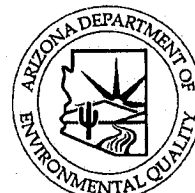


Janice K. Brewer  
Governor

# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007  
(602) 771-2300 • www.azdeq.gov



Benjamin H. Grumbles  
Director

March 2, 2010

Mr. Gene Leasure, Chairman  
Inscription Canyon Sanitary District  
5360 West Inscription Canyon drive  
Prescott, Arizona 86305

**Re: Inscription Canyon Ranch Wastewater Treatment Plant (WWTP),  
Significant Amendment, Aquifer Protection Permit (APP), File No. 103119 LTF  
47152**

Dear Mr. Leasure:

Enclosed is a signed copy of an Individual APP with Fact Sheet for the above referenced facility. The permit conditions shall apply from March 2, 2010, which is the date of the Water Quality Division Director's signature, and shall be valid for the life of the facility. Thank you for your cooperation in protecting the water quality of the State of Arizona.

If you have any questions about this permit or need further assistance, please contact me at (800) 234-5677 ext. 4695 or at (602) 771-4695

Sincerely,

Taly Gilama, Project Manager  
APP & Reuse Unit  
Groundwater Section, Water Quality Division

Enclosures (2)

cc: Asif Majeed, Manager, APP & Reuse Unit  
Lynne Dekarske, Environmental Program Specialists, Water Permits Section  
Mathew Hodge, Supervisor, Water Quality Compliance Section, Data Unit  
Marcia Colquitt, Supervisor, Water Quality Compliance Section, Enforcement Unit

Northern Regional Office  
1801 W. Route 66 • Suite 117 • Flagstaff, AZ 86001  
(928) 779-0313

Southern Regional Office  
400 West Congress Street • Suite 433 • Tucson, AZ 85701  
(520) 628-6733

Buck Oberding, Inspector, Water Quality Compliance Section, NRO  
Byron James, Northeast Arizona Community Liaison  
Mr. Justin R. Logan, Principal Engineer, Aqua Engineering  
Shivani Shah, Engineer, APP & Reuse Unit  
Marcy Mullins, Reuse Program Coordinator, APP & Reuse Unit  
Maribeth Greenslade, Manager, Technical Support Unit  
Jeff Emde, Hydrologist, Technical Support Unit  
Yavapai County Department of Development Services  
Maribeth Greenslade, Manager, TSU  
Jennifer Widlowski, Hydrologist, TSU

WRR10: 0125



## Fact Sheet

Aquifer Protection Permit #P-103119  
Place ID 70, LTF 47152

Inscription Canyon Wastewater Treatment Plant  
SIGNIFICANT AMENDMENT

The Arizona Department of Environmental Quality (ADEQ) proposes to issue **an amendment** to the Aquifer Protection Permit for the subject facility that covers the life of the facility, including operational, closure, and post-closure periods unless suspended or revoked pursuant to A.A.C. R18-9-A213. This document gives pertinent information concerning the issuance of the permit. The requirements contained in this permit will allow the permittee to comply with the two key requirements of the Aquifer Protection Program: 1) meet Aquifer Water Quality Standards at the Point of Compliance; and 2) demonstrate Best Available Demonstrated Control Technology (BADCT). The purpose of BADCT is to employ engineering controls, processes, operating methods or other alternatives, including site-specific characteristics (i.e., local subsurface geology) to reduce discharge of pollutants to the greatest degree achievable before they reach the aquifer, or to keep pollutants from reaching the aquifer.

### I. FACILITY INFORMATION

#### Name and Location

Name of Permittee:	Inscription Canyon Ranch Sanitary District
Mailing Address:	5360 Inscription Canyon Drive
Facility Name and Location:	Inscription Canyon Ranch Wastewater Treatment Plant 14400 Grey Bears Trail Prescott, AZ 86305 (Yavapai County)

#### Regulatory Status

The original Aquifer Protection Permit (APP) was issued for this facility on July 30, 1997. A Significant Amendment to increase the flow from 0.046 MGD to 0.455 MGD was issued on December 30, 2002. The application for the current "Significant" permit amendment was received by the Department on March 26, 2008. The purpose of this amendment is to replace the existing WWTP with a new WWTP.

#### Facility Description

The Inscription Canyon Wastewater Treatment Plant (WWTP) has the capacity to collect and treat a maximum average monthly flow of 0.455 million gallons per day (mgd).

The new WWTP will be constructed in two phases. Phase I is designed to treat 0.25 mgd and the treatment process consists of an existing influent lift station; head works with two fine screens; Membrane Bioreactor (MBR) which comprises of anoxic basin, aeration basin, membrane basin with membrane cassettes; UV disinfection; effluent reuse pump station; and screw press for sludge dewatering. The phase II is designed to treat 0.455 mgd. The phase II treatment process consist of phase I treatment process and additional membrane cassettes; a blower, a permeate

**Fact Sheet - APP #103119 - Significant Permit Amendment  
Inscription Canyon Wastewater Treatment Plant - Page 2 of 6**

pump, and an upgraded effluent reuse pump station with a new pump. All the WWTP units are constructed of reinforced concrete. Covers are provided for the odor control units, blowers/motors are provided with fiberglass covers and silencers. All the effluent generated shall be used for beneficial purposes as regulated under a valid reclaimed water permit. The sludge, including the screenings, grit, and scum, is hauled off site for disposal in accordance with state and federal regulations.

The new WWTP will produce reclaimed water meeting Class A+ Reclaimed Water Standards (A.A.C. R18-11, Article 3) and shall be delivered for beneficial use under a valid reclaimed water permit under A.A.C. R18-9, Article 7.

The existing WWTP: The treatment process consists of flow equalization, followed by modified extended aeration process with nitrification/denitrification, clarification, sludge holding/digestion, and chlorine disinfection. Treated effluent is stored in lined storage ponds and reused under a valid Reclaimed Water Permit, under A.A.C. title 18, Chapter 9, Article 7. Waste sludge will be treated, thickened, hauled, and disposed in accordance with state and federal regulations.

