

**STATE OF ARIZONA
AQUIFER PROTECTION PERMIT NO. P-100273
PLACE ID 795 LTF 49145
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, Forest Highlands Water Reclamation Company is hereby authorized to operate the Forest Highlands Water Reclamation Facility, located approximately five miles south of the city of Flagstaff, Arizona, in Coconino County, over groundwater of the Little Colorado River Plateau Basin, in Township 20 N, Range 7 E, Section 19, SE ¼, SE ¼ 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:	Forest Highlands Water Reclamation Facility
Facility Address:	658 Forest Highlands Located approximately five miles south of the city of Flagstaff
County:	Coconino
Permittee:	Forest Highlands Water Reclamation Company
Permittee Address:	658 Forest Highlands Flagstaff, Arizona 86001
Facility Contact:	Bill Strauss, Director of Public Works
Emergency Phone No.:	(928) 525-5244
Latitude/Longitude:	35° 06' 24" N/ 111°41' 15" W
Legal Description:	Township 20N, Range 7E, Section 19, SE¼, SE¼, Gila and Salt River Baseline and Meridian

1.2 AUTHORIZING SIGNATURE

Henry R. Darwin, Acting Director
Water Quality Division
Arizona Department of Environmental Quality

Signed this _____ day of _____, 2009

THIS 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 Forest Highlands Water Reclamation Company is authorized to operate the Forest Highlands Water Reclamation Facility (WRF), with an average design flow of 0.18 million gallons per day (mgd), and an expanded treatment capacity of 0.21 mgd during peak holiday periods. The WRF is designed to treat flows from single-family residential dwellings and the golf course clubhouses. The treatment process consists of extended aeration, clarification, filtration, and disinfection (chlorination). Storage of reclaimed water is accomplished in three ways: pumped to an on-site eight-million-gallon above-ground steel storage tank; pumped to an existing wetland pond at Kachina Village (regulated under Aquifer Protection Permit #P-100362); or pumped to an on-site lined effluent storage pond. There is also a lined emergency overflow pond on-site for storage of influent or effluent in emergency situations. Sludge produced by the treatment process is removed off-site to an approved landfill. The reclaimed water may be used for beneficial purposes under a valid reclaimed water permit (A.A.C. R18-9, Article 7).

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

Additions to this permit under this amendment include a new on-site effluent storage pond and the existing on-site emergency overflow pond. The emergency overflow pond was not included in previous permits.

The site includes the following permitted discharging facilities:

Facility	Latitude	Longitude
Forest Highlands WRF	35° 06' 24" N	111° 41' 15" W
Effluent Storage Pond	35° 06' 21" N	111° 41' 11" W
Emergency Overflow Pond	35° 06' 25" N	111° 41' 10" W

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

The Annual Registration Fee for this permit is established by A.R.S. § 49-242(E) and is payable to the Arizona Department of Environmental Quality (ADEQ) each year. The design flow is 0.18 million gallons per day (mgd).

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(C)(1). The permittee shall maintain financial capability throughout the life of the facility. The estimated dollar amount demonstrated for financial capability is \$150,000.

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

The WRF (except for the effluent storage pond) was designed and constructed, and shall be operated and maintained to meet the treatment performance criteria (BADCT) which was in effect at the time the original permit was issued. The effluent storage pond shall be designed, constructed, operated and maintained to meet the performance levels for new facilities as specified in A.A.C. R18-9-B204(B)(7). Testing of the liner of the emergency overflow pond shall be conducted and reported to ADEQ as per compliance schedule item #2 (see Section 3.0). If the liner meets the leakage rate of less than 550 gpd/acre, then it will be considered to meet the BADCT for new facilities under A.A.C. R18-9-B204(B)(7). Pre-treatment requirements shall be met by conducting monitoring as per A.A.C. R18-9-B204(B)(6)(b)(iii).

