

JOHNSON UTILITIES L.L



0000035756

5230 East Shea Boulevard * Scottsdale, Arizo.
PH: (480) 998-3300; FAX: (480) 483-7908

28DR

Linda Jaress
Utilities Division
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, Arizona 85007

December 16, 2005

ORIGINAL

RE: Johnson Utilities Company- Application to extend a Certificate of Convenience and Necessity. Docket No. WS-02987A-05-0695

Dear Ms. Jaress,

In response to your Insufficiency Letter dated November 2, 2005 regarding the above captioned matter:

1. A proposed 208 plan amendment is currently being prepared by Specific Engineering to include the proposed expansion area and will be submitted to CAAG and for Staff review. Johnson Utilities has no objection to approving this CC&N expansion application with the condition that an approved CAAG §208 plan, for this expansion, be submitted to the Commission within 365 from the approval of the order.
2. The proposed 208 plan does not include a Master Design Report. Currently Specific Engineering is diligently working to complete this report for your review. Our Section 11 Wastewater Treatment Plant ("WWTP") will initially service the proposed CC&N Expansion area until wastewater flows are sufficient enough to warrant the construction of our planned Copper Basin WWTP. The wastewater will be transferred from the proposed area via a Sewer Force Main as described by the Silverado Ranch Offsite Force Main Design Report attached hereto as Attachment 1. The Master Design Report will provide the WWTP capacities so that the Commission may analyze that Johnson Utilities has and will continue develop treatment capacities able to serve the proposed area. We will submit the Master Design Report along with the proposed CAAG §208 plan for your review.
3. The Aquifer Protection Permit ("APP") for the Section 11 WWTP is attached hereto as Attachment 2. The current permitted capacity is 1.6 million gallons a day ("MGD"), which will be increased in January to 2 MGD by an APP amendment that is currently out for public comment. The APP for the Copper Basin WWTP will be submitted to ADEQ for review and approval in the first quarter of 2006. The APP application will be for a treatment capacity of 3 MGD.

AZ CORP COMMISSION
DOCUMENT CONTROL

2005 DEC 16 P 3:39

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JOHNSON UTILITIES L.L.C

5230 East Shea Boulevard * Scottsdale, Arizona 85254

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4. The water use data sheet provided with the application has one well that is above the new arsenic standard. The most current test data on well #55-582085 has a reading of 22 micrograms per liter. The well is not currently "in use" Johnson Utilities has committed to retest the well in January 2006 before it is placed back in service. The arsenic plan given to ADEQ, and the ACC in a previous application, explains that Johnson Utilities will discontinue the use of this well permanently if it does not meet the new arsenic standards for drinking water. The well in question is a very low flow production well and will not impact the overall ability of Johnson Utilities to provide safe and reliable potable water.

If Staff needs any additional information or clarification to satisfy any of the deficiencies, please contact me at 480-998-3300.

Sincerely,
Johnson Utilities, LLC

Daniel Hodges

Enclosure

Cc: Brian Tompsett
Richard Sallquist
Del Smith
Lyn Farmer
Brian Bozzo
Docket Control

ATTACHMENT 1

SILVERADO RANCH OFFSITE FORCE MAIN DESIGN REPORT

Date: November 2005

Prepared for:
Johnson Utilities LLC
Central Pinal contracting LLC No. 115-417
5230 E. Shea Blvd., Suite 200
Scottsdale, AZ 85254
(480) 998-3300

Prepared by:
Specific Engineering, LLC
5230 E. Shea blvd, Suite 220
Scottsdale, AZ 85254
(480) 596-6335



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1.0 Introduction

This condensed Design Report is to confirm that the design of the Silverado Ranch offsite force main conforms to the *Johnson Utilities Company Guide lines and A.A.C. R18-9-E301* as approved by the Arizona Department of Environmental Quality (ADEQ).

Silverado Ranch is located in Section 3, Township 3 South, Range 9 East. This force main will only serve the Silverado Ranch development at this time. This section of the force main is basically in the middle of the entire project, however, since the Silverado Ranch Developer wishes to construct Skyline Drive first, Johnson Utilities and Specific Engineering has divided the project into two piece.

The second section will be the force main from a manhole located in Cooper Road, about half way between Bella Vista Road and Judd Road, to the force main in Skyline Drive. The Silverado development will construct the lift station and the force main up to the tie in with the force main shown on these plans. In the mean time this will be a dry sewer line. It will be built, tested and as built.

The site is not presently within the Johnson Utilities (an Arizona Corporation) CC&N's and will provide the water and sewer services for this subdivision. Johnson Utilities has the paperwork in to add this area to its CC&N.

2.0 Sanitary Sewer System

The force main was designed by Specific Engineering LLC. The force main was designed based on the sewer flows prepared for the Silverado Ranch development by EPS Engineering.

There will be a total flow of 688 GPM when the Silverado Ranch Development is total built out. The development will drain to the lift station and the lift station will drain to the manhole within the Magma Ranch development. The sewer main will handle the flows due to the travel distance of the peak. The flow from the lift station will have to traverse approximately 4 miles. By the time it reaches the receiving manhole the peak flows from the Magma Ranch project will have passed. The flow from this development will initially go to the Section 11 WWTP, and will ultimately go to the proposed Copper Basin water reclamation plant.

HEADS21

HEADS2 Version 2.0
 Wastewater Pump Head Calculation Template Using HGL Method
 Copyright 2002 Timmons Engineering Software. All Rights Reserved

Station Data: Date : 11/03/05

Station Description: Silverado Ranch Force Main

Pump Off Elevation:	1621.00
Pump Reference Datum :	1621.00
Available Atmospheric Head:	34.00
Vapor Pressure:	1.00
Available NPSH Safety Factor:	0.00
Flow Units Used:	GPM
Conversion Factor to GPM:	1.00
Flow:	688

Calculated Heads :

	Feet	Psi
Suction Static Head:	0.00	0.00
Discharge Static Head:	27.00	11.69
Total Dynamic Suction Head:	0.00	0.00
Total Dynamic Discharge Head:	98.67	42.72
NPSH Available:	33.00	14.29
Total Dynamic Head:	98.67	42.72

Piping System Data:

Suction:

Descrip.:	C	Dia	Length	Flow	K	Vel	HeadLoss
	100.00	6.00	0.00	688.00	0.00	7.81	0.00
	100.00	6.00	0.00	688.00	0.00	7.81	0.00
	100.00	6.00	0.00	688.00	0.00	7.81	0.00
	100.00	6.00	0.00	688.00	0.00	7.81	0.00
	100.00	6.00	0.00	688.00	0.00	7.81	0.00

Total Suction Head Loss: 0.00

Discharge:

