**STATE OF ARIZONA**
**AQUIFER PROTECTION PERMIT NO. P-511700**
**PLACE ID 148049, LTF 61952**

## 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 EPCOR Water Arizona Inc. to operate the Luke 303 Water Reclamation Facility which is located immediately south of Luke Air Force Base, ¼ mile north of Camelback Road and ¼ mile east of Alsup Avenue, in Glendale, Arizona, in Maricopa County, over groundwater of the Phoenix Active Management Area, in Township 2N, Range 1W, Section 18, 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:** | Luke 303 Water Reclamation Facility |
| **Permitted Flow Rate:** | Phase A: 180,000 gallons per day (gpd)<br>Phase 1: 550,000 gpd |
| **Facility Address:** | 5239 North Alsup Avenue, Litchfield Park, Arizona 85340 |
| **County:** | Maricopa |
| **Permittee:** | EPCOR Water Arizona Inc. |
| **Permittee Address:** | 2355 W. Pinnacle Peak Road, Suite 300<br>Phoenix, Arizona 85027 |
| **Facility Contact:** | John Calkins, Director - Environmental Compliance |
| **Emergency Phone No.:** | (623) 445-2406 |
| **Latitude/Longitude:** | 33° 30' 54.37" N/ 112° 23' 57.48" W |
| **Legal Description:** | Township 2N, Range 1W, Section 18, Gila and Salt River Baseline and Meridian |

## 1.2 AUTHORIZING SIGNATURE

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**Trevor Baggiore, Director**
Water Quality Division
Arizona Department of Environmental Quality

Signed this _____ day of _____ , 2016

## 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)]

EPCOR Water Arizona Inc. is authorized to operate the Luke 303 Water Reclamation Facility (WRF) with a maximum monthly average flow of 0.55 million gallons per day (mgd), upon completion of two phases (Phase A and Phase 1) of plant construction. The maximum monthly average flow for Phase A shall be limited to 0.18 mgd. The maximum monthly average flow for Phase 1 shall be limited to 0.55 mgd.

**Start-up:** An influent pump station will be used to vault the influent flow up to 24,000 gallons per day (gpd) to an approved facility. The permittee shall monitor the flow under Table IA during the start-up period.

**Phase A WRF:** The Phase A WRF will have a capacity to treat up to 0.18 mgd. The Phase A treatment system shall include an influent pump station, headworks with a mechanical bar screen and manual bar rack, a bioreactor with an anoxic zone and an aeration zone, two square clarifiers, two cloth media disc filters, a chlorine contact basin, and sludge dewatering roll-offs. A spray aeration system will be utilized for total trihalomethane (TTHM) reduction at the chlorine contact basin. Dechlorination will be utilized in the future for discharge of effluent under a valid AZPDES permit. The approved methods of disposal for Phase A are recharge and reuse. Phase A includes two (2) recharge basins (recharge basins hereafter referred to as recharge "facilities"); Recharge Facility 1 and Recharge Facility 2. Recharge Facility 2 is divided into two sections: Recharge Facility 2A and Recharge Facility 2B. Sludge, including screenings, grit, and scum, shall be hauled off-site to an approved landfill for disposal in accordance with state and federal regulations.

**Phase 1:** The Phase 1 WRF will have a capacity to treat up to 0.55 mgd. During Phase 1, the existing clarifiers will be converted and combined into the bioreactor. The Phase 1 treatment system shall include an influent pump station, headworks with a mechanical bar screen and manual bar rack, a new equalization tank, modified bioreactor with anoxic zone and aeration zones, a new circular clarifier, two cloth media disc filters, a new chlorine contact basin, a new sludge holding tank, and sludge dewatering roll-offs. The existing chlorine contact basin will be converted to an effluent discharge channel. The facility will utilize a spray aeration system for total trihalomethane (TTHM) reduction at the chlorine contact basin. Dechlorination will be utilized in the future for discharge of effluent under a valid AZPDES permit. The approved methods of disposal for Phase 1 are recharge and reuse. Phase 1 includes three (3) recharge facilities; Recharge Facility 1, Recharge Facility 2 (which includes Recharge Facilities 2A and 2B), and Recharge Facility 3. Sludge, including screenings, grit, and scum, shall be hauled off-site to an approved landfill for disposal in accordance with state and federal regulations.

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 |
|---|---|---|
| Luke 303 WRF | 33° 30' 54.37" N | 112° 23' 57.48" W |
| Recharge Facility 1 (Phase A) | 33° 30' 50" N | 112° 23' 34" W |
| Recharge Facility 2A (Phase A) | 33° 30' 49" N | 112° 23' 35" W |
| Recharge Facility 2B (Phase A) | 33° 30' 49" N | 112° 23' 34" W |
| Recharge Facility 3 (Phase 1) | 33° 30' 53" N | 112° 23' 34" W |

**Annual Registration Fee [A.R.S. § 49-242 and A.A.C. R18-14-104]**

The annual registration fee for this permit is payable to ADEQ each year. The permitted flow for fee calculation is 180,000 gallons per day (gpd) for Phase A, and 550,000 gallons per day for Phase 1.

**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 estimated dollar amount for facility closure and post-closure costs is $330,000. The financial capability was demonstrated through A.A.C. R18-9-A203(C)(2).