2.2.1 Engineering Design

An Approval to Construct was issued for the original Hydro-Aerobics 30,000 gpd package treatment facility on November 6, 1986, and an Approval of Construction was issued on February 14, 1989 (ADEQ Technical Review Unit file no. 860419). On July 20, 1990, an Approval to Construct was issued to expand the treatment facility from 30,000 gpd to 180,000 gpd and an Approval of Construction was issued for this expansion project on December 2, 1992 (ADEQ Technical Review Unit file no. 870220). An Approval to Construct was issued on June 18, 1997 to modify the treatment facility to enable the treatment of limited, high-flow holiday periods, and an Approval of Construction was issued for this modification project on February 10, 1999 (ADEQ Engineering Review Unit file no. 970139). Under this current permit amendment, an approval of the engineering design for the effluent storage pond and the emergency overflow pond was granted on October 5, 2009 by the ADEQ APP & Reuse Unit as a part of the technical review requirements for a new facility under A.A.C. R18-9B-204(B)(7).

Installation and oversight of the original treatment facility was performed by Werhan, Folkers, and Monihan Engineers. Expansion of the facility to 180,000 gpd was designed by Werhan, Folkers, & Monihan Engineers. The modification for treatment of limited, high-flow holiday periods was designed by Malcolm Pirnie, Inc. The effluent storage pond was designed by Shephard Wesnitzer, Inc. All three firms employ professional engineers registered in the state of Arizona.

2.2.2 Site-specific Characteristics

Depth to groundwater in the vicinity of the WRF is estimated to be approximately 885 feet below ground surface. Groundwater flow direction is estimated to be toward the south. Site-specific characteristics were not used to determine BADCT for this facility.

2.2.3 Pre-operational Requirements

For the new effluent storage pond, the permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion in a format approved by the Department (see Section 3.0, compliance schedule item #1). The Engineer's Certificate of Completion shall be submitted to the Groundwater Section and a copy shall be sent to the Water Quality Compliance Section.

2.2.4 Operational Requirements

1. Permittee shall maintain a copy of the up-to-date Operations and Maintenance (O & M) Manual at the WRF site at all times and 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 on the Self-Monitoring Report Form submitted quarterly to the ADEQ Water Quality Compliance Section.

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 classified as producing Class B reclaimed water which may be used for any allowable Class B or C use under a valid reclaimed water permit.

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 an average design flow of 0.18 million gallons per day.
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 including liner failure¹, uncontrollable leakage, overtopping (e.g., exceeding the maximum storage capacity, defined as a fluid level exceeding the crest elevation of a permitted impoundment), of basins, lagoons, impoundments or sludge drying beds, berm breaches, accidental spills, or other unauthorized discharges.
4. Specific effluent and reclaimed water discharge limitations are listed in Section 4.2, Tables IA and IB, respectively.
5. For the existing emergency overflow pond, the permittee shall perform testing of the liner according to the procedure submitted by the permittee on October 6, 2009, and contained in the ADEQ project file. Subsequent to a failed test, and prior to liner repair, use of the pond shall be limited to one time per three-month period beginning on the date of the failed test; water may remain in the pond up to two days. In the event of liner replacement, use of the pond shall be limited to two times per 12-month period beginning on the date of the failed test; water may remain in the pond up to two days per episode.

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

The POC is established at the following designated location:

POC#	POC Location	Latitude	Longitude
1	Downgradient (south) boundary of the WRF	35° 06' 24" N	111° 41' 15" W

Groundwater monitoring is not required at the point of compliance at permit issuance.

The Director may amend this permit to require installation of wells and initiation of groundwater monitoring at the POC or 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)]

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 consult the most recent version of the ADEQ Quality Assurance Project Plan (QAPP) and Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) PART 136 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.

¹Liner failure in a single-lined impoundment is any condition that would result in leakage exceeding 550 gallons per day per acre.

