this permit to require installation of a monitoring well POC#1 and POC #3, or 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)]**

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. The permittee shall develop a site-specific Quality Management Plan (QMP) which describes the sample collection and analysis procedures to ensure that the result of work performed under this permit will satisfy the data quality objectives of the permit. The permittee shall be responsible for the quality and accuracy of all data required by this permit. If a third party collects or analyzes samples on behalf of the permittee, the permittee shall obtain a copy of the third party site-specific QMP. The permittee shall consult with the most recent version of the ADEQ QMP and Title 40, PART 136 of the Environmental Protection Agency’s Code of Federal Regulations (CFR) for guidance in this regard. Copies of laboratory analyses and Chain-of-Custody forms shall be maintained at the permitted facility. Upon request, these documents shall be made immediately available for review by ADEQ personnel.

**2.5.1 Pre-Operational Monitoring**

Not applicable - facility is in operation at time of permit issuance.

**2.5.2 Discharge Monitoring**

The permittee shall monitor the wastewater according to Section 4.2, Table IA and IB as applicable. A representative sample of the wastewater shall be collected at the point of discharge from the chlorination basin.

### **2.5.3 Reclaimed Water Monitoring**

The permittee shall monitor the reclaimed water parameters listed under Section 4.2, Table IB in addition to the routine discharge monitoring parameters listed in Section 4.2, Table IA. Representative samples of the reclaimed water shall be collected at the point of discharge from the chlorination basin.

### **2.5.4 Groundwater Monitoring and Sampling Protocols**

Whenever there is discharge to the ARF, the facility shall conduct groundwater monitoring in that month, and for two additional quarters as per Section 4.2, Table II. Report "No flow" on the SMRF when there is no discharge to the ARF, or after two consecutive quarters of monitoring following a discharge to the ARF.

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

#### **2.5.4.1 POC Well Replacement**

In the event that one or more of the designated POC wells should become unusable or inaccessible due to damage, exceedance of an alert level (AL) for water level as required by Section 2.6.2.3.4(3), or any other event, a replacement POC well shall be constructed and installed upon approval by ADEQ. If the replacement well is fifty feet or less from the original well, the ALs and/or aquifer quality limits (AQLs) calculated for the designated POC well shall apply to the replacement well.

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

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

### **2.5.6 Facility / Operational Monitoring**

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

1. If any damage of the pollution control structures is identified during inspection, proper repair procedures shall be performed. All repair procedures and materials used shall be documented in the facility log book as per Section 2.7.2 and reported to ADEQ in case of a violation or exceedance as per 2.7.3
2. The permittee shall submit data required in Section 4.2, Table III regardless of the operating status of the facility unless otherwise approved by the Department or allowed in this permit.

### **2.5.7 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. Analyses shall be performed by a laboratory licensed by the Arizona Department of Health Services, Office of Laboratory Licensure and Certification. For results to be considered valid, all analytical work shall meet quality control standards specified in the approved methods. A list of state-certified laboratories in Arizona can be obtained at the address below:

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

### **2.5.8 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 Groundwater Section for approval prior to installation and the permit shall be amended to include any new monitoring points.

## **2.6 Contingency Plan Requirements**

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

### **2.6.1 General Contingency Plan Requirements**

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

Any AL exceedance, or violation of an AQL, DL, or other permit condition shall be reported to ADEQ following the reporting requirements in Section 2.7.3.

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 or DL. 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 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.

### **2.6.2 Exceeding of Alert Levels/Performance Levels**

#### **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 Groundwater Section (by phone or US mail, see Section 2.7.5) within five days of becoming aware of the exceedance.

- b. Submit a written report to the ADEQ Groundwater Section within 30 days after 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 4.2, Table IA has been exceeded, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:
  - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the exceedance;
  - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences; and
  - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the exceedance, the permittee shall sample individual waste streams composing the wastewater for the parameter(s) in question, if necessary to identify the cause of the exceedance.
2. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 5.0 and specific contingency measures identified in Section 2.6 to resolve any problems identified by the investigation which may have led to the AL exceedance. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6.
3. Within thirty days of an AL exceedance, the permittee shall submit the laboratory results to the ADEQ Groundwater 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.