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

The facility shall be 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(B)(6)(b).

The treatment facility shall not exceed a maximum seepage rate of 550 gallons per day per acre for all containment structures within the treatment works.

### 2.2.1 Engineering Design

The facility was designed as per the design report prepared and stamped, dated, and signed (sealed) by Rob Bryant, P.E. and John Matta, P.E. of WaterWorks Engineers dated March 30, 2015 and subsequent sealed submittals that served as additions to the design report.

### 2.2.2 Site-specific Characteristics

Site specific characteristics were not used to determine BADCT.

### 2.2.3 Pre-operational Requirements

Prior to initiating use of the Phase A and Phase 1 treatment facilities, the permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion in a format approved by the Department per the compliance schedule in Section 3.0. The certificate shall be submitted to the Water Permits Section and a copy shall be sent to the Water Quality Compliance Section.

### 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 materials 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). This classification applies to both the Phase A and Phase 1 WRFs.

### 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 0.18 mgd for Phase A, and 0.55 mgd for Phase 1. Two (2) tables are listed in Section 4.2 for discharge monitoring; Table IB - Phase A, and Table IC - Phase 1. The permittee shall use the monitoring table which is commensurate with the phase in use at the time.

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.

4. Specific discharge limitations are listed in Section 4.2, Tables IA, IB, IC, and ID.

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

The Point of Compliance (POC) has been designated at the following location:

| POC # | POC Location | Latitude | Longitude |
|---|---|---|---|
| 1 | Monitor Well #1 located at the northwest corner of the WRF | 33° 30' 55.37" N | 112° 23' 46.45" W |

In order to determine upgradient ambient groundwater conditions, groundwater monitoring shall also take place at the following location:

| Upgradient Groundwater Monitoring Location | Latitude | Longitude |
|---|---|---|
| Monitor Well #2, located at the southeast boundary of the property | 33° 30' 45.47" N | 112° 23' 33.81" W |

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

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

#### 2.5.1 Pre-operational Monitoring

An influent pump station will be used to vault the influent flow up to 24,000 gpd to an approved facility. The permittee shall monitor the flow under Table IA during the start-up period. Flow rate shall be measured at the flow meter located on the influent line. Monitoring under Section 4.1, Table IA shall continue until the permittee ceases to vault and haul and initiates routine discharge monitoring under Section 4.2, Table IB for Phase A.

#### 2.5.2 Discharge Monitoring

Upon cessation of the initial start-up period and initiation of the operation of the Phase A WRF, the permittee shall monitor the effluent according to Section 4.2, Table IB. Representative samples of the effluent shall be collected downstream of the chlorine contact basin.

Upon initiation of the operation of the Phase 1 WRF, the permittee shall monitor the effluent according to Section 4.2, Table IC. Representative samples of the effluent shall be collected downstream of the chlorine contact basin.

### 2.5.3 Reclaimed Water Monitoring

The permittee shall monitor the Class A+ reclaimed water for the parameters listed under Table ID in addition to the routine discharge monitoring of the effluent. Representative samples of the reclaimed water shall be collected downstream of the chlorine contact basin.

### 2.5.4 Groundwater Monitoring and Sampling Protocols

Upon permit issuance, the permittee shall monitor the groundwater from the following two wells in order to determine ambient conditions: Monitor Well #1 (which is also the downgradient point of compliance well); and Monitor Well #2, which is located upgradient from the treatment facility and the recharge facilities. The wells shall be monitored for water level, total nitrogen, total coliform, and for the metals, VOCs, and SVOCs included in the Aquifer Water Quality Standards for Drinking Water under A.A.C. R18-11 406(B) and (C).

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, 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.

The permittee may conduct the sampling using the low-flow purging method as described in the Arizona Water Resources Research Center, March 1995 *Field Manual for Water Quality Sampling*. The well must be purged until indicator parameters stabilize. Indicator parameters shall include dissolved oxygen, turbidity, pH, temperature, and conductivity.

#### 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.

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.

### 2.5.7 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 17th 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 Water Permits 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 submitted in Attachment K of 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 and Performance Levels

#### 2.6.2.1 Exceeding of Performance Levels Set for Operational Conditions

1. For freeboard operational performance levels, the permittee shall comply with the 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.

2. If any other operational performance level set in Section 4.2, Table III has been exceeded, the permittee shall:

    a. Notify the ADEQ Water Quality Compliance Section within five days of becoming aware of the exceedance.

    b. Submit a written report 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.

3. The facility is no longer on alert status once the operational indicator no longer indicates that the performance level is being exceeded. The permittee shall, however, complete all tasks necessary to return the facility to its pre-alert operating condition.

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

1. If an AL set in Section 4.2, Table IB or IC 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 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.

##### 2.6.2.2.1 Exceeding Permit Flow Limit

1. If the Alert Level (AL) for average monthly flow in Section 4.2, Table IB has been exceeded, the permittee shall begin construction of Phase 1, or submit a report to the ADEQ Water Permits Section detailing the reasons it is not necessary to begin the next phase of construction. Acceptance of the report instead of beginning the next phase of construction requires ADEQ approval.