This amendment is to replace the existing WWTP with a new WWTP. The permit covers the operations of the existing and new WWTP. Existing WWTP monitoring shall be required as per Table IA-3 and IB-2 until the facility begins operation of the new WWTP before or at the end of the 60 day start-up period.

During the initial start-up period not lasting more than 60 days, if the effluent does not meet the discharge monitoring requirements, the effluent shall be disposed off at the existing WWTP. After 60 days effluent shall meet the monitoring requirements in the permit.

Upon construction, completion, operation of the new WWTP, the inflow lines will be redirected from the existing WWTP to the new WWTP. The permittee shall submit a clean closure application for the existing WWTP as per compliance schedule in Section 3.0.

**Amendment Description**

This significant permit amendment was initiated by the permittee. This amendment is to replace the existing WWTP with a new WWTP. The permit covers the operations of the existing and new WWTP. Existing WWTP monitoring shall be required as per Table IA-3 and IB-2 until the facility begins operation of the new WWTP before or at the end of the 60 day start-up period:

Listed below are the changes to the permit as a result of this amendment:

1. Section 1.1, Permittee Information: Changed the facility address from 13868 Grey Bear Trail to 14400 Grey Bears Trail Prescott, Arizona.
2. Section 1.1, Permittee Information: Changed the facility contact from Lee Hixton to Gene Leasure.
3. Section 1.2, Authorizing Signature: Changed the authorizing signature from Karen Smith to Michael A. Fulton.

4. Section 2.1, Facility/Site Description: Changed operation and monitoring of existing and new WWTP: Existing WWTP monitoring shall be required as per Table IA-3 and IB-2 until the facility begins operation of the new WWTP before or at the end of the 60 day start-up period.
5. Section 2.1, Facility/Site Description: Added the new WWTP as a discharging facility.
6. Section 3.0, Compliance Schedule: Added a compliance schedule.
7. Section 4. , Table IA-1 and IA-2 added and Table I changed to Table IA-3.
8. Section 4. , Table IB-1 and IB-2 added.
9. Other changes include change in permit language to conform to the most current permit format.

## II. BEST AVAILABLE DEMONSTRATED CONTROL TECHNOLOGY (BADCT)

The new and existing WWTPs are designed to meet the treatment performance criteria for new facilities pursuant to A.A.C. R18-9-B204. The facility produces denitrified and disinfected effluent.

## III. HYDROGEOLOGIC SETTING

The facility and reuse site are located in the transition zone between the Basin-and-Range and Colorado Plateau physiographic provinces. The facility is located within the Prescott Active Management Area. Groundwater flow direction regionally is to the north-northeast. Information from a well located about 2.5 miles to the northeast of the site first encountered saturated conditions at a depth of 120 feet below ground surface (bgs), beneath an apparent confining layer of basalt located from about 70 feet to 120 feet bgs.

## IV. STORM WATER/SURFACE WATER CONSIDERATIONS

The Flood Insurance Rate Map (FIRM) is not available for this area. The facility has performed the drainage and grading study and provided the report. The facility has constructed the rip rap channel to divert the 100-yr flood flow. Based on the drainage study, the facility has certified that the WWTP is protected from the 100-yr flood event.

There are no nearby surface water bodies. No monitoring of surface water is required at this time.

## V. COMPLIANCE WITH AQUIFER WATER QUALITY STANDARDS

The pollutant management area is the perimeter of the wastewater treatment plant. The point of compliance is located at the north corner of the wastewater treatment plant. No monitoring is required at the point of compliance, except as required by the ADEQ in response to the contingency plan reporting requirements. Groundwater monitoring is not required at the time of permit issuance, as disposal method is consumptive reuse at the Talking Rock Golf Course, and the water is treated to the Class A+ reclaimed water standard for new WWTP and B+ reclaimed water standard for existing WWTP. All nearby registered wells are located outside the one-half mile radius from the wastewater treatment plant.

**Monitoring and Reporting Requirements**

To ensure that site operations do not violate Aquifer Water Quality Standards at the point of compliance, representative samples of the effluent shall be collected down stream from the UV disinfection unit. The permittee shall monitor the effluent daily for flow rate and fecal coliform, monthly for total nitrogen, quarterly for metals and Indicator Parameters / Major Cations and Anions, and semi-annually for volatile organic compounds (see Section 4.2, Table IA in the permit).

To ensure that site operations do not violate the Reclaimed Water Quality Standards for the beneficial use of Class A+ reclaimed water, the permittee shall monitor the reclaimed water at the same effluent sampling point as indicated above. The permittee shall monitor the reclaimed water for turbidity continuously, fecal coliform daily, and monthly for total nitrogen. Initial monthly enteric virus sampling is required to indicate four out of seven sample results of non-detect and monthly enteric virus monitoring is required in cases where 2 consecutive 24-hour turbidity limits are violated (see Section 4.2, Table IB in the permit).

Facility inspection and operational monitoring shall be performed on a routine basis (see Section 4.2, Table III in the permit).

Groundwater monitoring is not required.

**Point of Compliance (POC)**

The hazardous/non-hazardous POC is located as follows:

POC Location	Latitude	Longitude
North corner of the WWTP	34°44'45" N	112°34'38" W

Groundwater monitoring well(s) are not required at the POCs, at the time of permit issuance.

**VI. COMPLIANCE SCHEDULE**

A compliance schedule is included in Section 3.0 of the permit which includes the requirement for submittal of an Engineer's Certificate of Completion and submittal of clean closure application for the existing WWTP.

**VII. OTHER REQUIREMENTS FOR ISSUING THIS PERMIT**

**Technical Capability**

Inscription Canyon Ranch Sanitary District (WWTP) has demonstrated the technical competence necessary to carry out the terms and conditions of the permit in accordance with A.R.S. § 49-243(N) and A.A.C. R18-9-A202 (B).