##### **2.6.2.2.1. Exceeding Permit Flow Limit**

1. If the AL for monthly average flow in Section 4.2, Tables IA has been exceeded, the permittee shall submit an application to ADEQ for an APP

amendment to expand the WRF or submit a report detailing the reasons an expansion is not necessary.

2. Acceptance of the report instead of an application for expansion requires ADEQ approval.

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

**2.6.2.3.1 Alert Levels for Indicator Parameters**

Not required at time of permit issuance.

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

1. In the case of an exceedance of an AL for a pollutant set in Section 4.2, Table II, the permittee may conduct verification sampling within five days of becoming aware of the exceedance. The permittee may use results of another sample taken between the date of the last sampling event and the date of receiving the result as verification.
2. If verification sampling confirms the AL exceedance or if the permittee opts not to perform verification sampling, then the permittee shall increase the frequency of monitoring for the pollutant set in Section 4.2, Table II as follows:

Specified Monitoring Frequency (Section 4.2, Table II)	Monitoring Frequency for AL Exceedance
Daily	Daily
Weekly	Daily
Monthly	Weekly
Quarterly	Monthly
Semi-annually	Quarterly
Annually	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 has been 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.
4. Within 30 days after confirmation of an AL exceedance, the permittee shall submit the laboratory results to the Groundwater Section along with a

summary of the findings of the investigation, the cause of the 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, amendments to permit conditions or other actions.
6. The increased monitoring required as a result of an AL exceedance may be reduced to the monitoring frequency in Section 4.2, Table II if the results of four 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 six sequential sampling events, the permittee shall submit a second report documenting an investigation of the continued AL exceedance within 30 days of the receipt of laboratory results of the sixth sampling event.

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

Not required at time of issuance.

**2.6.2.3.4 Alert Level for Groundwater Level**

Not applicable

**2.6.3 Discharge Limit Violation**

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

The permittee 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, notification of downstream or downgradient users who may be directly affected by the discharge, and mitigation of the impact of pollutants on existing uses of the aquifer. Corrective actions shall either be specifically identified in this permit, included in an ADEQ-approved contingency plan, or separately approved according to Section 2.6.6.

2. The permittee shall comply with the freeboard requirements as specified in Section 4.2, Table III (Facility Inspections) to prevent the overtopping of an impoundment or sludge drying bed. If an impoundment or sludge drying bed is overtopped, the permittee shall follow the requirements in Section 2.6.5.3 and the reporting requirements of Section 2.7.3.

3. 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 II has been exceeded, the permittee may conduct verification sampling within five days of becoming aware of the exceedance. The permittee may use results of another sample taken between the date of the last sampling event and the date of receiving the result as verification.
2. If the verification sample does not confirm an AQL violation, no further action is needed under this Section.
3. If verification sampling confirms that an AQL was violated for any parameter or if the permittee opts not to perform verification sampling, then, the permittee shall increase the frequency of monitoring as follows:

Specified Monitoring Frequency (Section 4.2, Table II)	Monitoring Frequency for AQL Exceedance
Daily	Daily
Weekly	Daily
Monthly	Weekly
Quarterly	Monthly
Semi-annually	Quarterly
Annually	Quarterly

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

The permittee also shall submit a report according to Section 2.7.3, which includes a summary of the findings of the investigation, the cause of the violation, and actions taken to resolve the problem. A verified exceedance of an AQL will be considered a violation unless the permittee demonstrates within 30 days that the exceedance was not caused or contributed to by pollutants discharged from the facility. Unless the permittee has demonstrated that the exceedance was not caused or contributed to by pollutants discharged from the facility, the permittee shall consider and ADEQ may require corrective action that may include control of the source of discharge, cleanup of affected soil, surface water, or groundwater, and mitigation of the impact of pollutants on existing uses of the aquifer. Corrective actions shall either be specifically identified in this permit, included in an ADEQ approved contingency plan, or separately approved according to Section 2.6.6.