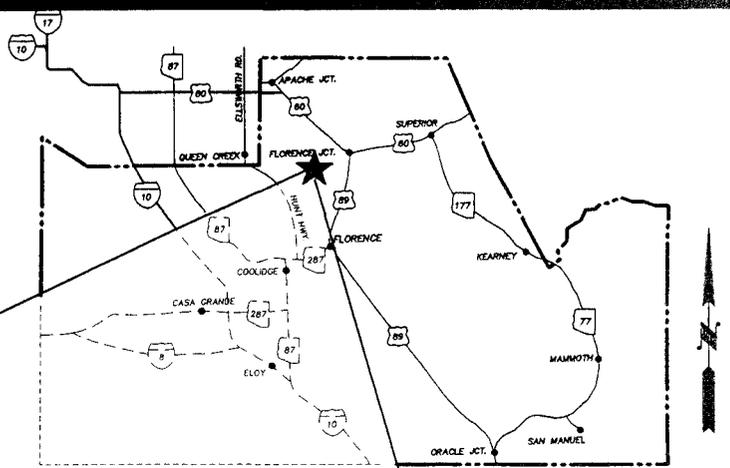
Descrip.:	C	Dia	Length	Flow	K	Vel	HeadLoss
	100.00	6.00	0.00	688.00	0.00	7.81	0.00
	100.00	6.00	0.00	688.00	0.00	7.81	0.00
	100.00	6.00	0.00	688.00	0.00	7.81	0.00
	100.00	6.00	0.00	688.00	0.00	7.81	0.00
	100.00	6.00	0.00	688.00	0.00	7.81	0.00

Total Discharge Head Loss: 0.00

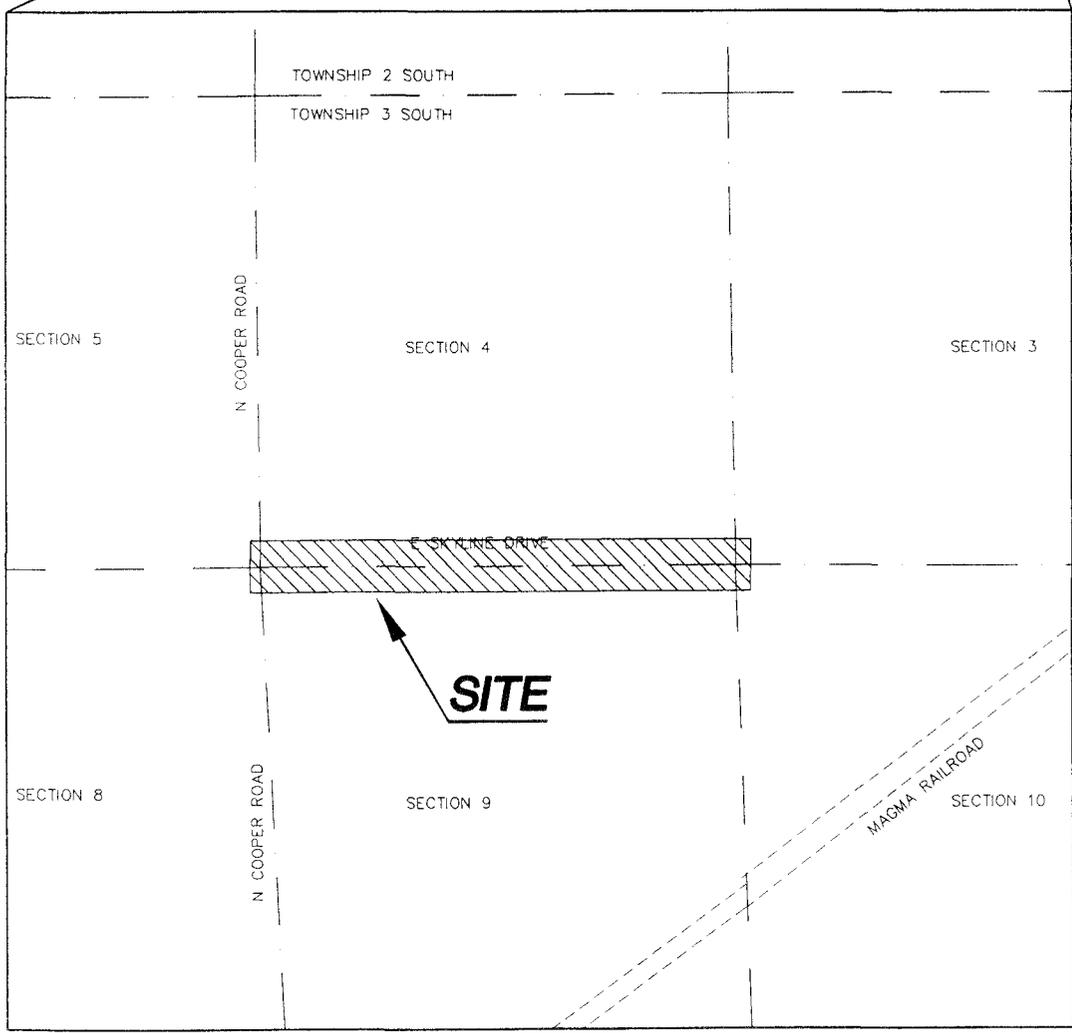
Pump Discharge Hydraulic Grade 1719.67

Force Main:

Segment-	Start	1	2	3	4	5	6	7	8	9	10
C		150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	100.00	100.00
Dia		8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Length		50.00	100.00	5280.00	5280.00	1980.00	660.00	2640.00	1320.00	0.00	0.00
Summed L	0.00	50.00	150.00	5430.00	10710.00	12690.00	13350.00	15990.00	17310.00	17310.00	17310.00
Flow		688.00	688.00	688.00	688.00	688.00	688.00	688.00	688.00	688.00	688.00
K		1.00	1.50	3.50	3.50	3.50	1.50	1.50	1.00	0.00	0.00
Dn Elev	1648.00	1648.00	1644.00	1624.00	1607.00	1605.00	1604.00	1595.00	1596.00	0.00	0.00
Velocity		4.39	4.39	4.39	4.39	4.39	4.39	4.39	4.39	4.39	4.39
Headloss		0.64	1.13	37.22	37.22	14.61	4.97	18.53	9.34	0.00	0.00
Dn HGL	1719.67	1719.03	1717.90	1680.68	1643.46	1628.85	1623.88	1605.34	1596.00	0.00	0.00



VICINITY MAP
N.T.S.



