



**Chandler • Arizona**  
*Where Values Make The Difference*

**MEMORANDUM**

**Municipal Utilities Department - Memo No. ER4-016**

**DATE:** AUGUST 21, 2003

**TO:** MARLA PADDOCK, CITY CLERK

**FROM:** JACQUELINE STRONG, WATER QUALITY ADVISOR

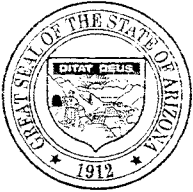
**SUBJECT:** CHANDLER-OCOTILLO WATER RECLAMAION FACILITY  
AQUIFER PROTECTION PERMIT NO. P-100140, AMENDMENT

Enclosed is an original amended Aquifer Protection Permit (with additional technical corrections) for the Chandler-Ocotillo Water Reclamation Facility, signed by the Arizona Department of Environmental Quality on August 18, 2003. This amendment supersedes the July 29, 2003 amendment. Please retain the new amendment in the facility permit file.

Enc. As stated

Cc w/o Enc.: Dave Siegel  
Karen Barfoot  
Lance Mason

Cc w/Enc.: James Cairns  
Kim Neill  
Wendy Chambers  
Wes Cannon  
Stephen White  
Robert Goff  
Bob Mulvey



Janet Napolitano  
Governor

# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

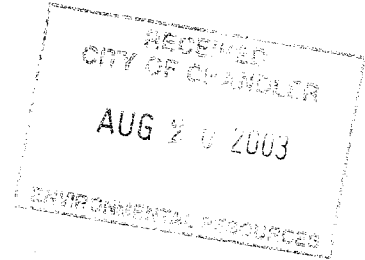
1110 West Washington Street • Phoenix, Arizona 85007  
(602) 771-2300 • [www.adeq.state.az.us](http://www.adeq.state.az.us)



Stephen A. Owens  
Director

August 18, 2003

Ms. Karen B. Barfoot, P.E., Assistant Director  
City of Chandler Municipal Utilities Department  
Mail Stop 413, P.O. Box 4008  
Chandler, Arizona 85244-4008



Re: Chandler, City of - Ocotillo Water Reclamation Facility  
Minor Amendment to Aquifer Protection Permit No. P-100140

Dear Karen:

The Arizona Department of Environmental Quality has performed some minor amendments to the Aquifer Protection Permit (APP) which was issued for the above-referenced facility on October 21, 1996, and which was subsequently amended on July 1, 2003. The minor amendments were corrections and clarifications which are described in the Arizona Administrative Code Title 18, Chapter 9, Article A211.C.1, 2, and 3, and are listed in the enclosed permit amendment page. A copy of the amended permit is also enclosed, along with an amended executive summary. These supercede the permit and executive summary sent to you by the Department on July 29, 2003.

Please accept my apology for the inconvenience. I would like to thank Ms. Jacqueline Strong and Mr. Lance Mason for their assistance in working with me diligently on this amendment. If you have any questions regarding this permit amendment, please feel free to contact me at (602) 771-4464, or [mmm@ev.state.az.us](mailto:mmm@ev.state.az.us).

Sincerely,

Marcy Mullins, Aquifer Protection Specialist  
Wastewater, Recharge, and Reuse Unit

Enclosures: APP Amendment Page, Amended Permit, and Amended Executive Summary

cc: Asif Majeed, Supervisor - Wastewater, Recharge, and Reuse Unit  
Don Shroyer, Manager - Water Quality Compliance Section, Data Unit  
Robert Casey, Manager - Water Quality Compliance Section, Enforcement Unit  
Lynne Dekarske, Administrative Assistant - Water Permits Section  
Jacqueline Strong, Water Quality Advisor - City of Chandler  
Lance Mason, Severn Trent Services  
Maricopa County Health Department - Environmental Services

MWR03:734

Northern Regional Office  
1515 East Cedar Avenue • Suite F • Flagstaff, AZ 86004  
(928) 779-0313

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

**MINOR AMENDMENT  
AQUIFER PROTECTION PERMIT NO. P-100140**

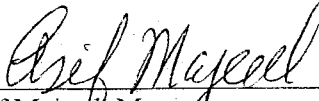
**CHANDLER, CITY OF - OCOTILLO WATER RECLAMATION FACILITY**

Owner	Operator
City of Chandler PO Box 4008, Mail Stop 413 Chandler, Arizona 85244-4008	Severn Trent Services, Inc. 3333 South Old Price Road Chandler, Arizona 85248

This permit amendment is for the following purposes:

1. Section 2.1: Added delivery of effluent to the City of Chandler Ocotillo Recharge and Recovery Facility;
2. Section 2.4: Added, "Groundwater monitoring is not required at the POC at permit issuance."
3. Section 4.0, TABLE I: Corrected the alert level for cadmium from 0.005 mg/l to 0.004 mg/l.
4. Section 4.0, TABLE II: Deleted footnote #9, which stated, "If there is no discharge to the reuse site, monitoring is not required under this table. When monitoring reclaimed water, must also monitor for metals, VOCs, and SVOCs in accordance with TABLE I."
5. Section 4.0, TABLE II: Added a column for **units**.
6. Section 4.0, TABLE II: Removed requirement for enteric virus monitoring.
7. Section 4.0, TABLE II: Various minor changes were made to the format of the table for purposes of clarity and readability.

This Amendment shall become effective on the date of signature and shall be valid for the duration of the permit provided that the facility is constructed, operated, and maintained pursuant to all the conditions of this permit, according to the design and operational information documented or referenced in Sections 1.0 through 6.0 of this permit, and such that Aquifer Water Quality Standards are not violated.