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

**2.6.5 Emergency Response and Contingency Requirements for Unauthorized Discharges pursuant to 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 ADEQ Groundwater Section 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 ADEQ Groundwater Section within 24 hours of discovering the discharge of non-hazardous material which (a) has the potential to cause an AQL exceedance, 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 Groundwater Section 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. 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 Section prior to implementing a corrective action to accomplish any of the following goals in response to exceedance of 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.

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

### **2.7 Reporting and Recordkeeping Requirements**

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

**2.7.1 Self-Monitoring Report Form**

1. When submitting hard copy, the permittee shall complete the Self-monitoring Report Form (SMRF) provided by ADEQ, including contact information for the person completing the form. Submit the completed form to the Groundwater Section.
2. The permittee shall complete the SMRF to the extent that the information reported may be entered on the form. If no information is required during a reporting period, the permittee shall enter "not required" on the form and include an explanation, and submit the report to ADEQ. The permittee shall use the format devised by ADEQ.
3. The tables contained in Section 4.0 list the parameters to be monitored and the frequencies for reporting results on SMRF.
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.

**2.7.2 Operation Inspection / Log Book Recordkeeping**

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

1. Name of inspector;
2. Date and shift inspection was conducted;
3. Condition of applicable facility components;
4. Any damage or malfunction, and the date and time any repairs were performed;
5. Documentation of sampling date and time; and
6. Any other information required by this permit to be entered in the log book.

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 Section in writing (by mail or by fax - see Section 2.7.5) within five 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.
2. The permittee shall submit a written report to the Groundwater Section 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 complete the SMRFs provided by the Department to reflect requirements designated in Section 4.2 Monitoring Tables and submit to the ADEQ Water Quality Groundwater Section quarterly. Facility inspections 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.

If the treatment facility is classified for reclaimed water under this permit, the permittee shall submit the reclaimed water monitoring results and flow volumes to any of the following in accordance with A.A.C. R18-9-703(C)(2)(c):

- 1. Any reclaimed water agent who has contracted for delivery of reclaimed water from the permittee; and
- 2. Any end user who has not waived interest in receiving this information.

**2.7.5 Reporting Location**

All documents, including SMRFs, required by this permit to be submitted to the Groundwater Section shall be directed to the following address:

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

**2.7.6 Reporting Deadline**

The following table lists the quarterly report due dates:

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

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

Monitoring conducted:	Report due by:
Semi-annual: January-June	July 30
Semi-annual: July-December	January 30
Annual: January-December	January 30

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

The Groundwater Section and the Groundwater Section 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 Section before ceasing operation of the facility for a period of 60 days or greater. The permittee shall take the following measures upon temporary cessation:

1. If applicable, direct the wastewater flows from the facility to another state-approved wastewater treatment facility;
2. Correct the problem that caused the temporary cessation of the facility; and
3. Notify ADEQ Groundwater Section with a monthly facility status report describing the activities conducted on the treatment facility to correct the problem.

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 Section 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 Water Quality Compliance Section 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 Section, a closure plan which meets the requirements of A.R.S. § 49-252 and A.A.C. R18-9-A209(B)(3).

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

#### **2.9.2 Closure Completion**

Upon completion of closure activities, the permittee shall give written notice to the Groundwater 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 the AWQS at the applicable POC;

3. Continued action is required to verify that the closure design has eliminated discharge to the extent intended;
4. Remediation or mitigation measures are necessary to achieve compliance with Title 49, Ch. 2; and
5. 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 Section.