LOCATION MAP

T-3S, R-9E
PINAL COUNTY, ARIZONA

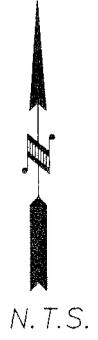


FIGURE 1

SKY LINE DRIVE WATER LINE

DRAWN FRB
DATE 11-14-05
SCALE N.T.S.



SPECIFIC ENGINEERING, LLC.

5230 E. SHEA BOULEVARD SUITE 220
SCOTTSDALE, ARIZONA 85254
Phone: (480) 596-6335
FAX: (480) 596-6437



LOCATION MAP

S:\Specific_Engineering\3000\9050\locos\Cat-ehis\EXHIBITS\FIGURE-1\center.dwg Plotted: Nov 14, 2005

ATTACHMENT 2



Janet Napolitano
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007
(602) 771-2300 • www.adeq.state.az.us



Stephen A. Owens
Director

November 1, 2005

Mr. George Johnson
Johnson Utilities Company
5230 East Shea Blvd.
Scottsdale, Arizona 85254

Re: Johnson Utilities Section 11 Wastewater Treatment Plant (WWTP)
Minor Amendment to –Aquifer Protection Permit (APP) No 103081.

Dear Mr. Johnson:

The Arizona Department of Environmental Quality (ADEQ) is making a minor amendment to APP No. 103081 to clear up a monitoring requirement in Table I, concerning discharge monitoring in the following manner:

1. Footnotes numbers 1 and 2 were combined to make space on the page.
2. The “weekly (calculated)” sampling frequency has been changed to “daily”. This means that the same footnote number 5 applies to this parameter as well as for the single sample maximum fecal coliform parameter.
3. Footnote number 6 has been added to indicate the 4 out of the “last” 7 samples and to indicate the “yes” and “no” answers.

The Department hopes this clears up this monitoring and reporting problem and that this simplified definition will aid in the sampling and reporting.

Northern Regional Office
1515 East Cedar Avenue • Suite F • Flagstaff, AZ
86004

Southern Regional Office
400 West Congress Street • Suite 433 • Tucson, AZ
85701

Johnson Utilities Section 11 Wastewater Treatment Plant
November 1, 2005
Page 2

If you have any questions please contact Don Bell of my staff at (602) 771-4613.

Sincerely,

Asif Majeed, Manager
Wastewater, Recharge and Reuse Unit
Water Permits Section

cc: Don Bell, Project Manager, Wastewater, Recharge and Reuse Unit

MWR04:0000

**STATE OF ARIZONA
AQUIFER PROTECTION PERMIT NO. P-103081
PLACE ID 142, LTF 24069**

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, Johnson Utilities Company is hereby authorized to operate the Johnson Utilities Section 11 Wastewater Treatment Plant located in the located adjacent to Hunt Highway, approximately nine miles southeast of Queen Creek, northern section of Pinal County, Arizona, over groundwaters of the Phoenix Active Management Area (AMA), in Township 4 S, Range 8 E, NW1/4 of Section 11, Gila and Salt River 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), provided that the facility is constructed, operated, and maintained:

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 are not violated at the applicable point(s) of compliance set forth below.

1.1 PERMITTEE INFORMATION

Facility Name:	Johnson Utilities Section 11 Wastewater Treatment Plant	
Permittee:	Mailing Address:	Facility's Street Address:
Johnson Utilities Company	5230 East Shea Blvd. Scottsdale, Arizona 85254	Adjacent to Hunt Highway, approximately nine miles southeast of Queen Creek, northern section of Pinal County, Arizona
Facility Contact:	Mr. George Johnson, Owner	
Emergency Telephone Number:	(480) 987-9870	
Latitude: 33° 06' 06"	Longitude: 111° 30' 16"	
Legal Description:	Township 4 S, Range 8 E, NW1/4 of Section 11	

*5632 E Hunt Hwy
Queen Creek, AZ
85242*

1.2 AUTHORIZING SIGNATURE

_____/s/_____
Karen L. Smith, Director
Water Quality Division
Arizona Department of Environmental Quality
Signed this 4th day of September, 1998

Amended: June 12, 2002

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 Johnson Utilities Section 11 Wastewater Treatment Plant (WWTP) has the capacity to collect and treat up to a maximum monthly average flow of 1.6 million gallons per day (MGD) wastewater received from residences and small businesses from the central and southern portions of Johnson Utilities service area and reverse osmosis discharge from the water treatment plant located on the site. The treatment process consists of headworks with a bar screen, a flow splitter box, aeration lagoons, wetland cells, ultraviolet disinfection, and an effluent pump station. All the lagoons and wetland cells of the WWTP, and the effluent storage lakes, located at the golf courses, are lined with liners that have a permeability of less than 550 gallons per day per acre. The WWTP is classified as producing Class B+ reclaimed water pursuant to 18 A.A.C. 11, Article 3 and the effluent from this WWTP may be utilized for any of the applicable Class B+ uses under a valid reclaimed water reuse permit as per 18 A.A.C. 9, Article 7. Part of the effluent is pumped to the Johnson Utilities Golf Course lakes and is consumptively used by irrigation of the golf course as regulated under Reuse Permit R103081. The remaining effluent is discharged by percolation into the soil through recharge basins. Sludge and wetland harvest is hauled off-site for disposal in accordance with State and Federal regulations for Solid Waste disposal.

This permit amendment is for re-rating the WWTP from 300,000 gpd to 1.6 MGD, changing the monitoring requirements to confirm with reuse class B+ effluent and new regulations effective January 1, 2001, and add recharge as a method of disposal.

The site includes the following permitted discharging facilities:

Monitoring for all constituents except flow shall be performed at the point of discharge from the effluent pump station located at:

Identification	Latitude	Longitude
Effluent Pump Station	33° 06' 12" N	111° 30' 11" W

Flow monitoring shall be performed at the influent pump station located at:

Identification	Latitude	Longitude
Influent Pump Station	33° 09' 18" N	111° 33' 26" W

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

The WWTP includes the following Best Available Demonstrated Control Technology.

2.2.1 Engineering Design

The WWTP process employs nitrification-denitrification to achieve an effluent total nitrogen level of 10 mg/l and chlorine disinfection to achieve an effluent fecal coliform level of 800/200 CFU. All the lagoons and wetland cells of the WWTP, and the effluent storage lakes, located at the golf courses, are lined with liners that have a permeability of less than 550 gallons per day per acre. Groundwater monitoring will be conducted at the point of compliance (POC) well as part of this permit.

2.2.2 Site-specific Characteristics

Depth to groundwater at the site is approximately 375 feet and the direction of groundwater flow is to the northeast.

2.2.3 Pre-Operational Requirements

Not Applicable, since the WWTP is currently in operation.