2.5.1 Routine Discharge Monitoring

The permittee shall monitor the wastewater according to Section 4.2, Table IA. Representative samples of the wastewater shall be collected from the downstream end of the chlorine contact chamber.

2.5.2. Reclaimed Water Monitoring

The permittee shall monitor the reclaimed water parameters listed under Section 4.2, Table 1B in addition to the routine discharge monitoring parameters listed in Section 4.2, Table 1A. Representative samples of the reclaimed water shall be collected from the downstream end of the chlorine contact chamber.

2.5.3 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 on the SMRF submitted quarterly to the ADEQ Water Quality Compliance Section, Data Unit. If none of the conditions occur, the report shall say "no event" for a particular reporting period. If the facility is not in operation, the permittee shall indicate this on the SMRF.
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.
3. The permittee shall conduct annual hydraulic testing of the liner of the emergency overflow pond according to the procedure submitted by the permittee on October 6, 2009, and contained in the ADEQ project file.

2.5.4 Groundwater Monitoring and Sampling Protocols

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

If groundwater monitoring is required as a contingency action, then 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.

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 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 Arizona state certified laboratories can be obtained at the address below:

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

2.5.7 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 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, violation of a discharge limit (DL), AQL, or other permit condition shall be reported to ADEQ following the reporting requirements in Section 2.7.3.

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

2.6.2 Exceeding of Alert Levels/Performance Levels

2.6.2.1 Exceeding of Performance Levels Set for Operational Conditions

1. Following are the procedures to follow for all parameters in Section 4.2, Table III **except** for Annual Hydraulic Testing for the Emergency Overflow Pond Liner:
 - a. If an operational performance level (PL) set in Section 4.2, Table III has been exceeded the permittee shall:
 - (1) Notify the ADEQ Water Quality Compliance Section within five days of becoming aware of the exceedance.
 - (2) Submit a written report within 30 days after becoming aware of the exceedance. The report shall document all of the following:

- (a) A description of the exceedance and its cause;
 - (b) 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;
 - (c) 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;
 - (d) any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS; and
 - (e) any malfunction or failure of pollution control devices or other equipment or process.
- b. 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. Following are the procedures to follow for the Annual Hydraulic Testing for the Emergency Overflow Pond Liner in Section 4.2, Table III:

If the liner testing indicates that the liner does not meet a liner leakage rate limit of 550 gpd/acre, the liner must be repaired and pass a retest within 90 days. If the retest indicates that the repaired liner fails to achieve the acceptable leakage rate, the liner must be replaced. The permittee shall submit an application to amend the permit within 60 days of receiving the failed liner test results. The application shall include plans, specifications, and a QA/QC plan for ADEQ approval prior to installation of the new liner.

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 parameters in question, if necessary to identify the cause of the exceedance.
2. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 5.0 and specific contingency measures identified in Section 2.6 to resolve any problems identified by the investigation which may have led to an AL exceedance. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6.
3. Within 30 days of an AL exceedance, the permittee shall submit the laboratory results to the ADEQ Water Quality Compliance Section, Data Unit, 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 average monthly flow in Section 4.2, Table IA has been exceeded, the permittee shall submit an application for an APP amendment to expand the WRF or submit a report detailing the reasons that 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

No ALs have been established for indicator parameters. Monitoring is for informational purposes only.

2.6.2.3.2 Alert Levels for Pollutants with Numeric Aquifer Water Quality Standards

Not required at time of permit issuance.

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.

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

The permittee also shall submit a report according to Section 2.7.3, which includes a summary of the findings of the investigation, the cause of the violation, and actions taken to resolve the problem. The permittee shall consider and ADEQ may require corrective action that may include control of the source of discharge, cleanup of affected soil, surface water or groundwater, and mitigation of the impact of pollutants on existing uses of the aquifer. Corrective actions shall either be specifically identified in this permit, included in an ADEQ approved contingency plan, or separately approved according to Section 2.6.6.

2. 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

Not applicable.