In the event clean-closure cannot be achieved pursuant to A.R.S. § 49-252, the permittee shall submit for approval to the Groundwater Section 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]**

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

<b>No.</b>	<b>Description</b>	<b>Due by:</b>	<b>Permit Amendment Required?</b>
1	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 INITIAL START-UP PLAN**

**Not applicable at permit issuance.**

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

**TABLE IA  
ROUTINE DISCHARGE MONITORING**

Sampling Point Number	Sampling Point Identification		Latitude		Longitude
1	Point of discharge from the chlorination unit		33° 28' 04" N		112° 29' 53" W
Parameter	AL <sup>1</sup>	DL <sup>2</sup>	Units	Sampling Frequency	Reporting Frequency
Total Flow <sup>3</sup> : Daily <sup>4</sup>	Not Established <sup>5</sup>	Not Established	mgd <sup>6</sup>	Daily	Quarterly
Total Flow: Monthly Average <sup>7</sup>	0.78	0.83	mgd	Monthly Calculation	Quarterly
Reuse Flow: Daily	Not Established	Not Established	mgd	Daily	Quarterly
Reuse Flow: Monthly Average	0.78	0.83	mgd	Monthly Calculation	Quarterly
AZPDES Outfall 001 Flow: Daily Average	Not Established	Not Established	mgd	Daily	Quarterly
AZPDES Outfall 001 Flow: Monthly Average	0.78	0.83	mgd	Monthly Calculation	Quarterly
Recharge Flow: Daily	Not Established	Not Established	mgd	Daily	Quarterly
Recharge Flow: Monthly Average	0.78	0.83	mgd	Monthly Calculation	Quarterly
Fecal Coliform: Single sample maximum	No Limit	23	MPN <sup>8</sup>	Daily	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week <sup>9</sup>	Not established	Non-detect <sup>10</sup>	MPN	Weekly Evaluation	Quarterly

<sup>1</sup>AL = Alert Level

<sup>2</sup>DL = Discharge Limit

<sup>3</sup>Total flow for all methods of disposal (reuse, AZPDES, and recharge).

<sup>4</sup>Flow shall be measured using a continuous recording flow meter which totals the flow daily.

<sup>5</sup>Not Established means monitoring is required but no limits are specified.

<sup>6</sup>mgd = million gallons per day

<sup>7</sup>Monthly = Calculated value = Average of daily flow values in a month.

<sup>8</sup>MPN, a value of <2.2 shall be considered to be non-detect.

<sup>9</sup>Week means a seven-day period starting on Sunday and ending on the following Saturday.

<sup>10</sup>Fecal coliform four (4) of the last seven (7) samples “requires entering a “Compliance” or “Non-Compliance” on the SMRF for each day of the reporting period; use the following procedure to determine whether to enter a “Compliance” or “Non-Compliance” for each weekly entry: For each date of the reporting period, evaluate the daily fecal coliform result for that date along with the daily fecal coliform results for the six previous days. If, of these seven days of data, four (4) or more of the daily fecal coliform results are non-detect (a daily value of <2.2 MPN is considered non-detect for that day), report “Compliance” for that date’s entry on the SMRF. If three (3) or fewer of the daily fecal coliform results are non-detect, report “Non-Compliance” for that date’s entry on the SMRF. For days when there is no flow, the daily fecal coliform result is considered “non-detect” for the purpose of evaluating the seven days of daily data for the SMRF entry

Total Nitrogen <sup>11</sup> : Five-sample rolling geometric mean	8	10	mg/l <sup>12</sup>	Monthly Calculation <sup>13</sup>	Quarterly
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4.2 COMPLIANCE (or OPERATIONAL) MONITORING

**TABLE IA**  
**ROUTINE DISCHARGE MONITORING (continued)**

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
<b>Metals (total):</b>					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.6	2	mg/l	Quarterly	Quarterly
Beryllium	0.0032	0.004	mg/l	Quarterly	Quarterly
Cadmium	0.004	0.005	mg/l	Quarterly	Quarterly
Chromium	0.08	0.1	mg/l	Quarterly	Quarterly
Cyanide (as free cyanide)	0.16	0.2	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	mg/l	Quarterly	Quarterly
Lead	0.04	0.05	mg/l	Quarterly	Quarterly
Mercury	0.0016	0.002	mg/l	Quarterly	Quarterly
Nickel	0.08	0.1	mg/l	Quarterly	Quarterly
Selenium	0.04	0.05	mg/l	Quarterly	Quarterly
Thallium	0.0016	0.002	mg/l	Quarterly	Quarterly

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

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

<sup>13</sup>The 5-sample rolling geometric mean is determined by multiplying the five (5) most recent monthly sample values together then taking the fifth root of the product.