2. If the AL for average monthly flow in Section 4.2, Table IC has been exceeded, the permittee shall submit an application to the Water Permits Section for an APP amendment to expand the WRF, or submit a report detailing the reasons an expansion is not necessary. 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

No ALs are established for indicator parameters.

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

1. After the establishing of ALs and AQLs in Table IIB for POC #1 (see Section 3.0, Compliance Schedule Item No. 9), in the case of an exceedance of an AL, the permittee may conduct verification sampling within five (5) days of becoming aware of the exceedance. The permittee may use results of another sample taken between the date of the last sampling event and the date of receiving the result as verification.

2. If verification sampling 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 pollutants set in Section 4.2, Table IIB 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 Water Permits 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 Water Permits Section.

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 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 IIB 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 permit issuance.

#### 2.6.2.3.4 Alert Level for Groundwater Level

1. After the establishing of ALs and AQLs in Table IIB for POC #1 (see Section 3.0, Compliance Schedule Item No. 9), if monitoring indicates the groundwater level is not within the allowable range established by the Alert Level (AL) in Section 4.2, Table IIB, the permittee shall submit a written report within 30 days after becoming aware of the exceedance. The report shall document the following:
   a. the as-built configuration of the well including the screened interval;
   b. all groundwater level measurements available for the well;
   c. a discussion and analysis of any trends or seasonal variations in the groundwater level measurements;
   d. information on groundwater recharge, withdrawal, or other hydrologic conditions in the vicinity of the well, and;
   e. any other pertinent information obtained by the permittee.

2. If monitoring indicates the groundwater level is not within the allowable range established by the Alert Level (AL) in Section 4.2, Table IIB for more than two (2) sequential sampling events, the permittee shall submit a second report which evaluates the cause(s) of the exceedance and recommends whether the well should be replaced pursuant to Section 2.5.4.1. The report shall discuss and demonstrate whether samples representative of the water quality of the relevant aquifer can be practicably obtained from the well.

3. Upon review of the submitted report, the Department may amend the permit to require replacement of the well, require additional permit conditions, or other actions.

### 2.6.3 Discharge Limit Violation

1. If a DL set in Section 4.1, Table IA, or 4.2, Tables IB, IC, or ID 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, as 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. 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 (5) days of becoming aware of the exceedance. The permittee may use results of another sample taken between the date of the last sampling event and the date of receiving the result as verification.

2. If 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 Water Quality Compliance 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 Water Quality Compliance Section within 24 hours of discovering the discharge of non-hazardous material which has the potential to cause an AQL exceedance, or could pose an endangerment to public health or the environment.

#### 2.6.5.4 Reporting Requirements

The permittee shall submit a written report for any unauthorized discharges reported under Sections 2.6.5.2 and 2.6.5.3 to the ADEQ Water Quality Compliance 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 2.6 and actions identified in the approved contingency plan referenced in Section 5.0 have already been approved by ADEQ and do not require written approval to implement.

With the exception of emergency response actions taken under Section 2.6.5, the permittee shall obtain written approval from the Water Permits 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 Water Quality Compliance 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. The permittee shall complete the Self-monitoring Report Form (SMRF) provided by ADEQ, and submit the completed report to the Water Quality Compliance Data and Enforcement 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 reporting period, 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 Section 4.0 list the monitoring parameters and the frequencies for reporting results on the SMRF:

   - Section 4.1, Table IA, Start-up Monitoring
   - Section 4.2, Table IB, Discharge Monitoring - Phase A
   - Section 4.2, Table IC, Discharge Monitoring - Phase 1
   - Section 4.2, Table ID, Reclaimed Water Monitoring
   - Section 4.2, Table IIB, Groundwater Monitoring

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

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 Water Quality Compliance Section in writing (by mail or by fax - see Section 2.7.5) within five (5) days (except as provided in Section 2.6.5) of becoming aware of an AL exceedance, or violation of any permit condition, AQL, or DL.

2. The permittee shall submit a written report to the Water Quality Compliance 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 record the information as required in Table III in the facility log book as per Section 2.7.2, and report to ADEQ any violations or exceedances as per Section 2.7.3.

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.

#### 2.7.4.1 TTHM Report

Upon commencement of the Phase A treatment process, the permittee shall monitor the effluent for total trihalomethane (TTHM) monthly for twelve months to confirm that the facility is meeting the discharge limit for TTHM. After completion of the twelve rounds of sampling, the permittee shall submit a report of the monitoring results to the Water Permits Section (see Compliance Schedule Item No. 5, in Section 3.0).

If, after review of the report, it is determined that the treatment process is able to consistently meet the TTHM discharge limit, the sampling frequency for TTHM shall be reduced to semi-annually (permit amendment not required - see Section 4.2, Table IB). If it is determined that the treatment process is unable to consistently meet the TTHM discharge limit, the permittee will be required to upgrade the treatment system under a permit amendment.