2.2.4 Operational Requirements

1. A copy of the Operation and Maintenance (O & M) manual shall be maintained 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 4.0, 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.

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

The permittee is authorized to operate the Johnson Utilities Section 11 Wastewater Treatment Plant with a maximum average monthly flow of 1.6 MGD.

2.4 Point(s) of Compliance (P.O.C.) [A.R.S. § 49-244]

The Point of Compliance is located at the northeast corner of the WWTP site at:

Identification	Latitude	Longitude
Point of Compliance Well # 55-564304	33° 06' 12" N	111° 30' 05" W

Monitoring requirements for each POC are listed in Section 4.0, TABLE II.

The Director may 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 EPA 40 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 Discharge Monitoring

The permittee shall monitor the wastewater according to Section 4.0, TABLE I. A representative sample of the wastewater shall be collected from the effluent pump station.

2.5.2 Facility / Operational Monitoring

Operational monitoring inspections shall be conducted according to Section 4.0, TABLE III. A log of these inspections shall be kept at the facility for ten (10) years from the date of each inspection, available for review by ADEQ personnel.

- a. 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 Self-Monitoring Report Form submitted quarterly to the ADEQ Water Quality Compliance. 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 that fact in the Self-Monitoring Report.
- b. The permittee shall submit data required in Section 4.0, TABLE III regardless of the operating status of the facility unless otherwise approved by the Department or allowed in this permit.

2.5.3 Groundwater Monitoring and Sampling Protocols

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 indicator 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% 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 Self-Monitoring Report Form (SMRF).

2.5.4 Surface Water Monitoring and Sampling Protocols

Not Applicable. No surface water monitoring is required.

2.5.5 Analytical Methodology

All samples collected for compliance monitoring shall be analyzed using Arizona state approved methods. If no state approved method exists, then any appropriate EPA approved method shall be used. Regardless of the method used, the detection limits must be sufficient to determine compliance with the regulatory limits of the parameters specified in this permit. 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
1740 W. Adams Street, Room 203 North
Phoenix, AZ 85007
Phone: (602) 364-0720

2.5.6 Installation and Maintenance of Monitoring Equipment

Monitoring equipment required by this permit shall be installed and maintained so that representative wastewater, groundwater, soil, water, or sludge samples can be collected. Should new groundwater wells be determined to be necessary, the construction details shall be submitted to the ADEQ Water Permits Section for approval.

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 Considerations

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

Some contingency actions involve verification sampling. Verification sampling shall consist of the first followup sample collected from a location that previously indicated a violation or that an AL has been exceeded. 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.

2.6.2 Exceeding of Alert Levels / Performance Levels

2.6.2.1 Exceeding Performance Levels Set for Operational Conditions

1. If the operational Performance Level set in Section 4.0, TABLE III has been exceeded the permittee shall:
 - a. Notify the ADEQ Water Quality Compliance Unit within five (5) days of becoming aware of a violation of any permit condition.
 - b. Submit a written report within thirty (30) days after becoming aware of a violation of a permit condition. The report shall document all of the following:
 1. A description of the violation and its cause;
 2. 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;
 3. any action taken or planned to mitigate the effects or the violation, or the spill, or to eliminate or prevent recurrence of the violation;
 4. any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an Aquifer Water Quality Standard; 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 Performance Level is being exceeded. The permittee shall, however, complete all tasks necessary to return the facility to its pre-alert operating condition.

2.6.2.2 Exceeding of Alert Levels Set for Discharge Monitoring

1. If an AL set in Section 4.0, TABLE I has been exceeded, the permittee shall conduct verification sampling within 24 hours of becoming aware of the alert status.
2. If the verification sampling confirms that the AL has been exceeded, the permittee shall immediately investigate to determine the cause of the AL being exceeded. 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 AL being exceeded.
 - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences;
3. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 5.0 and specific contingency measures identified in Section 2.6 to resolve any problems identified by the investigation which may have led to an AL being exceeded. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6.
4. Within thirty (30) days after confirmation of an AL being exceeded, 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 AL being exceeded, and actions taken to resolve the problem.
5. Upon review of the submitted report, the Department may require additional monitoring, increased frequency of monitoring, amendments to permit conditions or other actions.

2.6.2.3 Exceeding of Alert Levels in Groundwater Monitoring

2.6.2.3.1 Alert Levels for Indicator Parameters

Not Applicable.

2.6.2.3.2 Alert Levels for Pollutants with Numeric Aquifer Water Quality Standards

1. If an AL for a pollutant set in Section 4.0, TABLE II has been exceeded, the permittee shall conduct verification sampling within 5 days of becoming aware of an AL being exceeded.

2. If verification sampling confirms the AL being exceeded, the permittee shall increase the frequency of monitoring to 'Daily', 'Weekly', and 'Monthly' for constituents that have a permit monitoring frequency of 'Weekly', 'Monthly', and 'Quarterly' respectively. In addition, the permittee shall immediately initiate an investigation of the cause of the AL being exceeded, including inspection of all discharging units and all related pollution control devices, review of any operational and maintenance practices that might have resulted in an unexpected discharge, and hydrologic review of groundwater conditions including upgradient water quality.
3. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 5.0 and specific contingency measures identified in Section 2.6 to resolve any problems identified by the investigation which may have led to an AL being exceeded. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6. Alternatively, the permittee may submit a technical demonstration, subject to written approval by the Water Permits Section, that although an AL is exceeded, pollutants are not reasonably expected to cause a violation of an AQL. The demonstration may propose a revised AL or monitoring frequency for approval in writing by the Water Permits Section.
4. Within thirty (30) days after confirmation of an AL being exceeded, the permittee shall submit the laboratory results to the Water Quality Compliance Section, Data Unit along with a summary of the findings of the investigation, the cause of the AL being exceeded, and actions taken to resolve the problem.
5. Upon review of the submitted report, the Department may require additional monitoring, increased frequency of monitoring, amendments to permit conditions or other actions.
6. The increased monitoring required as a result of ALs being exceeded may be reduced to Section 4.0, Table II, if the results of four sequential sampling events demonstrate that no parameters exceed the AL.

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

Not Applicable.

2.6.3 Discharge Limitations (DL) Violations

1. If a DL set in Section 4.0, TABLE I has been exceeded, the permittee shall conduct verification sampling within 24 hours of becoming aware of a DL being exceeded.
2. If verification sampling confirms that the DL 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;

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.