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA  
ROUTINE DISCHARGE MONITORING (continued)

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
<b>Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs):</b>					
Benzene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Carbon tetrachloride	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
o-Dichlorobenzene	0.48	0.6	mg/l	Semi-Annually	Semi-Annually
para-Dichlorobenzene	0.06	0.075	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,1-Dichloroethylene	0.0056	0.007	mg/l	Semi-Annually	Semi-Annually
cis-1,2-Dichloroethylene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
trans-1,2-Dichloroethylene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Dichloromethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloropropane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Ethylbenzene	0.56	0.7	mg/l	Semi-Annually	Semi-Annually
Hexachlorobenzene	0.0008	0.001	mg/l	Semi-Annually	Semi-Annually
Hexachlorocyclopentadiene	0.04	0.05	mg/l	Semi-Annually	Semi-Annually
Monochlorobenzene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Styrene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Tetrachloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Toluene	0.8	1	mg/l	Semi-Annually	Semi-Annually
Trihalomethanes (total) <sup>14</sup>	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
1,1,1-Trichloroethane	0.16	0.2	mg/l	Semi-Annually	Semi-Annually
1,2,4 - Trichlorobenzene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
1,1,2 - Trichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Trichloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Vinyl Chloride	0.0016	0.002	mg/l	Semi-Annually	Semi-Annually
Xylenes (Total)	8	10	mg/l	Semi-Annually	Semi-Annually

<sup>14</sup> Total Trihalomethanes (TTHMs) are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

**TABLE IA**  
**ROUTINE DISCHARGE MONITORING (continued)**

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
<b>Indicator Parameters / Major Cations and Anions:</b>					
pH (field)	Monitor <sup>15</sup>	Monitor	S.U.	Annually	Annually
Iron	Monitor	Monitor	mg/l	Annually	Annually
Manganese	Monitor	Monitor	mg/l	Annually	Annually
Total Organic Carbon	Monitor	Monitor	mg/l	Annually	Annually
Total Dissolved Solids	Monitor	Monitor	mg/l	Annually	Annually
Sodium	Monitor	Monitor	mg/l	Annually	Annually
Potassium	Monitor	Monitor	mg/l	Annually	Annually
Calcium	Monitor	Monitor	mg/l	Annually	Annually
Magnesium	Monitor	Monitor	mg/l	Annually	Annually
Chloride	Monitor	Monitor	mg/l	Annually	Annually
Sulfate	Monitor	Monitor	mg/l	Annually	Annually
Alkalinity	Monitor	Monitor	mg/l	Annually	Annually
Specific Conductivity (field)	Monitor	Monitor	µmhos/cm	Annually	Annually

<sup>15</sup> Monitoring required, but no limits established.

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

**TABLE IB**  
**RECLAIMED WATER MONITORING - CLASS A+**

Sampling Point Number	Sampling Point Identification		Latitude	Longitude
1	Point of discharge from the chlorination unit		33° 28' 04" N	112° 29' 53" W
Parameter	DL <sup>16</sup>	Units	Sampling Frequency	Reporting Frequency
Fecal Coliform: Single-sample maximum	23	MPN <sup>17</sup>	Daily <sup>18</sup>	Quarterly
Fecal Coliform: Four (4) of last seven (7) samples	Non-detect <sup>19</sup>	MPN	Daily Evaluation	Quarterly
Total Nitrogen <sup>20</sup> : Five-sample rolling geometric	10	mg/l <sup>21</sup>	Monthly Calculation <sup>22</sup>	Quarterly
Turbidity <sup>23</sup> : Single reading	5	NTU <sup>24</sup>	Daily <sup>25</sup>	Quarterly
Turbidity: 24-hour average	2	NTU	Daily Calculation	Quarterly

<sup>16</sup>DL = discharge limit

<sup>17</sup>MPN, a value of <2.2 shall be considered to be non-detect.