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 Northern Regional Office at (928) 779-0313 and the ADEQ Water Quality Compliance Section at (602) 771-4497 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 Northern Regional Office at (928) 779-0313 and the ADEQ Water Quality Compliance Section at (602) 771-4497 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 Northern Regional Office and the ADEQ Water Quality Compliance Section (see Section 2.7.5) within thirty days of the discharge or as required by subsequent ADEQ action. The report shall summarize the event, including any human exposure, and facility response activities and include all information specified in Section 2.7.3. If a notice is issued by ADEQ subsequent to the discharge notification, any additional information requested in the notice shall also be submitted within the time frame specified in the notice. Upon review of the submitted report, ADEQ may require additional monitoring or corrective actions.

2.6.6 Corrective Actions

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

With the exception of emergency response actions taken under Section 2.6.5, the permittee shall obtain written approval from the Groundwater 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; and/or

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 SMRF provided by ADEQ. The completed SMRF shall be submitted to the Water Quality Compliance Section, Data Unit.
2. The permittee shall complete the SMRF to the extent that the information reported may be entered on the form. If no information is required during a quarter, the permittee shall enter "not required" on the SMRF and submit the report to ADEQ. The permittee shall use the format devised by ADEQ.
3. The tables contained in Section 4.0 list the parameters to be monitored and the frequency for reporting results for compliance monitoring. Monitoring and analytical methods shall be recorded on the SMRF. The permittee reserves the right to request a relaxation of the monitoring frequency for metals and volatile organic compounds through a permit amendment if the data indicate that water quality standards are being achieved consistently.
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 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 a violation of any permit condition, discharge limitation, or of an AL exceedance.
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 or discharge limitation. The report shall document all of the following:
 - a. Identification and description of the permit condition for which there has been a violation and a description of 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 SMRF provided by the Department to reflect facility inspection requirements designated in Section 4.2, Table III and submit to the ADEQ Water Quality Compliance Section, Data Unit quarterly along with other reports required by this permit. Facility inspection reports shall be submitted no less frequently than quarterly, regardless of operational status.

If the treatment facility is classified for reclaimed water under this permit, the permittee shall submit the reclaimed water monitoring results as required in Section 4.2, Table IB 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 SMRFs shall be submitted to:

Arizona Department of Environmental Quality
Water Quality Compliance Section, Data 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 both of the following addresses:

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

-AND-

Arizona Department of Environmental Quality
Northern Regional Office
1801 West Route 66, Suite 117
Flagstaff, Arizona 86001
Phone (928) 779-0313
Fax (928) 773-2700

All documents required by this permit to be submitted to the Groundwater Section shall be directed to:

Arizona Department of Environmental Quality
Groundwater 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:

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, Water Quality Compliance Section, and the Northern Regional Office 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 and the Northern Regional Office 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 the ADEQ (Water Quality Compliance Section and the Northern Regional Office 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 and the

Northern Regional Office 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 and the Northern Regional Office 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 AWQS at the applicable POC;
3. Continued action is required to verify that the closure design has eliminated discharge to the extent intended;
4. Remedial 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.

4.0 TABLES OF MONITORING REQUIREMENTS

4.1 PRE-OPERATIONAL MONITORING (OR CONSTRUCTION REQUIREMENTS)

Not applicable.

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

**TABLE IA
ROUTINE DISCHARGE MONITORING**

Sampling Point Number	Sampling Point Identification			Latitude	Longitude
1	downstream end of the chlorine contact chamber			35° 05' 32" N	110° 42' 06" W
Parameter	AL ³	DL ⁴	Units	Sampling Frequency	Reporting Frequency
Total Flow: Daily ⁵	Not Established ⁶	0.21	mgd ⁷	Daily	Quarterly
Total Flow: Monthly Average ⁸	0.171	0.18	mgd	Monthly Calculation	Quarterly
Fecal Coliform: Single sample maximum	Not Established	800	CFU or MPN ⁹	Daily	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week ¹⁰	Not established	200 ¹¹	CFU or MPN	Daily	Quarterly
Total Nitrogen ¹² : Five-sample rolling geometric mean	Not Established	Not Established	mg/l	Monthly ¹³	Quarterly

³ AL = Alert Level

⁴DL = Discharge Limit

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

⁶Not Established means monitoring is required but no limits are specified.