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

2.6.4 Aquifer Quality Limit (AQL) Violation

1. If an AQL set in Section 4.0, TABLE II has been exceeded, the permittee shall conduct verification sampling within 5 days of becoming aware of an AQL being exceeded.
2. If verification sampling confirms that the AQL is violated for any parameter, the permittee shall increase the frequency of monitoring to 'Daily', 'Weekly', and 'Monthly' for constituents that have a permit monitoring frequency of 'Weekly', 'Monthly', and 'Quarterly' respectively. In addition, the permittee shall immediately initiate an evaluation for the cause of the violation, including inspection of all discharging units and all related pollution control devices, and review of any operational and maintenance practices that might have resulted in unexpected discharge.

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

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

2.6.5 Emergency Response and Contingency Requirements for Spills and Unauthorized Discharges

2.6.5.1 Duty to Respond

The permittee shall act immediately to correct any condition that could pose an endangerment to public health or the environment.

2.6.5.2 Spills of Hazardous or Toxic Materials

In the event of any accidental spill or unauthorized discharge (A.R.S. § 49-201(12)) of suspected hazardous substances (A.R.S. § 49-201(18)) 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 spilled material. The permittee shall record information, including name, nature of exposure and follow-up medical treatment, if necessary, on persons who may have been exposed during the incident. Spilled materials, absorbents, and contaminated media generated during emergency response shall be removed and disposed of according to applicable federal, state and local regulations. The emergency response coordinator shall notify the ADEQ Emergency Response Unit at (602) 207-2300 immediately upon discovering a release of a hazardous substance in excess of a reportable quantity in accordance with 40 CFR Part 302, *et seq.*

2.6.5.3 Discharge of Non-hazardous Materials

In the event of any unauthorized discharge 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 ADEQ Compliance at (602) 207-4620 within 24-hours upon discovering the discharge of non-hazardous material which: a) has the potential to cause an AQL to be exceeded; or b) could pose an endangerment to public health or the environment.

2.6.5.4 Reporting Requirements

The permittee shall submit a written report for any unauthorized discharges described in Sections 2.6.5.2 and 2.6.5.3 to ADEQ Compliance at (602) 207-4620 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 that notice. Upon review of the submitted report, ADEQ may require additional monitoring or corrective actions.

2.6.6 Corrective Actions

Specific contingency measures identified in Section 2.6 and actions identified in the approved contingency plan referenced in Section 5.0 have already been approved by ADEQ and do not require written approval to implement.

With the exception of emergency response actions taken under Section 2.6.5, the permittee shall obtain written approval from the Water Permits Section prior to implementing a corrective action to accomplish any of the following goals in response to exceeding an AL or violation of an AQL, DL, or other permit condition:

1. Control of the source of an unauthorized discharge;
2. Soil cleanup;
3. Cleanup of affected surface waters;
4. Cleanup of affected parts of the aquifer;
5. Mitigation to limit the impact of pollutants on existing uses of the aquifer.

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 Forms (SMRF)**

1. The permittee shall complete the SMRFs provided by ADEQ, and submit them 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 Sections 4.0 list the parameters to be monitored and the frequency for reporting results for groundwater compliance monitoring. Monitoring methods shall be recorded on the SMRFs.
4. In addition to the SMRF, the information contained in Section 6.9.3 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 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 logbook shall be retained for ten years from the date of each inspection, and upon request, the permit and the logbook 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 data and time;
6. names of samples;
7. static water level in monitor well prior to sampling;
8. sampling method;
9. purging volume;
10. indicator parameters including field conductance ($\mu\text{mhos/cm}$), field temperature ($^{\circ}\text{C}$), and field pH (standard units);
11. date of analysis;
12. preservation and transportation procedures;
13. the name of the analytical facility, and;
14. any other information as specified by this permit to be entered in the logbook. -

2.7.3 Permit Violation and Alert Level Status Reporting

1. The permittee shall notify the Water Quality Compliance Section, Enforcement Unit in writing within five days (except as provided in Section 2.6.5) of becoming aware of a violation of any permit condition, discharge limitation or of an Alert Level being exceeded.
2. The permittee shall submit a written report to the Water Quality Compliance Section, Enforcement Unit within 30 days of becoming aware of the violation of any permit condition

or discharge limitation. The report shall document all of the following:

- a. Identification and description of the permit condition for which there has been a violation and a description of its cause.
- b. The period of violation including exact date(s) and time(s), if known, and the anticipated time period during which the violation is expected to continue.
- c. Any corrective action taken or planned to mitigate the effects of the violation, or to eliminate or prevent a recurrence of the violation.
- d. Any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an Aquifer Water Quality Standard.
- e. Proposed changes to the monitoring which include changes in constituents or increased frequency of monitoring.
- 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 Self-Monitoring Report Form provided by the Department to reflect facility inspection requirements designated in Section 4.0, TABLE III and submit to the ADEQ, Water Quality Compliance quarterly along with other reports required by this permit. Facility inspection reports shall be submitted no less frequently than quarterly, regardless of operational status.

2.7.5 Reporting Location

All SMRFs shall be submitted to:

Arizona Department of Environmental Quality
Water Quality Compliance Section, Data Unit
5 th Floor
1110 W. Washington Street
Phoenix, AZ 85007
Phone (602) 771-4681

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

Water Quality Compliance Section, Enforcement Unit
5 th Floor
1110 W. Washington Street
Phoenix, AZ 85007
Phone (602) 771-4614

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

Arizona Department of Environmental Quality
Water Permits Section
5 th Floor
1110 W. Washington Street
Phoenix, AZ 85007
Phone (602) 771-4428

2.7.6 Reporting Deadline

The following table lists the quarterly report due dates:

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

2.7.7 Changes to Facility Information in Section 1.0

The Water Permits Section and Water Quality Compliance Section shall be notified within 10 days of any change of facility information including Facility Name, Permittee Name, Mailing or Street Address, Facility Contact Person or Emergency Telephone Number.

2.8 Temporary Cessation [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 upon ceasing operation of the facility for a period of 60 days or greater. The permittee shall take the following measures upon temporary cessation, if applicable:

2. If applicable, direct the wastewater flows from the facility to another State approved wastewater treatment facility.
3. Correct the problem that caused the temporary cessation of the facility.
4. Notify ADEQ Water Quality Compliance with a monthly facility Status Report describing the activities conducted on the WWTP 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's approval, the permittee shall implement the approved plan. If necessary, ADEQ shall amend permit conditions to incorporate conditions to address temporary cessation. If the facility will cease operation, 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)]

The permittee shall give written notice of closure to the Water Quality Compliance Section before closing, or before ceasing use of a facility addressed under this permit if the cessation is projected to last more than three years.

Within 90 days following notification of closure, the permittee shall submit for approval to the Water Permits Section, a detailed Closure Plan which meets the requirements of A.R.S. § 49-252 and A.A.C. 18-9-A209(B)(1)(a).

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.