<sup>18</sup>For fecal coliform only, “daily” sampling means every day in which a sample can practicably be obtained and delivered in sufficient time for proper analysis, provided that no less than four (4) samples in each seven-day period are obtained and analyzed.

<sup>19</sup>If at least four (4) of the last seven (7) sample results are non-detect for fecal coliform, report “Compliance” for that day on the SMRF. If at least four (4) of the last seven (7) sample results have detections of fecal coliform, enter “Non-compliance” for that day on the SMRF.

<sup>20</sup>Nitrate N, plus Nitrite N, plus Total Kjeldahl Nitrogen (TKN)

<sup>21</sup>mg/l = milligrams per liter

<sup>22</sup>5-sample rolling geometric mean is determined by multiplying the five (5) most recent monthly sample values together then taking the fifth root of the product.

<sup>23</sup>Turbidimeter shall be placed at a point in the wastewater treatment process after filtration and immediately before disinfection and shall have a signal averaging time not exceeding 120 seconds. All exceedances must be explained and submitted to the Department with the corresponding quarterly SMRF; occasional spikes due to back-flushing or instrument malfunction shall not be considered an exceedance.

<sup>24</sup>NTU = Nephelometric Turbidity Units

<sup>25</sup>For the single turbidity reading, report the maximum reading during the 24-hour period.

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

**TABLE II  
 GROUNDWATER MONITORING**

Sampling Point Number	Sampling Point Identification			Latitude	Longitude
2	MW #1, within 300 feet east of the Vadose zone recharge wells			33° 28' 46" N	112° 30' 28" W
Parameter	AL <sup>26</sup>	AQL <sup>27</sup>	Units	Sampling Frequency	Reporting Frequency
Total Nitrogen <sup>28</sup> :	Not Established <sup>29</sup>	Not Established	mg/l <sup>30</sup>	Monthly	Quarterly
Nitrate-Nitrite as N	8	10	mg/l	Monthly	Quarterly
Nitrate as N	8	10	mg/l	Monthly	Quarterly
Nitrite as N	0.8	1	mg/l	Monthly	Quarterly
Total Kjeldahl Nitrogen (TKN)	Not Established	Not Established	mg/l	Monthly	Quarterly
Total Coliform	Absence	Absence	P/A <sup>31</sup>	Monthly	Quarterly

<sup>26</sup> AL = Alert Level

<sup>27</sup> AQL = Aquifer Quality Limit

<sup>28</sup> Total Nitrogen is equal to Nitrate as N plus Nitrite as N plus TKN. Use one sample to determine Total Nitrogen and the associated components (Nitrate-Nitrite as N, Nitrate as N, Nitrite as N, and TKN).

<sup>29</sup> Not Established means monitoring is required, but no limits are specified.

<sup>30</sup> mg/l = milligrams per liter

<sup>31</sup> P/A = Presence (Non-compliance) or absence (Compliance) of total coliforms in a 100-milliliter sample.

**TABLE II**  
**GROUNDWATER MONITORING (Continues)**

Parameter	AL	AQL	Units	Sampling Frequency	Reporting Frequency
<b>Metals (total):</b>					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.6	2	mg/l	Quarterly	Quarterly
Beryllium	0.0032	0.004	mg/l	Quarterly	Quarterly
Cadmium	0.004	0.005	mg/l	Quarterly	Quarterly
Chromium	0.08	0.1	mg/l	Quarterly	Quarterly
Cyanide (as free cyanide)	0.16	0.2	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	mg/l	Quarterly	Quarterly
Lead	0.04	0.05	mg/l	Quarterly	Quarterly
Mercury	0.0016	0.002	mg/l	Quarterly	Quarterly
Nickel	0.08	0.1	mg/l	Quarterly	Quarterly
Selenium	0.04	0.05	mg/l	Quarterly	Quarterly
Thallium	0.0016	0.002	mg/l	Quarterly	Quarterly