The WWTP was designed as per the design report prepared, stamped, dated, and signed (sealed) by Justin Logan, P.E., Aqua Engineering, Inc., dated December 19, 2008 and subsequent submittals that served as additions to design report. The permittee is expected to maintain technical capability throughout the life of the facility.

### **Financial Capability**

The Inscription Canyon Ranch Sanitary District has demonstrated the financial responsibility necessary to carry out the terms and conditions of the permit in accordance with A.R.S. § 49-243(N) and A.A.C. R18-9-A203. The permittee is expected to maintain financial capability throughout the life of the facility.

The permittee submitted a closure cost estimate of \$750,000.00. The applicant, being a local government, provided a detailed financial plan on its letterhead for meeting the requirements for financial capability, according to rule R18-9-A203 (B) (1).

### **Zoning Requirements**

Inscription Canyon Ranch Wastewater Treatment Plant has been properly zoned for the permitted use and the permittee has complied with all zoning ordinances in accordance with A.R.S. § 49-243(O) and A.A.C. R18-9-A201 (A) (2) (c).

## **VIII. ADMINISTRATIVE INFORMATION**

### **Public Notice (A.A.C. R18-9-108(A))**

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft permit or other significant action with respect to a permit or application. The aquifer protection program rules require that permits be public noticed in a newspaper of general circulation within the area affected by the facility or activity and provide a minimum of 30 calendar days for interested parties to respond in writing to ADEQ. The basic intent of this requirement is to ensure that all interested parties have an opportunity to comment on significant actions of the permitting agency with respect to a permit application or permit.

### **Public Comment Period (A.A.C. R18-9-109(A))**

The Department shall accept written comments from the public before a significant permit amendment is made. The written public comment period begins on the publication date of the public notice and extends for 30 calendar days. After the closing of the public comment period, ADEQ is required to respond to all significant comments at the time a final permit decision is reached or at the same time a final permit is actually issued.

### **Public Hearing (A.A.C. R18-9-109(B))**

A public hearing may be requested in writing by any interested party. The request should state the nature of the issues proposed to be raised during the hearing. A public hearing will be held if the Director determines there is a significant amount of interest expressed during the 30-day public comment period, or if significant new issues arise that were not considered during the permitting process.

**IX. ADDITIONAL INFORMATION**

Additional information relating to this permit may be obtained from:

Arizona Department of Environmental Quality  
Water Quality Division - Groundwater Section - APP and Reuse Unit  
Attn: Taly Gilama  
1110 West Washington Street, Mail Code 5415B-3  
Phoenix, Arizona 85007  
Phone: (602) 771-4695



**STATE OF ARIZONA**  
**AQUIFER PROTECTION PERMIT NO. P-103119**  
**PLACE ID 70, LTF 47152**  
**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, Inscription Canyon Ranch Sanitary District is hereby authorized to operate the Inscription Canyon Ranch Wastewater Treatment Plant located near Prescott, Arizona, in Yavapai County, over groundwater of the Prescott Active Management Area, in Township 16 North, Range 3 West, Section 28, of the Gila and Salt River Base Line and Meridian.

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

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

**1.1 PERMITTEE INFORMATION**

**Facility Name:** Inscription Canyon Ranch Wastewater Treatment Plant (WWTP)  
**Facility Address:** 14400 Grey Bears Trail  
Prescott, Arizona  
**County:** Yavapai

**Permittee:** Inscription Canyon Ranch Sanitary District  
**Permittee Address:** 5360 W. Inscription Canyon Drive  
Prescott, Arizona 86305

**Facility Contact:** Gene Leasure  
**Emergency Phone No.:** (928) 443-7418

**Latitude/Longitude:** 34°44' 45" N/ 112°34' 38" W  
**Legal Description:** Township 16 N, Range 3E, Section 28, of Gila and Salt River Baseline and Meridian

**1.2 AUTHORIZING SIGNATURE**



Michael A. Fulton, Director  
Water Quality Division  
Arizona Department of Environmental Quality

Signed this 2nd day of March, 2010

**THIS AMENDED PERMIT SUPERCEDES ALL PREVIOUS PERMITS**

**2.0 SPECIFIC CONDITIONS [A.R.S. §§ 49-203(4), 49-241(A)]**

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

The Inscription Canyon Wastewater Treatment Plant (WWTP) has the capacity to collect and treat a maximum average monthly flow of 0.455 million gallons per day (mgd).

The new WWTP will be constructed in two phases. Phase I is designed to treat 0.25 mgd and the treatment process consists of an existing influent lift station; head works with two fine screens; Membrane Bioreactor (MBR) which comprises of anoxic basin, aeration basin, membrane basin with membrane cassettes; UV disinfection; effluent reuse pump station; and screw press for sludge dewatering. The phase II is designed to treat 0.455 mgd. The phase II treatment process consist of phase I treatment process and additional membrane cassettes; a blower, a permeate pump, and an upgraded effluent reuse pump station with a new pump. All the WWTP units are constructed of reinforced concrete. Covers are provided for the odor control units, blowers/motors are provided with fiberglass covers and silencers. All the effluent generated shall be used for beneficial purposes as regulated under a valid reclaimed water permits. The sludge, including the screenings, grit, and scum, is hauled off site for disposal in accordance with state and federal regulations.

The new WWTP will produce reclaimed water meeting Class A+ Reclaimed Water Standards (A.A.C. R18-11, Article 3) and shall be delivered for beneficial use under a valid reclaimed water permit under A.A.C. R18-9, Article 7.