Upon completion of closure activities, the permittee shall give written notice to the Water Permits Section indicating that the approved Closure Plan has been implemented fully. If clean closure has been achieved, ADEQ shall issue a letter of approval to the permittee at that time. If any of the following conditions apply, the permittee shall follow the terms of Post Closure stated in this permit:

1. Clean closure cannot be achieved at the time of closure notification or within one year thereafter under a diligent schedule of closure actions;
2. Further action is necessary to keep the facility in compliance with aquifer water quality standards at the applicable point of compliance;
3. Continued action is required to verify that the closure design has eliminated discharge to the extent intended;
4. Remedial or mitigative measures are necessary to achieve compliance with Title 49, Ch. 2;
5. Further action is necessary to meet property use restrictions.

2.9.1 Closure Plan

A specific closure plan is not required at the time of permit issuance.

2.9.2 Closure Completion

Not required at the time of permit issuance.

2.10 Post Closure [A.R.S. §§ 49-243(K)(6), 49-252 and A.A.C. R18-9 A209(C)]

Post-closure requirements shall be established based on a review of facility closure actions and will be subject to review and approval by the Water Permits Section.

In the event clean closure cannot be achieved pursuant to A.R.S. § 49-252, the permittee shall submit for approval to the Water Permits Section a Post-Closure Plan that addresses post-closure maintenance and monitoring actions at the facility. The Post-Closure Plan shall meet all requirements of A.R.S. §§ 49-201(29) 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 is not required at the time of permit issuance.

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 Water Permits Section. A copy of the cover letter must also be submitted to the Water Quality Compliance Section, Data Unit.

1. The permittee shall submit an annual report summarizing water quality for all forms of nitrogen, total coliform, and water level data in a tabular and graphical form. The report shall also discuss any known impacts to the surrounding groundwater and land users as a result of the recharge operations.
2. Within three months from the signature date of the permit, the permittee shall submit to the Water Permits Section groundwater quality data from an approved point of compliance (POC) monitor well, along with the final design drawing of the POC well. The well shall not be constructed until ADEQ has approved the well design. If a constituent at the POC exceeds Aquifer Water Quality Standards (AWQS), the permittee shall submit at least eight groundwater samples of the constituent in exceedance in order to establish the appropriate Aquifer Quality Limit for that constituent. Groundwater monitoring will continue as described in Section 4.0, Table II.

TABLE I DISCHARGE MONITORING

Sampling Point Number	Sampling Point Identification		Latitude	Longitude
1	Influent Pump Station		33° 09' 18" N	111° 33' 26" W
Parameter	AL ¹	DL ¹	Sampling Frequency	Reporting Frequency
Daily Flow	Reserved ²	Reserved	Daily	Quarterly
Average Monthly Flow	1.5 MGD	1.6 MGD	Monthly ³	Quarterly
pH ⁴	Reserved	6.0 - 9.0	Daily ⁵	Quarterly
Sampling Point Number	Sampling Point Identification		Latitude	Longitude
2 (Reuse Class B+)	Effluent Pump Station		33° 06' 12" N	111° 30' 11" W
Parameter	AL ¹	DL ²	Sampling Frequency	Reporting Frequency
Fecal Coliform (single sample maximum)	Reserved	800 CFU	Daily ^{5,6}	Quarterly
Fecal Coliform (4 out of 7 samples) ⁶	Reserved	200 CFU	Daily	Quarterly
Total Nitrogen ⁷	8.0	10.0 ⁸	Monthly	Quarterly
Nitrate-Nitrite as N	8.0	10.0	Monthly	Quarterly
Total Kjeldahl Nitrogen (TKN)	Reserved	Reserved	Monthly	Quarterly

¹ AL = Alert Level. In most cases, ALs are set at 80% of DLs. DL = Discharge Limit. All discharge limits and alert levels are presented in mg/l except flow, which is in million gallons per day (MGD), or gallons per day (gpd). All ALs and DLs are maximum numbers except where stated otherwise.

² Reserved = No limits are specified.

³ Monthly = Calculated value = Monthly Average of daily flows recorded by a continuous recording and totalizing flow meter.

⁴ pH shall be measured with a continuous recording meter. The pH meter may be installed at a point after the headworks and before the flow splitter box.

⁵ Daily = Every day on which a sample can practicably be obtained and delivered in sufficient time for proper analysis, provided that no less than four samples in each calendar week are obtained and analyzed.

⁶ If at least four (4) out of the last seven (7) samples are ~~non-detect~~ ^{less than 200}, report "yes" in the appropriate space on the SMRF (indicating that the standard has been met). However, if at least four (4) out 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).

⁷ Total Nitrogen is equal to nitrate as N plus nitrite as N plus TKN.

⁸ A 5-Month Geometric Mean of the results of the 5 most recent samples.

4.0 TABLES OF MONITORING REQUIREMENTS

TABLE I DISCHARGE MONITORING

Sampling Point Number	Sampling Point Identification	Latitude	Longitude	
1	Influent Pump Station	33° 09' 18" N	111° 33' 26" W	
Parameter	AL ¹	DL ²	Sampling Frequency	Reporting Frequency
Flow:				
Daily	Reserved ³	Reserved	Daily	Quarterly
Average Monthly	1.5 MGD	1.6 MGD	Monthly ⁴	Quarterly
pH	Reserved	6.0 - 9.0	Daily ⁵	Quarterly

Sampling Point Number	Sampling Point Identification	Latitude	Longitude	
2 (Reuse Class B+)	Effluent Pump Station	33° 06' 12" N	111° 30' 11" W	
Parameter	AL ¹	DL ²	Sampling Frequency	Reporting Frequency
Fecal Coliform (single sample maximum)	Reserved	800 CFU	Daily ⁶	Quarterly
Fecal Coliform (4 out of 7 samples)	Reserved	200 CFU	Weekly (Calculated)	Quarterly
Total Nitrogen ⁷	8.0	10.0 ⁸	Monthly	Quarterly
Nitrate-Nitrite as N	8.0	10.0	Monthly	Quarterly
Total Kjeldahl Nitrogen (TKN)	Reserved	Reserved	Monthly	Quarterly

Notes:

- ¹ AL = Alert Level. In most cases, ALs are set at 80% of DLs.
- ² DL = Discharge Limit. All discharge limits and alert levels are presented in mg/l except flow, which is in million gallons per day (MGD), or gallons per day (gpd). All ALs and DLs are maximum numbers except where stated otherwise.
- ³ Reserved = No limits are specified.
- ⁴ Monthly = Calculated value = Monthly Average of daily flows recorded by a continuous recording and totalizing flow meter.
- ⁵ pH shall be measured with a continuous recording meter. The pH meter may be installed at a point after the headworks and before the flow splitter box.
- ⁶ Daily = Every day on which a sample can practicably be obtained and delivered in sufficient time for proper analysis, provided that no less than four samples in each calendar week are obtained and analyzed.
- ⁷ Total Nitrogen is equal to nitrate as N plus nitrite as N plus TKN.
- ⁸ A 5-Month Geometric Mean of the results of the 5 most recent samples.