### 2.7.5 Reporting Location

All SMRFs shall be submitted to:

Arizona Department of Environmental Quality
Water Quality Compliance Data and Enforcement Unit
Mail Code: 5415B-1
1110 West Washington Street
Phoenix, Arizona 85007
Phone (602) 771-4681

All documents required by this permit to be submitted to the Water Quality Compliance Section shall be directed to the following address:

Arizona Department of Environmental Quality
Water Quality Compliance Section
Mail Code: 5415B-1
1110 West Washington Street
Phoenix, Arizona 85007
Phone (602) 771-4497
Fax (602) 771-4505

All documents 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 West Washington Street
Phoenix, Arizona 85007
Phone (602) 771-4428

### 2.7.6 Reporting Deadline

The following table lists the quarterly report due dates[1]:

| 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 Water Permits Section and the Water Quality Compliance 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 Water Quality Compliance 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]A post-mark date no later than the due date is considered meeting the due date requirements under this Section.

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 Water Quality Compliance 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 Water Quality Compliance 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 Water Permits 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 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 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 Water Permits Section.

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

Unless otherwise indicated, for each compliance schedule item listed below, the permittee shall submit the required information, including a cover letter that lists the compliance schedule items, to the Water Permits 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? |
|---|---|---|---|
| 1 | **Engineer's Certificate of Completion for Phase A:** The permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion in a format approved by the Department that confirms that the Phase A WRF and recharge facilities have been constructed according to the Department-approved design report or plans and specifications, as applicable. | Prior to discharge under Phase A and within 90 days of completion of construction of the Phase A WRF. | No |
| 2 | **Cessation of Vault and Haul Notification:** The permittee shall submit notification of the cessation of vault and haul. This notification must also be submitted to the ADEQ Water Quality Compliance Data and Enforcement Unit (see address in Section 2.7.5) in order to receive the SMRFs for Phase A under Table IB. | Within 15 days of the date of the cessation of the vault and haul activity or when flow reaches 24,000 gpd, whichever comes first. | No |
| 3 | **Engineer's Certificate of Completion for Phase 1:** The permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion in a format approved by the Department that confirms that the Phase 1 WRF and the associated recharge facility have been constructed according to the Department-approved design report or plans and specifications, as applicable. | Prior to discharge under Phase 1 and within 90 days of completion of construction of the Phase 1 WRF. | No |
| 4 | **Cessation of Discharge Under Phase A Notification:** The permittee shall submit notification of the cessation of discharge under Phase A and the commencement of discharge under Phase 1. This notification must also be submitted to the ADEQ Water Quality Compliance Data and Enforcement Unit (see address in Section 2.7.5) in order to receive the SMRFs for Phase 1 under Table IC. | Within 15 days of the date of the cessation of discharge under Phase A and the commencement of discharge under Phase 1. | No |
| 5 | **TTHM Summary Report:** The permittee shall submit a TTHM summary report summarizing the results of the twelve (12) monthly TTHM samples as required under Section 2.7.4.1. | Within 30 days after receipt of the laboratory results for the 12$^{th}$ monitoring event. | See Section 2.7.4.1 |
| 6 | **Installation of POC Well #1 and Upgradient Well #2:** Both wells shall be installed in accordance with the requirements of the Arizona Department of Water Resources (ADWR). The wells shall be screened within 10 feet above and 30 feet below the water table in the uppermost aquifer, unless an alternative screen length is pre-approved by the ADEQ Water Permits Section. | Within 90 days after the effective date of the permit. | No |
| 7 | **Well Construction Logs:** Submit geologic and well construction logs, including the ADWR well-registration numbers and the "as-built" latitude/longitude coordinates. | Within 45 days of well installation. | No |
| 8 | **Ambient Groundwater Monitoring:** Sample the groundwater in POC Well #1 and Upgradient Well MW #2. The groundwater samples shall be collected and analyzed for all constituents as per the sampling frequencies indicated in Section 4.2, Table IIA. | Begin in the first month following well installation and continue sampling each month until 12 months of ambient data are available. | No |

| | | | |
|---|---|---|---|
| 9 | **Ambient Report and Permit Amendment to Establish ALs and AQLs in POC #1:** Submit a permit amendment application along with copies of all laboratory analytical reports, change of custody documentation, and QA/QC. Also submit a field sampling report describing the sampling procedures and sample collection QA/QC. The permittee may calculate the ALs and AQLs for those constituents in Section 4.2, Table IIA, or may request the Water Permits Section to perform the calculations. The AL for the groundwater level measurement in Table IIB shall be based on the screened interval of the POC well (MW #1). | Within 30 days of receipt of the laboratory results of the final ($12^{th}$) sampling event. | Yes |
| 10 | **Compliance Groundwater Monitoring:** Compliance groundwater monitoring shall be performed as detailed in Section 4.2, Table IIB. | Beginning in the first month following the final ($12^{th}$) sampling event. | No |
| 11 | **Update Cost Estimate and Financial Assurance:** The permittee shall submit updated cost estimates for facility closure and post-closure, as per A.A.C. R18-9-A201(B)(5), and an updated financial assurance demonstration for the updated cost estimate as per A.A.C. R18-9-A203. | Every six (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

**TABLE IA**
**INITIAL START-UP PLAN - PHASE A INLUENT FLOW MONITORING**[2]

| **Sampling Point Number** | **Sampling Point Identification** | | **Latitude** | | **Longitude** |
|---|---|---|---|---|---|
| 1 | Flow meter located on the influent line | | 33° 30' 53" N | | 112° 23' 34" W |
| **Parameter** | **AL**[3] | **DL**[4] | **Units** | **Sampling Frequency** | **Reporting Frequency** |
| Total Flow: Daily[5] | Not Established[6] | 0.024 | mgd[7] | Daily | Quarterly |