The existing WWTP treatment process consists of flow equalization, followed by modified extended aeration process with nitrification/denitrification, clarification, sludge holding/digestion, and chlorine disinfection. Treated effluent is stored in lined storage ponds at the reuse site and reused under a valid Reclaimed Water Permit, under A.A.C. title 18, Chapter 9, Article 7. Waste sludge will be treated, thickened, hauled and disposed in accordance with state and federal regulations. The existing WWTP produces reclaimed water meeting Class B+ Reclaimed Water Standards (A.A.C. R18-11, Article 3) and shall be delivered for beneficial use under a valid reclaimed water permit under A.A.C. R18-9, Article 7.

This amendment is to replace the existing WWTP with a new WWTP. The permit covers the operations of the existing and a new WWTP. Existing WWTP monitoring shall be required as per Table IA-3 and IB-2 until the facility begins operation of the new WWTP or at the end of the 60 day start-up period, whichever comes later.

During the initial start-up period not lasting more than 60 days, if the effluent does not meet the discharge monitoring requirements, the effluent shall be disposed off at the existing WWTP. After 60 days effluent shall meet the monitoring requirements in the permit for the new WWTP.

Upon operation of the new WWTP, the inflow lines will be redirected from the existing WWTP to a new WWTP. The permittee shall submit a clean closure application for the existing WWTP as per compliance schedule in Section 3.0.

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
Existing WWTP	34° 44' 45" N	112° 34' 38" W
WWTP	34° 44' 45" N	112° 34' 38" 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 0.455 million gallons per day.

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

The permittee has demonstrated financial capability under A.R.S. § 49-243(N) and A.A.C. R18-9-A203. The permittee shall maintain financial capability throughout the life of the facility. The estimated dollar amount demonstrated for financial capability is \$750,000. The financial capability was demonstrated through R18-9-A203 (B) (1) and (2).

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

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

The facility shall meet the requirements for pretreatment by conducting monitoring as per R18-9-B204(B)(6)(b)(iii).

**2.2.1 Engineering Design**

The WWTP was designed as per the design report prepared, stamped, dated, and signed (sealed) by Justin Logan, P.E, Aqua Engineering, Inc., dated December 19, 2008 and subsequent submittals that served as additions to design report.

**2.2.2 Site-specific Characteristics**

Site specific characteristics were not used to determine BADCT.

**2.2.3 Pre-operational Requirements**

The permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion in a format approved by the Department per Compliance Schedule in Section 3.0. The Certificate 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. The permittee shall maintain a copy of the new Operation and Maintenance (O & M) Manual at the WWTP 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 (SMRF) submitted quarterly to the ADEQ Water Quality Compliance Section, Data Unit (see Section 2.7.5).

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

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

**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 WWTP with a maximum average annual flow of 0.455 mgd. Three tables are listed in Section 4.2, Tables IA-1, IA-2, and IA-3. The permittee shall use the monitoring table which is commensurate with operation of the facility. Upon commencing operations from the new WWTP (Tables IA-1/IA-2) the facility may discontinue operation of the existing WWTP (Table IA-3).
2. The permittee shall notify all users that the materials authorized to be disposed of through the WWTP 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 failure<sup>1</sup>, 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 discharge limitations are listed in Section 4.2, Tables IA-1, 2, 3 and IB-1, 2.

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

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

POC Location	Latitude	Longitude
North corner of the WWTP	34°44'45" N	112°34'38" 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)]**

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

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

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.

#### **2.5.1 Pre-Operational Monitoring**

During the initial start-up period, the permittee shall monitor the flow rate according to Section 4.1, Table IA-1. Flow rate shall be measured downstream of the UV disinfection unit. Monitoring flow rate shall continue until permittee ceases to dispose effluent to the existing WWTP and initiates routine discharge monitoring under Section 4.2, Table IA-1.

#### **2.5.2 Discharge Monitoring**

Upon cessation of the initial start-up period, the permittee shall monitor the effluent according to Section 4.2, Tables IA-1 and IA-2. Representative samples of the effluent shall be collected at the point of discharge downstream of the UV disinfection unit.

Monitoring under Section 4.1, Table IA-3 shall continue until permittee ceases operation of the existing WWTP, commences operation of new WWTP, and initiates routine discharge monitoring under Section 4.2, Tables IA-1 and IA-2.

#### **2.5.3 Reclaimed Water Monitoring**

The permittee shall monitor the parameters listed under Tables IB-1 and B-2 in addition to the routine discharge monitoring parameters listed in Tables IA-1, IA-2, and IA-3. Representative samples of the reclaimed water shall be collected at the point of discharge downstream from UV disinfection unit.

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

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

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

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

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

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

1. If any damage of the pollution control structures is identified during inspection, proper repair procedures shall be performed. All repair procedures and materials used shall be documented 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.

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

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

### 2.5.8 Installation and Maintenance of Monitoring Equipment

Monitoring equipment required by this permit shall be installed and maintained so that representative samples required by the permit can be collected. If new groundwater wells are determined to be necessary, the construction details shall be submitted to the ADEQ Groundwater Section for approval prior to installation and the permit shall be amended to include any new monitoring points.

## 2.6 Contingency Plan Requirements

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

### 2.6.1 General Contingency Plan Requirements

At least one copy of 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, discharge limits (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 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 has been conducted. The permittee is responsible for compliance with contingency plans relating to the exceedance of an AL or violation of a DL or any other permit condition.

### 2.6.2 Exceeding of Alert Levels/Performance Levels

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

1. If an operational performance level (PL) set in Section 4.2, Table III has been exceeded the permittee shall:

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

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

1. If an AL set in Section 4.2, Table IA-1, IA-2, and IA-3 has been exceeded, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:
  - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the exceedance;
  - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences; and
  - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the exceedance, the permittee shall sample individual waste streams composing the wastewater for the parameter(s) in question, if necessary to identify the cause of the exceedance.
2. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 5.0 and specific contingency measures identified in Section 2.6 to resolve any problems identified by the investigation which may have led to the AL exceedance. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6.
3. Within thirty days of an AL exceedance, the permittee shall submit the laboratory results to the ADEQ 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 AL for average monthly flow in Section 4.2, Table IA-1, IA-2 or IA-3 has been exceeded, the permittee shall submit an application to ADEQ for an APP amendment to expand the WRP or submit a report detailing the reasons an expansion is not necessary.
2. Acceptance of the report instead of an application for expansion requires ADEQ approval.