Amended: June 12, 2002

4.0 TABLES OF MONITORING REQUIREMENTS

TABLE I
DISCHARGE MONITORING (continued)

Metals (Total): (Sample Point No. 2)

Parameter	AL	DL	Sampling Frequency	Reporting Frequency
Antimony	0.0048	0.006	Quarterly	Quarterly
Arsenic	0.04	0.05	Quarterly	Quarterly
Barium	1.60	2.00	Quarterly	Quarterly
Beryllium	0.0032	0.004	Quarterly	Quarterly
Cadmium	0.004	0.005	Quarterly	Quarterly
Chromium	0.08	0.1	Quarterly	Quarterly
Cyanide (As free cyanide)	0.16	0.2	Quarterly	Quarterly
Fluoride	3.2	4.0	Quarterly	Quarterly
Lead	0.04	0.05	Quarterly	Quarterly
Mercury	0.0016	0.002	Quarterly	Quarterly
Nickel	0.08	0.1	Quarterly	Quarterly
Selenium	0.04	0.05	Quarterly	Quarterly
Thallium	0.0016	0.002	Quarterly	Quarterly

Amended: June 12, 2002

4.0 TABLES OF MONITORING REQUIREMENTS

TABLE I
DISCHARGE MONITORING (continued)

Volatile Organic Compounds (VOCs): (Sample Point No. 2)

Parameter	AL	DL	Sampling Frequency	Reporting Frequency
Benzene	0.004	0.005	Quarterly	Quarterly
Carbon tetrachloride	0.004	0.005	Quarterly	Quarterly
o-Dichlorobenzene	0.48	0.6	Quarterly	Quarterly
para-Dichlorobenzene	0.06	0.075	Quarterly	Quarterly
1,2-Dichloroethane	0.004	0.005	Quarterly	Quarterly
1,1-Dichloroethylene	0.0056	0.007	Quarterly	Quarterly
cis-1,2-Dichloroethylene	0.056	0.07	Quarterly	Quarterly
trans-1,2-Dichloroethylene	0.08	0.1	Quarterly	Quarterly
Dichloromethane	0.004	0.005	Quarterly	Quarterly
1,2-Dichloropropane	0.004	0.005	Quarterly	Quarterly
Ethylbenzene	0.56	0.7	Quarterly	Quarterly
Monochlorobenzene	0.08	0.1	Quarterly	Quarterly
Styrene	0.08	0.1	Quarterly	Quarterly
Tetrachloroethylene	0.004	0.005	Quarterly	Quarterly
Toluene	0.8	1.0	Quarterly	Quarterly
Trihalomethanes (total) ⁹	0.08	0.1	Quarterly	Quarterly
1,1,1-Trichloroethane	0.16	0.20	Quarterly	Quarterly
1,2,4 - Trichlorobenzene	0.056	0.07	Quarterly	Quarterly
1,1,2 - Trichloroethane	0.004	0.005	Quarterly	Quarterly
Trichloroethylene	0.004	0.005	Quarterly	Quarterly
Vinyl Chloride	0.0016	0.002	Quarterly	Quarterly
Xylenes (Total)	8.0	10.0	Quarterly	Quarterly

Notes:

⁹ Total Trihalomethanes comprises of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

4.0 TABLES OF MONITORING REQUIREMENTS

**TABLE II
GROUNDWATER MONITORING**

Sampling Point Number	Sampling Point Identification	Latitude	Longitude	
3	Point of Compliance Well 55-564304	33° 06' 12" N	111° 30' 05" W	
Parameter	AL ¹	AQL ²	Sampling Frequency	Reporting Frequency
Water Level	Reserved	Reserved	Monthly	Quarterly
Nutrients:				
Total Nitrogen ³	Reserved ⁴	Reserved ⁴	Monthly ⁵	Quarterly ⁵
Nitrate-Nitrite as N	Reserved	Reserved	Monthly	Quarterly
Total Kjeldahl Nitrogen (TKN)	Reserved	Reserved	Monthly	Quarterly
Total Coliform	Absence	Absence ⁶	Monthly	Monthly

Notes:

- ¹ AL = Alert Level. In most cases, ALs are set at 80% of DLs.
- ² AQL = Aquifer Quality Limit. All aquifer quality limits and alert levels are presented in mg/l. All AQLs and DLs are maximum numbers except where stated otherwise.
- ³ Calculated value - Total Nitrogen = Nitrate as N plus Nitrite as N plus TKN.
- ⁴ ALs and AQLs will be set after ambient groundwater data has been collected and analyzed, in accordance with Section 3.0.
- ⁵ The frequency will be as per Section 3.0, until the ALs and AQLs have been established.
- ⁶ Absence means the absence of total coliform in the first sample, or the absence of total coliform or fecal coliform in the repeat sample. In the event the facility must re-sample due to a positive result for total coliform in the initial sample, then only the result of the repeat sample must be submitted to ADEQ.

4.0 TABLES OF MONITORING REQUIREMENTS

TABLE II
GROUNDWATER MONITORING (continued)

Metals (Total):

Parameter	AL	AQL	Sampling ⁷ Frequency	Reporting ⁷ Frequency
Antimony	Reserved	Reserved	Quarterly	Quarterly
Arsenic	Reserved	Reserved	Quarterly	Quarterly
Barium	Reserved	Reserved	Quarterly	Quarterly
Beryllium	Reserved	Reserved	Quarterly	Quarterly
Cadmium	Reserved	Reserved	Quarterly	Quarterly
Chromium	Reserved	Reserved	Quarterly	Quarterly
Cyanide (As free cyanide)	Reserved	Reserved	Quarterly	Quarterly
Fluoride	Reserved	Reserved	Quarterly	Quarterly
Lead	Reserved	Reserved	Quarterly	Quarterly
Mercury	Reserved	Reserved	Quarterly	Quarterly
Nickel	Reserved	Reserved	Quarterly	Quarterly
Selenium	Reserved	Reserved	Quarterly	Quarterly
Thallium	Reserved	Reserved	Quarterly	Quarterly

Notes:

⁷ The frequency will be as per Section 3.0, until the ALs and AQLs have been established.