[2] For up to 12 months from the date of permit issuance, up to 24,000 gpd of influent may be vaulted and hauled to an approved facility. An influent pump station will be used to vault the influent. The permittee shall monitor the flow under Table IA during the start-up period. Monitoring under this table shall continue until permittee ceases to vault and haul and initiates routine compliance monitoring under Section 4.2, Table IB.
[3] AL = Alert Level
[4] DL = Discharge Limit
[5] Flow shall be measured using a continuous recording flow meter that totals the flows daily.
[6] Not Established = Monitoring required but no limits have been specified at time of permit issuance.
[7] mgd = million gallons per day

## 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

**TABLE IB - PHASE A (flows up to 0.18 mgd)[8]**
**ROUTINE COMPLIANCE DISCHARGE MONITORING**

| **Sampling Point Number** | **Sampling Point Identification** | | **Latitude** | | **Longitude** |
|---|---|---|---|---|---|
| 2 | Effluent sampling point downstream of the chlorine contact basin | | 33° 30' 48.33" N | | 112° 23' 36.78" W |
| 3 | Flow meter located on the line to the recharge facilities | | 33° 30' 48.37" N | | 112° 23' 36.50" W |
| **Parameter** | **AL**[9] | **DL**[10] | **Units** | **Sampling Frequency** | **Reporting Frequency** |
| Total Flow[11]: Daily[12] | NE[13] | NE | mgd[14] | Daily | Quarterly |
| Total Flow: Monthly Average[15] | 0.171 | 0.18 | mgd | Monthly Calculation | Quarterly |
| Recharge Flow: Daily | NE | NE | mgd | Daily | Quarterly |
| Recharge Flow: Monthly Average | 0.171 | 0.18 | mgd | Monthly Calculation | Quarterly |
| Reuse Flow: Daily | NE | NE | mgd | Daily | Quarterly |
| Reuse Flow: Monthly Average | 0.171 | 0.18 | mgd | Monthly Calculation | Quarterly |
| Fecal Coliform: Single sample maximum | NE | 800 | MPN[16] | Daily[17] | Quarterly |
| Fecal Coliform: four (4) of seven (7) samples in a week[18] | NE | 200[19] | MPN | Daily Evaluation | Quarterly |
| Total Nitrogen[20]: Five-sample rolling geometric mean[21] | 8 | 10 | mg/l[22] | Monthly Calculation | Quarterly |

[8]Upon transitioning from Phase A to Phase 1, the permittee shall notify the Water Permits Section and the Water Quality Compliance Data and Enforcement Unit (see Section 2.7.5), discontinue monitoring under Table IB, and begin monitoring under Table IC.

[9]AL = Alert Level

[10]DL = Discharge Limit

[11]Total flow for all methods of disposal (recharge and reuse).

[12]Flow shall be measured using a continuous recording flow meter which totals the flow daily.

[13]NE = Not Established (no limits specified at permit issuance).

[14]mgd = million gallons per day

[15]Monthly = Calculated value = Average of daily flow values in a month.

[16]MPN = Most Probable Number per 100 ml sample. For MPN, a value of <2.0 shall be considered to be non-detect.

[17]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 fewer than four samples in each week are obtained and analyzed.

[18]Week means a seven-day period starting on Sunday and ending on the following Saturday.

[19]If at least four (4) of seven (7) samples in a week are equal to or less than 200 MPN/100 ml, report "yes" in the appropriate space on the SMRF (indicating that the standard has been met). If at least four (4) of seven (7) samples in a week are greater than 200 MPN/100 ml, report "no" in the appropriate space on the SMRF (indicating that the standard has not been met).

[20]Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

[21]The five-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. *Example:* $GM_5 = \sqrt[5]{(m_1)(m_2)(m_3)(m_4)(m_5)}$

For the first four samples, enter "not required" on the SMRF.

[22]mg/l = milligrams per liter

**TABLE IB - PHASE A (flows up to 0.18 mgd)**
**ROUTINE COMPLIANCE DISCHARGE MONITORING (continued)**

| Parameter | AL | DL | Units | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|---|
| **Metals (total):** | | | | | |
| Antimony | 0.0048 | 0.006 | mg/l | Quarterly | Quarterly |
| Arsenic | 0.04 | 0.05 | mg/l | Quarterly | Quarterly |
| Barium | 1.60 | 2.00 | 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 |

**TABLE IB - PHASE A - (flows up to 0.18 mgd)**
**ROUTINE COMPLIANCE DISCHARGE MONITORING (continued)**

| Parameter | AL | DL | Units | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|---|
| **Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs):** | | | | | |
| 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 | 1.0 | mg/l | Semi-Annually | Semi-Annually |
| Trihalomethane (total)[23] | 0.08 | 0.1 | mg/l | Monthly[24]/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) | 8.0 | 10.0 | mg/l | Semi-Annually | Semi-Annually |

[23] Total Trihalomethane (TTHM) is comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

[24] Monitoring for TTHM shall be performed on a monthly basis for the first 12 months of operation of the Phase A WRF as per Sections 2.7.4.1 and 3.0, Item No. 5.