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

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

No ALs were established for indicator parameters.

##### **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 issuance.

#### **2.6.3 Discharge Limit Violation**

1. If a DL set in Section 4.2, Tables IA-1, IA-2, IA-3 or IB-2 and IB-2 has been violated, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:
  - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the violation;
  - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences;
  - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the violation, the permittee shall sample individual waste streams composing the wastewater for the parameters in violation, if necessary to identify the cause of the violation.

The permittee shall submit a report according to Section 2.7.3, which includes a summary of the findings of the investigation, the cause of the violation, and actions taken to resolve the problem. The permittee shall consider and ADEQ may require corrective action that may include control of the source of discharge, cleanup of affected soil, surface water or groundwater, 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 required at time of permit issuance.

#### **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(1)) 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 within 30 days of the discharge or as required by subsequent ADEQ action. The report shall summarize the event, including any human exposure, and facility response activities and include all information specified in Section 2.7.3. If a notice is issued by ADEQ subsequent to the discharge notification, any additional information requested in the notice shall also be submitted within the time frame specified in the notice. Upon review of the submitted report, ADEQ may require additional monitoring or corrective actions.

### 2.6.6 Corrective Actions

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

With the exception of emergency response actions taken under Section 2.6.5, the permittee shall obtain written approval from the Groundwater Section prior to implementing a corrective action to accomplish any of the following goals in response to an AL exceedance, 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 (see Section 2.7.5), 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 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 parameters to be monitored and the frequency for reporting results for compliance monitoring. Monitoring and analytical methods shall be recorded on the SMRF.
4. In addition to the SMRF, the information contained in A.A.C. R18-9-A206(B)(1) shall be included for an AL exceedance, 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 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 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 (see Section 2.7.5) 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 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<sup>2</sup>:

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

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

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

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

<sup>2</sup>A post-mark date no later than the due date is considered meeting the due date requirements under this Section

The Groundwater Section, and the 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 ADEQ 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 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 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. 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.

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

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 Groundwater Section. A copy of the cover letter must also be submitted to the ADEQ Water Quality Compliance Section.

<b>Description</b>	<b>Due by:</b>
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 new WWTP is constructed according to the Department-approved design report or plans and specifications, as applicable.	Prior to discharging from the new WWTP and within 90 days of completion of construction of the new WWTP.
Discontinue operation of the existing WWTP	Upon commencing operation of the new WWTP or within 60 days of the startup period, whichever comes later.
The permittee shall submit a clean closure application to ADEQ to close the existing WWTP.	Within 90 days of the operations of the new WWTP.

**4.0 TABLES OF MONITORING REQUIREMENTS**

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

TABLE I (or IA, IB, IC, etc., as appropriate)

Not applicable at permit issuance.



4.0 TABLES OF MONITORING REQUIREMENTS

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA-1 - PHASE I (flows up to 0.25 mgd)<sup>3</sup>  
ROUTINE DISCHARGE MONITORING

Sampling Point Number	Sampling Point Identification		Latitude		Longitude
	AL <sup>4</sup>	DL <sup>5</sup>	Units	Sampling Frequency	Reporting Frequency
2	Downstream from UV disinfection unit		34° 44' 43.5" N		114° 34' 38.5" W
Total Flow <sup>6</sup> : Daily <sup>7</sup>	Not Established <sup>8</sup>	Not Established	mgd <sup>9</sup>	Daily	Quarterly
Total Flow: Average Monthly	0.24	0.25	mgd	Monthly <sup>10</sup>	Quarterly
Fecal Coliform: Single sample maximum	No Limit	23.0	CFU or MPN <sup>11</sup>	Daily	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week <sup>12</sup>	Not established	Non-detect <sup>13</sup>	CFU or MPN	Daily	Quarterly
Total Nitrogen <sup>14</sup> : Five-sample rolling geometric mean	8.0	10.0	mg/l	Monthly <sup>15</sup>	Quarterly

<sup>3</sup>No monitoring is required until the facility discontinues monitoring as per Table IA-3 or 60 days from start of the operation of the new WWTP whichever comes earlier. Monitoring for Phase I is no longer required after once the facility commences monitoring under Table IA-2.

<sup>4</sup>AL - Alert Level

<sup>5</sup>DL - Discharge Limit

<sup>6</sup>Monthly average of daily flow values

<sup>7</sup>Flow shall be measured using a continuous recording flow meter which totals the flow daily.

<sup>8</sup>Not Established means monitoring is required but no limits are specified.

<sup>9</sup>mgd = million gallons per day

<sup>10</sup>Monthly - Calculated value = Average of daily flows in a month.

<sup>11</sup>CFU = Colony Forming Units / 100 ml sample. MPN - Most Probable Number / 100 ml sample

<sup>12</sup>Week means a seven-day period starting on Sunday and ending on the following Saturday.

<sup>13</sup>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).