⁷mgd = million gallons per day

⁸Monthly average of daily flow values.

⁹CFU = Colony Forming Units / 100 ml sample. MPN = Most Probable Number / 100 ml sample. For CFU, a value of <1.0 shall be considered to be non-detect. For MPN, a value of <2.2 shall be considered to be non-detect.

¹⁰**Week** means a seven-day period starting on Sunday and ending on the following Saturday.

¹¹If at least four (4) of seven (7) samples in a week are not greater than 200 CFU or MPN per 100 ml sample, 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 greater than 200 CFU or MPN per 100 ml sample, report “no” in the appropriate space on the SMRF (indicating that the standard has **not** been met).

¹²Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

¹³A five-month geometric mean of the results of the five (5) most recent samples

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

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

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
Metals (total):					
Antimony	0.0048	0.006	mg/l	Semi-Annually	Semi-Annually
Arsenic	0.04	0.05	mg/l	Semi-Annually	Semi-Annually
Barium	1.60	2.00	mg/l	Semi-Annually	Semi-Annually
Beryllium	0.0032	0.004	mg/l	Semi-Annually	Semi-Annually
Cadmium	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Chromium	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Cyanide (as free cyanide)	0.16	0.2	mg/l	Semi-Annually	Semi-Annually
Fluoride	3.2	4.0	mg/l	Semi-Annually	Semi-Annually
Lead	0.04	0.05	mg/l	Semi-Annually	Semi-Annually
Mercury	0.0016	0.002	mg/l	Semi-Annually	Semi-Annually
Nickel	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Selenium	0.04	0.05	mg/l	Semi-Annually	Semi-Annually
Thallium	0.0016	0.002	mg/l	Semi-Annually	Semi-Annually

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

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

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
Volatile Organic Compounds (VOCs):					
Benzene	0.004	0.005	mg/l	Annual	Annual
Carbon tetrachloride	0.004	0.005	mg/l	Annual	Annual
o-Dichlorobenzene	0.48	0.6	mg/l	Annual	Annual
para-Dichlorobenzene	0.06	0.075	mg/l	Annual	Annual
1,2-Dichloroethane	0.004	0.005	mg/l	Annual	Annual
1,1-Dichloroethylene	0.0056	0.007	mg/l	Annual	Annual
cis-1,2-Dichloroethylene	0.056	0.07	mg/l	Annual	Annual
trans-1,2-Dichloroethylene	0.08	0.1	mg/l	Annual	Annual
Dichloromethane	0.004	0.005	mg/l	Annual	Annual
1,2-Dichloropropane	0.004	0.005	mg/l	Annual	Annual
Ethylbenzene	0.56	0.7	mg/l	Annual	Annual
Hexachlorobenzene	0.0008	0.001	mg/l	Annual	Annual
Hexachlorocyclopentadiene	0.04	0.05	mg/l	Annual	Annual
Monochlorobenzene	0.08	0.1	mg/l	Annual	Annual
Styrene	0.08	0.1	mg/l	Annual	Annual
Tetrachloroethylene	0.004	0.005	mg/l	Annual	Annual
Toluene	0.8	1.0	mg/l	Annual	Annual
Trihalomethanes (total) ¹⁴	0.08	0.1	mg/l	Annual	Annual
1,1,1-Trichloroethane	0.16	0.2	mg/l	Annual	Annual
1,2,4 - Trichlorobenzene	0.056	0.07	mg/l	Annual	Annual
1,1,2 - Trichloroethane	0.004	0.005	mg/l	Annual	Annual
Trichloroethylene	0.004	0.005	mg/l	Annual	Annual
Vinyl Chloride	0.0016	0.002	mg/l	Annual	Annual
Xylenes (Total)	8.0	10.0	mg/l	Annual	Annual