**TABLE IC - PHASE 1 (flows up to 0.55 mgd)**
**ROUTINE COMPLIANCE DISCHARGE MONITORING**

| **Sampling Point Number** | **Sampling Point Identification** | | **Latitude** | | **Longitude** |
|---|---|---|---|---|---|
| 2 | Effluent sampling point located downstream of the chlorine contact basin | | 33° 30' 48.33" N | | 112° 23' 36.78" W |
| 3 | Flow meter located on the line to the recharge facilities | | 33° 30' 48.37" N | | 112° 23' 36.50" W |
| **Parameter** | **AL**[25] | **DL**[26] | **Units** | **Sampling Frequency** | **Reporting Frequency** |
| Total Flow[27]: Daily[28] | NE[29] | NE | mgd[30] | Daily | Quarterly |
| Total Flow: Monthly Average[31] | 0.5225 | 0.55 | mgd | Monthly Calculation | Quarterly |
| Recharge Flow: Daily | NE | NE | mgd | Daily | Quarterly |
| Recharge Flow: Monthly Average | 0.5225 | 0.55 | mgd | Monthly Calculation | Quarterly |
| Reuse Flow: Daily | NE | NE | mgd | Daily | Quarterly |
| Reuse Flow: Monthly Average | 0.5225 | 0.55 | mgd | Monthly Calculation | Quarterly |
| Fecal Coliform: Single sample maximum | NE | 23 | MPN[32] | Daily[33] | Quarterly |
| Fecal Coliform: four (4) of seven (7) samples in a week[34] | NE | Non-detect[35] | MPN | Daily Evaluation | Quarterly |
| Total Nitrogen[36]: Five-sample rolling geometric mean[37] | 8 | 10 | mg/l[38] | Monthly Calculation | Quarterly |

[25]AL = Alert Level
[26]DL = Discharge Limit
[27]Total flow for all methods of disposal (recharge and reuse).
[28]Flow shall be measured using a continuous recording flow meter which totals the flow daily.
[29]NE = Not Established (no limits specified at permit issuance).
[30]mgd = million gallons per day
[31]Monthly = Calculated value = Average of daily flow values in a month.
[32]MPN = Most Probable Number per 100 ml sample. For MPN, a value of <2.0 shall be considered to be non-detect.
[33]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 fewer than four samples in each week are obtained and analyzed.
[34]Week means a seven-day period starting on Sunday and ending on the following Saturday.
[35]If at least four (4) of seven (7) samples in a week are non-detect, report "yes" in the appropriate space on the SMRF (indicating that the standard has been met). If at least four (4) of seven (7) samples in a week have detections of fecal coliform, report "no" in the appropriate space on the SMRF (indicating that the standard has not been met).
[36]Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen
[37]The five-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. *Example:* $GM_5 = \sqrt[5]{(m_1)(m_2)(m_3)(m_4)(m_5)}$
[38]mg/l = milligrams per liter

**TABLE IC - PHASE 1 (flows up to 0.55 mgd)**
**ROUTINE COMPLIANCE DISCHARGE MONITORING (continued)**

| Parameter | AL | DL | Units | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|---|
| **Metals (total):** | | | | | |
| Antimony | 0.0048 | 0.006 | mg/l | Quarterly | Quarterly |
| Arsenic | 0.04 | 0.05 | mg/l | Quarterly | Quarterly |
| Barium | 1.60 | 2.00 | 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 |

**TABLE IC - PHASE 1 (flows up to 0.55 mgd)**
**ROUTINE COMPLIANCE DISCHARGE MONITORING (continued)**

| Parameter | AL | DL | Units | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|---|
| **Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs):** | | | | | |
| 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 | 1.0 | mg/l | Semi-Annually | Semi-Annually |
| Trihalomethane (total)[39] | 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) | 8.0 | 10.0 | mg/l | Semi-Annually | Semi-Annually |

[39]Total Trihalomethane (TTHM) is comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

**TABLE ID - PHASE A and PHASE 1**
**RECLAIMED WATER MONITORING TABLE - CLASS A+**[40]

| **Sampling Point Number** | **Sampling Point Identification** | | **Latitude** | **Longitude** |
|---|---|---|---|---|
| 2 | Flow meter located downstream of the chlorine contact basin | | 33° 30' 48.33" N | 112° 23' 36.78" W |
| **Parameter** | **DL**[41] | **Units** | **Sampling Frequency** | **Reporting Frequency** |
| Fecal Coliform: Single-sample maximum | 23.0 | MPN[42] | Daily[43] | Quarterly |
| Fecal Coliform: Four (4) of last seven (7) samples | Non-detect[44] | MPN | Daily Evaluation | Quarterly |
| Total Nitrogen[45]: Five-sample rolling geometric | 10 | mg/l[47] | Monthly Calculation | Quarterly |
| Turbidity[48]: Single reading[49] | 5.0 | NTU[50] | Daily | Quarterly |
| Turbidity: 24-hour average | 2.0 | NTU | Daily Calculation | Quarterly |

[40]Reclaimed water monitoring under Table ID shall be performed in addition to routine discharge monitoring required under Section 4.2, Tables IB and IC.

[41]DL = discharge limit

[42]MPN = Most Probable Number per 100 ml. For MPN, a value of <2.0 shall be considered to be non-detect.