<sup>14</sup>Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

<sup>15</sup>A five-month geometric mean of the results of the five (5) most recent samples

## 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA-1 - PHASE I (flows up to 0.25 mgd)  
 ROUTINE DISCHARGE MONITORING (continued)

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
<b>Metals (total):</b>					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.60	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

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA-1 - PHASE I  
ROUTINE DISCHARGE MONITORING (continued)

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
<b>Volatile Organic Compounds (VOCs):</b>					
Benzene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Carbon tetrachloride	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
o-Dichlorobenzene	0.48	0.6	mg/l	Semi-Annually	Semi-Annually
para-Dichlorobenzene	0.06	0.075	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,1-Dichloroethylene	0.0056	0.007	mg/l	Semi-Annually	Semi-Annually
cis-1,2-Dichloroethylene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
trans-1,2-Dichloroethylene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Dichloromethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloropropane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Ethylbenzene	0.56	0.7	mg/l	Semi-Annually	Semi-Annually
Hexachlorobenzene	0.0008	0.001	mg/l	Semi-Annually	Semi-Annually
Hexachlorocyclopentadiene	0.04	0.05	mg/l	Semi-Annually	Semi-Annually
Monochlorobenzene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Styrene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Tetrachloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Toluene	0.8	1.0	mg/l	Semi-Annually	Semi-Annually
Trihalomethanes (total) <sup>16</sup>	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
1,1,1-Trichloroethane	0.16	0.2	mg/l	Semi-Annually	Semi-Annually
1,2,4 - Trichlorobenzene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
1,1,2 - Trichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Trichloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Vinyl Chloride	0.0016	0.002	mg/l	Semi-Annually	Semi-Annually
Xylenes ( Total)	8.0	10.0	mg/l	Semi-Annually	Semi-Annually

<sup>16</sup> Total Trihalomethanes (THMs) are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dichloromethane.

## 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

**TABLE IA-1 - PHASE I  
ROUTINE DISCHARGE MONITORING (continued)**

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
<b>Indicator Parameters / Major Cations and Anions:</b>					
pH (field)	Monitor <sup>17</sup>	Monitor	S.U.	Quarterly	Quarterly
Iron	Monitor	Monitor	mg/l	Quarterly	Quarterly
Manganese	Monitor	Monitor	mg/l	Quarterly	Quarterly
Total Organic Carbon	Monitor	Monitor	mg/l	Quarterly	Quarterly
Total Dissolved Solids	Monitor	Monitor	mg/l	Quarterly	Quarterly
Sodium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Potassium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Calcium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Magnesium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Chloride	Monitor	Monitor	mg/l	Quarterly	Quarterly
Sulfate	Monitor	Monitor	mg/l	Quarterly	Quarterly
Alkalinity	Monitor	Monitor	mg/l	Quarterly	Quarterly
Specific Conductivity (field)	Monitor	Monitor	µmhos/cm	Quarterly	Quarterly

<sup>17</sup> Monitoring required, but no limits established.

## 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA-2 - PHASE II (flows up to 0.455 mgd)<sup>18</sup>  
ROUTINE DISCHARGE MONITORING

Sampling Point Number	Sampling Point Identification		Latitude		Longitude
	2	Downstream from UV disinfection unit		34° 44' 43.5" N	
Parameter	AL <sup>19</sup>	DL <sup>20</sup>	Units	Sampling Frequency	Reporting Frequency
Total Flow <sup>21</sup> : Daily <sup>22</sup>	Not Established <sup>23</sup>	Not Established	mgd <sup>24</sup>	Daily	Quarterly
Total Flow: Average Monthly	0.433	0.455	mgd	Monthly <sup>25</sup>	Quarterly
Fecal Coliform Single sample maximum	No Limit	23.0	CFU or MPN <sup>26</sup>	Daily	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week <sup>27</sup>	Not established	Non-detect <sup>28</sup>	CFU or MPN	Daily	Quarterly
Total Nitrogen <sup>29</sup> : Five-sample rolling geometric mean	8.0	10.0	mg/l	Monthly <sup>30</sup>	Quarterly

<sup>18</sup>Monitoring under this table is required once the flow exceeds 0.25 mgd or when the facility commences operation under phase II.

<sup>19</sup>AL = Alert Level

<sup>20</sup>DL = Discharge Limit

<sup>21</sup>Monthly average of daily flow values

<sup>22</sup>Flow shall be measured using a continuous recording flow meter which totals the flow daily.

<sup>23</sup>Not Established means monitoring is required but no limits are specified.

<sup>24</sup>mgd = million gallons per day

<sup>25</sup>Monthly = Calculated value = Average of daily flows in a month.

<sup>26</sup>CFU = Colony Forming Units / 100 ml sample. MPN = Most Probable Number / 100 ml sample.

<sup>27</sup>Week means a seven-day period starting on Sunday and ending on the following Saturday.

<sup>28</sup>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).

<sup>29</sup>Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

<sup>30</sup>A five-month geometric mean of the results of the five (5) most recent samples

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA-2 - PHASE II  
ROUTINE DISCHARGE MONITORING (continued)

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
<b>Metals (total):</b>					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.60	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

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA-2  
ROUTINE DISCHARGE MONITORING - PHASE II (continued)

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
<b>Volatile Organic Compounds (VOCs):</b>					
Benzene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Carbon tetrachloride	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
o-Dichlorobenzene	0.48	0.6	mg/l	Semi-Annually	Semi-Annually
para-Dichlorobenzene	0.06	0.075	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,1-Dichloroethylene	0.0056	0.007	mg/l	Semi-Annually	Semi-Annually
cis-1,2-Dichloroethylene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
trans-1,2-Dichloroethylene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Dichloromethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloropropane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Ethylbenzene	0.56	0.7	mg/l	Semi-Annually	Semi-Annually
Hexachlorobenzene	0.0008	0.001	mg/l	Semi-Annually	Semi-Annually
Hexachlorocyclopentadiene	0.04	0.05	mg/l	Semi-Annually	Semi-Annually
Monochlorobenzene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Styrene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Tetrachloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Toluene	0.8	1.0	mg/l	Semi-Annually	Semi-Annually
Trihalomethanes (total) <sup>31</sup>	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
1,1,1-Trichloroethane	0.16	0.2	mg/l	Semi-Annually	Semi-Annually
1,2,4 - Trichlorobenzene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
1,1,2 - Trichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Trichloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Vinyl Chloride	0.0016	0.002	mg/l	Semi-Annually	Semi-Annually
Xylenes (Total)	8.0	10.0	mg/l	Semi-Annually	Semi-Annually

<sup>31</sup> Total Trihalomethanes (THMs) are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