¹⁴Total Trihalomethanes are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

**TABLE IB
RECLAIMED WATER MONITORING - CLASS B¹⁵**

Sampling Point Number	Sampling Point Identification		Latitude	Longitude
1	downstream end of the chlorine contact chamber		35° 05' 32" N	110° 42' 06" W
Parameter	DL	Units	Sampling Frequency	Reporting Frequency
Fecal Coliform: Single-sample maximum	800	CFU or MPN ¹⁶	Daily ¹⁷	Quarterly
Fecal Coliform: Four of last seven samples	200 ¹⁸	CFU or MPN	Daily	Quarterly

¹⁵Reclaimed water monitoring under Table 1B shall be performed in addition to routine discharge monitoring required under Section 4.2, Table 1A.

¹⁶CFU = Colony Forming Units per 100 ml; MPN = Most Probable Number per 100 ml. For CFU, a value of <1 shall be considered to be non-detect. For MPN, a value of <2.2 shall be considered to be non-detect.

¹⁷For 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 samples in each seven-day period are obtained and analyzed.

¹⁸If at least four of the last seven samples are equal to or less than 200 CFU or MPN per 100 ml, report “yes” in the appropriate space on the SMRF (indicating that the standard has been met). If at least four of the last seven samples are greater than 200 CFU or MPN per 100 ml, report “no” in the appropriate space on the SMRF (indicating that the standard has **not** been met).

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

**TABLE II
GROUNDWATER MONITORING**

Not applicable.

**TABLE III
FACILITY INSPECTION (Operational Monitoring)**

Pollution Control Structures/Parameter	Performance Levels	Inspection Frequency	Reporting Frequency
Pump Integrity	Good working condition	Weekly	Quarterly
Treatment Plant Components	Good working condition	Weekly	Quarterly
Berm Integrity of Effluent Storage Pond	No visible structural damage, breach, or erosion of embankments	Weekly	Quarterly
Berm Integrity of Emergency Overflow Pond	No visible structural damage, breach, or erosion of embankments	Weekly	Quarterly
Liner Integrity of Effluent Storage Pond	No cracks or leaks that would exceed a leakage rate of 550 gpd/acre	Weekly	Quarterly
Liner Integrity of Emergency Overflow Pond	No cracks or leaks that would exceed a leakage rate of 550 gpd/acre	Weekly	Quarterly
Effluent Storage Pond Freeboard	1.5 Linear Feet	Weekly	Quarterly
Emergency Overflow Pond Freeboard	2.0 Linear Feet	Weekly	Quarterly
Annual Hydraulic Testing for Emergency Overflow Pond Liner ¹⁹	Leakage rate less than 550/gpd/acre	Annually	Annually

¹⁹ Annual hydraulic testing of the liner shall be performed according to the procedure proposed by the permittee on October 6, 2009, and contained in the ADEQ project file. The first test shall take place within 90 days of permit issuance as per compliance schedule item #2 (see Section 3.0). Upon meeting the leakage rate criteria (less than 550 gpd/acre), the liner shall be tested annually as indicated above in Table III.

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: December 23, 1996 (original APP, signed on 12/26/1997)
2. "Other" Amendment Application, dated: July 29, 2002 (amendment signed on 11/7/2003)
3. Significant Amendment Application, dated: December 12, 2008

6.0 NOTIFICATION PROVISIONS

6.1 Annual Registration Fees

The permittee is notified of the obligation to pay an Annual Registration Fee to ADEQ. The Annual Registration Fee is based upon the amount of daily influent or discharge of pollutants in gpd as established by A.R.S. § 49-242(D).

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. §§ 41-1009, 49-203(B), and 49-243(K)(8)]

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

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

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

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

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