[43]For fecal coliform, "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.

[44]If at least four (4) of the last seven (7) samples are non-detect, report "yes" in the appropriate space on the SMRF (indicating that the standard has been met). If at least four (4) of the last seven (7) samples have detections of fecal coliform, report "no" in the appropriate space on the SMRF (indicating that the standard has not been met).

[45]Nitrate N, plus Nitrite N, plus Total Kjeldahl Nitrogen (TKN)

[46]The five-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. *Example:* $GM_5 = \sqrt[5]{(m_1)(m_2)(m_3)(m_4)(m_5)}$

For the first four samples in Phase A, enter "not required" on the SMRF.

[47]mg/l = milligrams per liter

[48]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.

[49] For the single turbidity reading, report the maximum reading during the 24-hour period.

[50]NTU = Nephelometric Turbidity Units

## TABLE IIA - AMBIENT GROUNDWATER MONITORING[51]

| **Sampling Point Number** | **Sampling Point Identification** | | | **Latitude** | **Longitude** |
|---|---|---|---|---|---|
| 4 | POC #1 (MW #1) | | | 33° 30' 55.37" N | 112° 23' 46.45" W |
| 5 | Upgradient Monitoring Well (MW #2) | | | 33° 30' 45.47" N | 112° 23' 33.81" W |
| **Parameter** | **AL**[52] | **AQL**[53] | **Units** | **Sampling Frequency** | **Reporting Frequency** |
| Total Nitrogen[54]: | NE[55] | NE | mg/l | Monthly Calculation | Quarterly |
| Nitrate-Nitrite as N | NE | NE | mg/l | Monthly Calculation | Quarterly |
| Nitrate as N | NE | NE | mg/l | Monthly | Quarterly |
| Nitrite as N | NE | NE | mg/l | Monthly | Quarterly |
| Total Kjeldahl Nitrogen (TKN) | NE | NE | mg/l | Monthly | Quarterly |
| Total Coliform | NE | NE | P/A[56] | Monthly | Quarterly |
| Water Level MW #1 | NE | NE | Feet bgs[57] | Monthly | Quarterly |
| Water Level MW #2 | NE | NE | Feet bgs | Monthly | Quarterly |
| **Metals (total):** | | | | | |
| Antimony | NE | NE | mg/l | Quarterly | Quarterly |
| Arsenic | NE | NE | mg/l | Quarterly | Quarterly |
| Barium | NE | NE | mg/l | Quarterly | Quarterly |
| Beryllium | NE | NE | mg/l | Quarterly | Quarterly |
| Cadmium | NE | NE | mg/l | Quarterly | Quarterly |
| Chromium | NE | NE | mg/l | Quarterly | Quarterly |
| Cyanide (as free cyanide) | NE | NE | mg/l | Quarterly | Quarterly |
| Fluoride | NE | NE | mg/l | Quarterly | Quarterly |
| Lead | NE | NE | mg/l | Quarterly | Quarterly |
| Mercury | NE | NE | mg/l | Quarterly | Quarterly |
| Nickel | NE | NE | mg/l | Quarterly | Quarterly |
| Selenium | NE | NE | mg/l | Quarterly | Quarterly |
| Thallium | NE | NE | mg/l | Quarterly | Quarterly |

[51]Ambient groundwater monitoring shall be performed according to Table IIA for 12 months. After 12 months, the permittee shall submit a report containing the monitoring results to ADEQ so that the ALs and AQLs may be established for routine groundwater monitoring under a permit amendment (see Section 3.0, Compliance Schedule Item Nos. 8 and 9).
[52]AL = Alert Level
[53] AQL = Aquifer Quality Limit
[54]Total Nitrogen is equal to Nitrate as N plus Nitrite as N plus TKN.
[55]NE = Not Established
[56]Presence/Absence
[57]bgs = below ground surface

**TABLE IIA - AMBIENT GROUNDWATER MONITORING (continued)**

| Parameter | AL | AQ | Units | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|---|
| **Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs):** | | | | | |
| Benzene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| Carbon tetrachloride | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| o-Dichlorobenzene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| para-Dichlorobenzene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| 1,2-Dichloroethane | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| 1,1-Dichloroethylene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| cis-1,2-Dichloroethylene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| trans-1,2-Dichloroethylene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| Dichloromethane | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| 1,2-Dichloropropane | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| Ethylbenzene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| Hexachlorobenzene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| Hexachlorocyclopentadiene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| Monochlorobenzene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| Styrene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| Tetrachloroethylene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| Toluene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| Trihalomethanes (total)[58] | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| 1,1,1-Trichloroethane | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| 1,2,4 - Trichlorobenzene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| 1,1,2 - Trichloroethane | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| Trichloroethylene | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| Vinyl Chloride | NE | NE | mg/l | Semi-Annually | Semi-Annually |
| Xylenes (Total) | NE | NE | mg/l | Semi-Annually | Semi-Annually |

[58] Total Trihalomethanes are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