## 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA-2  
 ROUTINE DISCHARGE MONITORING - PHASE II (continued)

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
<b>Indicator Parameters / Major Cations and Anions:</b>					
pH (field)	Monitor <sup>32</sup>	Monitor	S.U.	Quarterly	Quarterly
Iron	Monitor	Monitor	mg/l	Quarterly	Quarterly
Manganese	Monitor	Monitor	mg/l	Quarterly	Quarterly
Total Organic Carbon	Monitor	Monitor	mg/l	Quarterly	Quarterly
Total Dissolved Solids	Monitor	Monitor	mg/l	Quarterly	Quarterly
Sodium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Potassium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Calcium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Magnesium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Chloride	Monitor	Monitor	mg/l	Quarterly	Quarterly
Sulfate	Monitor	Monitor	mg/l	Quarterly	Quarterly
Alkalinity	Monitor	Monitor	mg/l	Quarterly	Quarterly
Specific Conductivity (field)	Monitor	Monitor	µmhos/cm	Quarterly	Quarterly

<sup>32</sup> Monitoring required, but no limits established.



4.0 TABLES OF MONITORING REQUIREMENTS

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA-3<sup>33</sup>  
 ROUTINE DISCHARGE MONITORING  
 (Existing WWTP)

Parameter	Point of discharge into storage basin		34° 44' 45.21" N		112° 34' 40.42" W
	AL <sup>34</sup>	DL <sup>35</sup>	Units	Sampling Frequency	Reporting Frequency
Total Flow <sup>36</sup> : Daily <sup>37</sup>	Not Established <sup>38</sup>	Not Established	mgd <sup>39</sup>	Daily	Quarterly
Total Flow: Average Monthly	0.433	0.455	mgd	Monthly <sup>40</sup>	Quarterly
Fecal Coliform Single sample maximum	Reserved	800	CFU or MPN <sup>41</sup>	Daily	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week <sup>42</sup>	Reserved	200	CFU or MPN	Weekly (Calculated)	Quarterly
Total Nitrogen	8.0	10.0	mg/l	Monthly	Quarterly
Nitrate as N	8.0	10.0	mg/l	Monthly	Quarterly
Nitrite as N	0.8	1.0	mg/l	Monthly	Quarterly
Total Nitrogen <sup>43</sup> : Five-sample rolling geometric mean	8.0	10.0	mg/l	Monthly <sup>44</sup>	Quarterly

<sup>33</sup> Monitoring may be discontinued once the new WWTP commences operation or at the end of the 60 day start-up period, whichever comes later.

<sup>34</sup> AL = Alert Level

<sup>35</sup> DL = Discharge Limit

<sup>36</sup> Monthly average of daily flow values

<sup>37</sup> Flow shall be measured using a continuous recording flow meter which totals the flow daily.

<sup>38</sup> Not Established means monitoring is required but no limits are specified.

<sup>39</sup> mgd = million gallons per day

<sup>40</sup> Monthly = Calculated value = Average of daily flows in a month.

<sup>41</sup> CFU = Colony Forming Units / 100 ml sample. MPN = Most Probable Number / 100 ml sample.

<sup>42</sup> Week means a seven-day period starting on Sunday and ending on the following Saturday.

<sup>43</sup> Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

<sup>44</sup> A five-month geometric mean of the results of the five (5) most recent samples

## 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA-3  
 ROUTINE DISCHARGE MONITORING (continued)

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
<b>Metals (total):</b>					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.60	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

## 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA-3  
 ROUTINE DISCHARGE MONITORING (continued)

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
<b>Volatile Organic Compounds (VOCs):</b>					
Benzene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Carbon tetrachloride	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
o-Dichlorobenzene	0.48	0.6	mg/l	Semi-Annually	Semi-Annually
para-Dichlorobenzene	0.06	0.075	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,1-Dichloroethylene	0.0056	0.007	mg/l	Semi-Annually	Semi-Annually
cis-1,2-Dichloroethylene	0.05	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
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
Trihalomethanes (total) <sup>45</sup>	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
1,1,1-Trichloroethane	0.16	0.2	mg/l	Semi-Annually	Semi-Annually
1,2,4 - Trichlorobenzene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
1,1,2 - Trichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Trichloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Vinyl Chloride	0.0016	0.002	mg/l	Semi-Annually	Semi-Annually
Xylenes (Total)	8.0	10.0	mg/l	Semi-Annually	Semi-Annually

<sup>45</sup> Total Trihalomethanes (THMs) are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

## 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA-3  
 ROUTINE DISCHARGE MONITORING (continued)

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
<b>Indicator Parameters / Major Cations and Anions:</b>					
pH (field)	Monitor <sup>16</sup>	Monitor	S.U.	Quarterly	Quarterly
Iron	Monitor	Monitor	mg/l	Quarterly	Quarterly
Manganese	Monitor	Monitor	mg/l	Quarterly	Quarterly
Total Organic Carbon	Monitor	Monitor	mg/l	Quarterly	Quarterly
Total Dissolved Solids	Monitor	Monitor	mg/l	Quarterly	Quarterly
Sodium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Potassium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Calcium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Magnesium	Monitor	Monitor	mg/l	Quarterly	Quarterly
Chloride	Monitor	Monitor	mg/l	Quarterly	Quarterly
Sulfate	Monitor	Monitor	mg/l	Quarterly	Quarterly
Alkalinity	Monitor	Monitor	mg/l	Quarterly	Quarterly
Specific Conductivity (field)	Monitor	Monitor	µmhos/cm	Quarterly	Quarterly

<sup>16</sup> Monitoring required, but no limits established. Monitoring is for informational purposes only.