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

**TABLE II**  
**GROUNDWATER MONITORING (continued)**

Parameter	AL	AQ	Units	Sampling Frequency	Reporting Frequency
<b>Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs):</b>					
Benzene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Carbon tetrachloride	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
o-Dichlorobenzene	0.48	0.6	mg/l	Semi-Annually	Semi-Annually
para-Dichlorobenzene	0.06	0.075	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,1-Dichloroethylene	0.0056	0.007	mg/l	Semi-Annually	Semi-Annually
cis-1,2-Dichloroethylene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
trans-1,2-Dichloroethylene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Dichloromethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloropropane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Ethylbenzene	0.56	0.7	mg/l	Semi-Annually	Semi-Annually
Hexachlorobenzene	0.0008	0.001	mg/l	Semi-Annually	Semi-Annually
Hexachlorocyclopentadiene	0.04	0.05	mg/l	Semi-Annually	Semi-Annually
Monochlorobenzene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Styrene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Tetrachloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Toluene	0.8	1	mg/l	Semi-Annually	Semi-Annually
Trihalomethanes (total) <sup>32</sup>	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
1,1,1-Trichloroethane	0.16	0.2	mg/l	Semi-Annually	Semi-Annually
1,2,4 - Trichlorobenzene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
1,1,2 - Trichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Trichloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Vinyl Chloride	0.0016	0.002	mg/l	Semi-Annually	Semi-Annually
Xylenes (Total)	8	10	mg/l	Semi-Annually	Semi-Annually

<sup>32</sup> Total Trihalomethanes are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.



**4.2 COMPLIANCE (or OPERATIONAL) MONITORING**

**TABLE III  
 FACILITY INSPECTION MONITORING<sup>33</sup> Log Book<sup>34</sup>**

<b>Pollution Control Structures/Parameter</b>	<b>Performance Levels</b>	<b>Inspection Frequency</b>	<b>Reporting Frequency</b>
Pump Integrity	Good working condition	Weekly	Quarterly
Treatment Plant Components	Good working condition	Weekly	Quarterly
Vadose-zone Wells	Good working condition No biofouling No clogging No daylighting	Monthly	Quarterly

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<sup>34</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.

## **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:

1. APP Application, dated: November 15, 2015 (significant amendment)
2. Contingency Plan, dated: February 25, 2008
3. Final Hydrologist Report, dated: May 20, 2016
4. Final Engineering Report, dated: November 14, 2011
5. Public Notice, dated:
6. Public Hearing, dated:
7. Responsiveness Summary, dated:

## **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 gallons-per-day (gpd) as established by A.R.S. § 49-242.

### **6.2 Duty to Comply [A.R.S. §§ 49-221 through 263]**

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

### **6.3 Duty to Provide Information [A.R.S. §§ 49-243(K)(2) and 49-243(K)(8)]**

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

### **6.4 Compliance with Aquifer Water Quality Standards [A.R.S. §§ 49-243(B)(2) and 49-243(B)(3)]**

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

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

The permittee shall have and maintain the technical and financial capability necessary to fully carry out the terms and conditions of this permit. Any bond, insurance policy, trust fund, or other financial assurance mechanism provided as a demonstration of financial capability in the permit application, pursuant to A.A.C. R18-9-A203(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 days after the occurrence of any one of the following:

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

### **6.7 Monitoring and Records [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A206]**

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

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

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

**6.9 Duty to Modify [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A211]**

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

**6.10 Permit Action: Amendment, Transfer, Suspension, and Revocation  
[A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]**

This permit may be amended, transferred, suspended, or revoked for cause, under the rules of the Department. The permittee shall notify the Groundwater Section 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).