**TABLE IIB - ROUTINE GROUNDWATER MONITORING**

| **Sampling Point Number** | **Sampling Point Identification** | | | **Latitude** | **Longitude** |
|---|---|---|---|---|---|
| 4 | POC #1 (MW #1) | | | 33° 30' 55.37" N | 112° 23' 46.45" W |
| **Parameter** | **AL**[59] | **AQL**[60] | **Units** | **Sampling Frequency** | **Reporting Frequency** |
| Total Nitrogen[61]: | Reserved[62] | Reserved | mg/l[63] | Monthly Calculation | Quarterly |
| Nitrate-Nitrite as N | Reserved | Reserved | mg/l | Monthly Calculation | Quarterly |
| Nitrate as N | Reserved | Reserved | mg/l | Monthly | Quarterly |
| Nitrite as N | Reserved | Reserved | mg/l | Monthly | Quarterly |
| Total Kjeldahl Nitrogen (TKN) | Reserved | Reserved | mg/l | Monthly | Quarterly |
| Total Coliform | Reserved | Reserved | P/A[64] | Monthly | Quarterly |
| Water Level MW #1 | Reserved | Reserved | Feet bgs[65] | Monthly | Quarterly |
| Water Level MW #2 | Reserved | Reserved | Feet bgs | Monthly | Quarterly |
| **Metals (total):** | | | | | |
| Antimony | Reserved | Reserved | mg/l | Quarterly | Quarterly |
| Arsenic | Reserved | Reserved | mg/l | Quarterly | Quarterly |
| Barium | Reserved | Reserved | mg/l | Quarterly | Quarterly |
| Beryllium | Reserved | Reserved | mg/l | Quarterly | Quarterly |
| Cadmium | Reserved | Reserved | mg/l | Quarterly | Quarterly |
| Chromium | Reserved | Reserved | mg/l | Quarterly | Quarterly |
| Cyanide (as free cyanide) | Reserved | Reserved | mg/l | Quarterly | Quarterly |
| Fluoride | Reserved | Reserved | mg/l | Quarterly | Quarterly |
| Lead | Reserved | Reserved | mg/l | Quarterly | Quarterly |
| Mercury | Reserved | Reserved | mg/l | Quarterly | Quarterly |
| Nickel | Reserved | Reserved | mg/l | Quarterly | Quarterly |
| Selenium | Reserved | Reserved | mg/l | Quarterly | Quarterly |
| Thallium | Reserved | Reserved | mg/l | Quarterly | Quarterly |

[59]AL = Alert Level
[60] AQL = Aquifer Quality Limit
[61]Total Nitrogen is equal to Nitrate as N plus Nitrite as N plus TKN.
[62]ALs and AQLs will be established under a permit amendment after review of the Ambient Groundwater Monitoring Report (see Section 3.0, Compliance Schedule Item Nos. 8 and 9).
[63]mg/l = milligrams per liter
[64]P/A = Presence or absence of total coliforms in a 100-milliliter sample.
[65]bgs = below ground surface

**TABLE IIB - ROUTINE GROUNDWATER MONITORING (continued)**

| Parameter | AL | AQ | Units | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|---|
| **Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs):** | | | | | |
| Benzene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| Carbon tetrachloride | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| o-Dichlorobenzene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| para-Dichlorobenzene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| 1,2-Dichloroethane | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| 1,1-Dichloroethylene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| cis-1,2-Dichloroethylene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| trans-1,2-Dichloroethylene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| Dichloromethane | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| 1,2-Dichloropropane | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| Ethylbenzene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| Hexachlorobenzene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| Hexachlorocyclopentadiene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| Monochlorobenzene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| Styrene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| Tetrachloroethylene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| Toluene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| Trihalomethanes (total)[66] | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| 1,1,1 - Trichloroethane | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| 1,2,4 - Trichlorobenzene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| 1,1,2 - Trichloroethane | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| Trichloroethylene | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| Vinyl Chloride | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |
| Xylenes (Total) | Reserved | Reserved | mg/l | Semi-Annually | Semi-Annually |

[66] Total Trihalomethanes are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

**TABLE III**
**FACILITY INSPECTION (OPERATIONAL MONITORING) [67]**

| Pollution Control Structure/Parameter | Performance Level | Inspection Frequency | Reporting Frequency |
|---|---|---|---|
| Treatment Plant Components | Good working condition | Weekly | See Section 2.7.3 |
| Pump Integrity | Good working condition | Weekly | See Section 2.7.3 |
| Recharge Facility Freeboard | Two (2) feet | Weekly | See Section 2.7.3 |
| Recharge Facility Berm Integrity | No visible structural damage, breach, or erosion of embankments | Weekly | See Section 2.7.3 |

[67] 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: 2/24/2015
2. Contingency Plan, dated: 4/2013
3. Final Hydrologist Report, dated: 4/6/2015
4. Final Engineering Report, dated: 9/30/2015
5. Public Notice, dated: to be entered
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. If the facility is not constructed or is incapable of discharge at time of permit issuance, the permittee may be eligible for reduced fees under the rule. Send all correspondence requesting reduced fees to the Water Quality Division of ADEQ. Please reference the permit number, LTF number and why reduced fees are requested under the rule.

### 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(C), shall be in effect prior to any discharge authorized by this permit and shall remain in effect for the duration of the permit.

### 6.6 Reporting of Bankruptcy or Environmental Enforcement [A.A.C. R18-9-A207(C)]

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

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

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

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

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

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

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

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

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

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