4.0 TABLES OF MONITORING REQUIREMENTS

TABLE II
GROUNDWATER MONITORING (continued)

Volatile Organic Compounds (VOCs):

Parameter	AL	AQL	Sampling ⁷ Frequency	Reporting ⁷ Frequency
Benzene	Reserved	Reserved	Quarterly	Quarterly
Carbon tetrachloride	Reserved	Reserved	Quarterly	Quarterly
o-Dichlorobenzene	Reserved	Reserved	Quarterly	Quarterly
para-Dichlorobenzene	Reserved	Reserved	Quarterly	Quarterly
1,2-Dichloroethane	Reserved	Reserved	Quarterly	Quarterly
1,1-Dichloroethylene	Reserved	Reserved	Quarterly	Quarterly
cis-1,2-Dichloroethylene	Reserved	Reserved	Quarterly	Quarterly
trans-1,2-Dichloroethylene	Reserved	Reserved	Quarterly	Quarterly
Dichloromethane	Reserved	Reserved	Quarterly	Quarterly
1,2-Dichloropropane	Reserved	Reserved	Quarterly	Quarterly
Ethylbenzene	Reserved	Reserved	Quarterly	Quarterly
Monochlorobenzene	Reserved	Reserved	Quarterly	Quarterly
Styrene	Reserved	Reserved	Quarterly	Quarterly
Tetrachloroethylene	Reserved	Reserved	Quarterly	Quarterly
Toluene	Reserved	Reserved	Quarterly	Quarterly
Trihalomethanes (total) ⁸	Reserved	Reserved	Quarterly	Quarterly
1,1,1-Trichloroethane	Reserved	Reserved	Quarterly	Quarterly
1,2,4 - Trichlorobenzene	Reserved	Reserved	Quarterly	Quarterly
1,1,2 - Trichloroethane	Reserved	Reserved	Quarterly	Quarterly
Trichloroethylene	Reserved	Reserved	Quarterly	Quarterly
Vinyl Chloride	Reserved	Reserved	Quarterly	Quarterly
Xylenes (Total)	Reserved	Reserved	Quarterly	Quarterly

Notes:

⁷ The frequency will be as per Section 3.0, until the ALs and AQLs have been established.

⁸ Total Trihalomethanes comprises of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.

4.0 TABLES OF MONITORING REQUIREMENTS

TABLE III
FACILITY INSPECTION (OPERATIONAL MONITORING)

Pollution Control Structures/Parameter	Performance Levels	Inspection Frequency
Pump Integrity	Good Working Condition	Weekly
Free Board in all lagoons	Minimum of 3 feet	Monthly
Water level depth in all lagoons	Minimum of 1foot	Daily
Treatment Plant Components including wiers, gates, and all flow control devices.	Good Working Condition	Weekly
Liners of all lined lagoons	No visible deterioration, holes, cracks, or leakage	Weekly
Resident vegetation in Wetlands	Healthy and preferred species predominating	Monthly

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. Permit Application dated: August 31, 1996
2. Design Drawings dated: August 14, 1998
3. Aquifer Protection Permit (APP) File Number: P-103081
4. Plan Approval by APP Section dated: June 24, 1998
5. Attachments to above No. 1 dated: November 20, December 3, 1997, February 18, March 11, June 18, 26, 1998
6. Public Notice dated: July 2, 1998
7. Public Hearing comments, correspondence and any additional supplemental information contained in the permit file.
8. ADEQ Engineering Review File Number: 980174
Approval of Construction date: April 7, 2000
9. Application for permit amendment dated: April 6, 2001
10. Public notice for permit amendment dated: March 1, 2002
11. Other _____

6.0 GENERAL CONDITIONS AND RESPONSIBILITIES

6.1 Annual Registration Fees.

The permittee shall pay an Annual Registration Fee to ADEQ. The Annual Registration Fee is based upon the amount of daily influent or discharge of pollutants in gallons per day as established by A.R.S. § 49-242(D). This fee is payable to ADEQ by January 31, each year.

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

The permittee shall 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 modification, 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 Severability. [A.R.S. § 49-243(K)(8)]

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.

6.5 Proper Operation and Maintenance. [A.R.S. § 49-243(K)(8)]

The permittee shall, at all times, properly operate and maintain all facilities, treatment processes, and discharge control systems which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

6.6 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 aquifer water quality standard at the applicable point of compliance for the facility. Where, at the time of issuance of the permit, an aquifer already exceeds an aquifer water quality standard for a pollutant, the permittee shall not discharge that pollutant so as to further degrade, at the applicable point of compliance for the facility, the water quality of any aquifer for that pollutant.

6.7 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.

6.8 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.
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.

6.9 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.

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. The permittee shall retain records of all monitoring information, including copies of all reports required by this permit and records of all data used to complete the application for this permit, for a period of 10 years from the date of the sample, measurement report, or application. This period may be extended by request of the Director at any time.
3. At a minimum, records of monitoring information shall include:
 - a. The date, time, and exact place of sampling or measurements
 - b. The individual(s) who performed the sampling or measurements
 - c. The date(s) analyses were performed
 - d. The individual(s) who performed the analyses
 - e. The analytical techniques or methods used
 - f. The results of such analyses
 - g. The chain of custody records, and
 - h. Any field notes relating to the information described in (a) - (g) above.

6.10 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.

6.11 Inspection and Entry. [A.R.S. §§ 49-203(B) and 49-243(K)(8)]

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. In so doing, the Department representative may:

1. Enter upon the operator's premises where a regulated facility or activity is located or conducted, or locations where records must be kept under the conditions of this permit.
2. Have access to and copy, at reasonable times, any records required to be kept under the conditions of this permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance, any substances or parameters at any location.
5. Take photographs or video tape.
6. Take other actions reasonably necessary to determine compliance with Aquifer Protection Permit statutes or rules or the terms and conditions of this permit.

6.12 Duty to Modify. [A.R.S. § 49-243(K)(8)]

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

**6.13 Permit Action: Amendment, Transfer, Suspension & 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, renewed, or revoked for cause, under the rules of the Department. The filing of a request by the permittee for a permit action does not stay or suspend the effectiveness of any existing permit condition. The Director shall issue a public notice of all proposed permit actions pursuant to A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213.

6.13.1 Permit Reopen.

The Director may reopen this permit and amend it pursuant to A.A.C. R18-9-A211.

6.13.2 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 will be approved until the applicant complies with all transfer requirements as specified in A.A.C. R18-9-A212(B) and (C).

The permittee shall notify the Water Permits Section in writing within 15 days after any change in the owner or operator of the facility. The notification shall state the permit number, the name of the facility, the date of property transfer, and the name, address, and phone number where the new owner or operator can be reached. The operator shall advise the new owner or operators of the terms of this permit and the need for permit transfer in accordance with the rules.