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IB-1  
RECLAIMED WATER MONITORING TABLE - CLASS A+<sup>47</sup>  
(New WWTP)

Sampling Point Number	Sampling Point Identification		Latitude	Longitude
2	Downstream from UV disinfection unit		34° 44' 43.5" N	114° 34' 38.5" W
Parameter	DL	Units	Sampling Frequency	Reporting Frequency
Fecal Coliform: Single-sample maximum	23	CFU or MPN <sup>48</sup>	Daily <sup>49</sup>	Quarterly
Fecal Coliform: Four (4) of last seven (7) samples	Non-detect <sup>50</sup>	CFU or MPN	Daily	Quarterly
Total Nitrogen <sup>51</sup> : Five-sample rolling geometric mean	10.0	mg/l	Monthly	Quarterly
Turbidity <sup>52</sup> : Single reading	5.0	NTU <sup>53</sup>	Everyday <sup>54</sup>	Quarterly
Turbidity: 24-hour average	2.0	NTU	Everyday	Quarterly
Enteric Virus <sup>55</sup> : Four (4) of last seven (7) samples	Non-detect	PFU <sup>56</sup>	Monthly / Suspended <sup>57</sup>	Quarterly

<sup>47</sup>Reclaimed water monitoring under Table IB-1 is not required until the new WWTP commences operation; monitoring under the table shall be performed in addition to routine discharge monitoring required under Section 4.2, Tables IA-1 and IA-2.

<sup>48</sup>CFU - Colony Forming Units per 100 ml; MPN - Most Probable Number per 100 ml. 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.

<sup>49</sup>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 calendar week are obtained and analyzed.

<sup>50</sup>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).

<sup>51</sup>Nitrate N, plus Nitrite N, plus Total Kjeldahl Nitrogen (TKN)

<sup>52</sup>Turbidimeter shall have a signal averaging time not exceeding 120 seconds. Occasional spikes due to back-flushing or instrument malfunction shall not be considered an exceedance. All exceedances must be explained and submitted to the Department with the corresponding quarterly SMRF.

<sup>53</sup>NTU = Nephelometric Turbidity Units

<sup>54</sup>For the single turbidity reading, "everyday" means the maximum reading during the 24-hour period.

<sup>55</sup>Initial monthly enteric virus sampling shall be performed to indicate four (4) out of seven (7) sample results of non-detect.

<sup>56</sup>Plaque Forming Units per 40 Liters. A value of < 1.1 PFU/40 L shall be considered to be non-detect.

<sup>57</sup>Enteric virus sampling shall resume only when the discharge limit for the 24-hour average for turbidity is exceeded for two (2) consecutive 24-hour monitoring periods. Monthly enteric virus monitoring shall continue until four (4) out of seven (7) consecutive sample results show no detection. During times when enteric virus sampling is suspended, enter "suspended" in the appropriate space on the SMRF.

**TABLE IB-2**  
**RECLAIMED WATER MONITORING TABLE - CLASS B<sup>58</sup>**  
**(Existing WWTP)**

Sampling Point Number	Sampling Point Identification		Latitude	Longitude
1	Point of discharge into storage basin		34° 44' 45.21" N	112° 34' 40.42" W
Parameter	DL	Units	Sampling Frequency	Reporting Frequency
Total Nitrogen <sup>59</sup> : Five-sample rolling geometric mean	10.0	mg/l	Monthly <sup>60</sup>	Quarterly
Fecal Coliform: Single-sample maximum	800	CFU or MPN <sup>61</sup>	Daily <sup>62</sup>	Quarterly
Fecal Coliform: Four of last seven samples	200 <sup>63</sup>	CFU or MPN	Daily	Quarterly

<sup>58</sup> Reclaimed water monitoring under Table IB-2 shall be performed in addition to routine discharge monitoring required under Section 4.2, Table IA-3. Monitoring under this table (Table IB-2) may be discontinued once the new WWTP commences operation.

<sup>59</sup> Nitrate N, plus Nitrite N, plus Total Kjeldahl Nitrogen (TKN)

<sup>60</sup> A five-month geometric mean of the results of the five most recent samples.

<sup>61</sup> CFU - 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.

<sup>62</sup> 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 samples in each seven-day period are obtained and analyzed.

<sup>63</sup> If 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.

## 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE III  
FACILITY INSPECTION (Operational Monitoring)

<b>Pollution Control Structures/Parameter</b>	<b>Performance Levels</b>	<b>Inspection Frequency</b>	<b>Reporting Frequency</b>
Pump integrity	Good working condition	Weekly	Quarterly
Treatment plant components	Good working condition	Weekly	Quarterly



**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: 07/30/1997 (original APP); 11/29/2001 (significant amendment); 03/26/2008 (significant amendment)
2. Contingency Plan, dated: 12/23/2008
3. Final Hydrologist Report, dated: 05/20/2002 (significant amendment); 05/20/2002 (significant amendment); 10/27/09 (significant amendment);
4. Final Engineering Report, dated: 10/14/09 (significant amendment)
5. Public Notice, dated: 09/11/02 (original APP); 09/11/02 (significant amendment)
6. Public Hearing, dated: Not applicable
7. Responsiveness Summary, dated: Not applicable

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

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

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

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

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

This permit may be amended, transferred, suspended, or revoked for cause, under the rules of the Department. The permittee shall notify the Groundwater Section in writing within 15 days after any change in the owner or operator of the facility. The notification shall state the permit number, the name of the facility, the date of property transfer, and the name, address, and phone number where the new owner or operator can be reached. The operator shall advise the new owner or operators of the terms of this permit and the need for permit transfer in accordance with the rules.

**7.0 ADDITIONAL PERMIT CONDITIONS**

**7.1 Other Information [A.R.S. § 49-243(K)(8)]**

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, the permittee shall promptly submit the correct facts or information.

**7.2 Severability  
[A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. The filing of a request by the permittee for a permit action does not stay or suspend the effectiveness of any existing permit condition.

**7.3 Permit Transfer**

This permit may not be transferred to any other person except after notice to and approval of the transfer by the Department. No transfer shall be approved until the applicant complies with all transfer requirements as specified in A.A.C. R18-9-A212(B) and (C).