  
\_\_\_\_\_  
Asif Majeed, Manager  
Wastewater, Recharge and Reuse Unit  
Water Quality Division  
Arizona Department of Environmental Quality

Signed this 18<sup>th</sup> day of August, 2003

**EXECUTIVE SUMMARY**  
**MINOR AMENDMENT TO AQUIFER PROTECTION PERMIT NO. P-100140**  
**Amendment issued August 18, 2003**

**Facility Name:**

Chandler Ocotillo Water Reclamation Facility (WRF)

**Facility Location:**

The facility is located at 3333 S. Old Price Road, Chandler, Maricopa County, Arizona, over groundwater of the Phoenix Active Management Area (AMA) in Township 2 South, Range 5 East, Section 18, Gila and Salt River Base Line and Meridian.

**Regulatory Status**

The Chandler Ocotillo WRF is an existing facility which filed an NOD with the Department on April 8, 1985. An Individual Reclaimed Wastewater Reuse Permit (R-0024-07) was originally issued on July 3, 1986, and was renewed three times; on March 3, 1992 (the permit number was changed to R100140, which remained on all subsequent reuse permits), on October 12, 1995, and on May 17, 2000. The call-in date for an individual Aquifer Protection Permit (APP) application was May 30, 1999, however, due to a facility expansion, an APP application was received by ADEQ on January 10, 1996, with the APP being issued on August 26, 1997. An APP major modification was issued on September 18, 1998. An application for an "other" APP amendment including a request to classify the WRF for Class A+ reclaimed water was received by the Department on March 20, 2003. The "other" amendment was issued on July 1, 2003. An APP minor amendment to address clarifications in the aforementioned "other" amendment was issued on August 18, 2003.

**Facility Description:**

The permittee is authorized to operate a tertiary WRF that expanded treatment capacity in September 1997 from 7.5 million gallons per day (MGD) to 10.0 MGD. The facility produces tertiary treated effluent and provides nitrogen removal, filtration, and chlorination. The effluent may be used for beneficial purposes under a valid reclaimed water reuse permit, or recharged at the City of Chandler Ocotillo Recharge and Recovery Facility (APP #P-105388), and/or the Chandler Regional Park Recharge Facility (aka, the Tumbleweed Park Recharge Facility (APP #P-103145)). Sludge is dewatered, stored in a storage hopper, and hauled off-site to an approved landfill. There are no sludge drying beds. There are two clay-lined effluent storage basins on site. The Chandler Ocotillo WRF was designed, constructed, and located according to plans approved by, and on file with, the Maricopa County Environmental Services Department. The plant is operated by a certified wastewater facility operator.

**“Other” Permit Amendment Description:**

The “other” permit amendment issued July 1, 2003 was for the following purposes:

1. to transfer the ownership interests of Severn Trent Services, Inc. to the City of Chandler. Severn Trent was previously owned by Parsons/ES<sub>2</sub> Environmental Services, Inc. The current owner is the City of Chandler, Municipal Utilities Department, and the current name is the Chandler Ocotillo WRF;
2. to classify the WRF as generating Class A+ reclaimed water according to A.A.C. R18-11-303;
3. to change facility name references throughout the permit;
4. to adjust language and format of the entire permit to conform to the new boilerplate.

**Minor Permit Amendment Description:**

The minor permit amendment issued August ???, 2003 was for the following purposes:

1. to include delivery of effluent to the City of Chandler Ocotillo Recharge and Recovery Facility;
2. to update and clarify the monitoring tables to reflect the current format;
3. to correct typographical and minor technical errors.

**Best Available Demonstrated Control Technology (BADCT):**

The Ocotillo WRF is a tertiary wastewater treatment facility capable of denitrifying the effluent to below 10.0 mg/l. The effluent storage basins are lined, and disposal is through use of the reclaimed water for beneficial purposes, and recharge of the aquifer as regulated under two separate APPs (see facility description above).

**Compliance with Aquifer Water Quality Standards (AWQS):**

The facility produces tertiary treated effluent with denitrification. The effluent is disinfected using chlorine. The sludge is hauled to an approved off-site disposal facility. The effluent storage basins are lined, and disposal is through use of the reclaimed water for beneficial purposes, and recharge of the aquifer as regulated under two separate APPs (see facility

description above). Because of these considerations, the facility is not expected to violate Aquifer Quality Standards at the applicable point of compliance.

**Point of Compliance:**

The point of compliance is located at the north downgradient edge of the property boundary of the facility as indicated in Section 2.4 of the permit.

**Zoning Requirements:**

The permittee has stated the facility complies with the applicable zoning ordinances and regulations.

**Financial Capability:**

The permittee has submitted the required information as per A.A.C. R18-9-A212 (B) (3). The permittee has stated in a letter that sufficient funds are available for the total cost of closure and post-closure care.

STATE OF ARIZONA  
AQUIFER PROTECTION PERMIT NO. P-100140  
PLACE ID 686 / LTF 27879

**1.0 AUTHORIZATION**

In compliance with the provisions of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2, Articles 1, 2 and 3, Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Articles 1 and 2, A.A.C. Title 18, Chapter 11, Article 4 and amendments thereto, and the conditions set forth in this permit, the City of Chandler is hereby authorized to operate the Chandler Ocotillo Water Reclamation Facility (WRF), 3333 South Old Price Road, Chandler, located in Maricopa County, Arizona, in the Phoenix Active Management Area, in Township 2 South, Range 5 East, Section 18, 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), 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 (AWQS) are not violated at the applicable point(s) of compliance set forth below.

**1.1 PERMITTEE INFORMATION**

<b>Facility Name:</b>	Chandler Ocotillo Water Reclamation Facility	
<b>Permittee:</b>	<b>Mailing Address:</b>	<b>Facility's Street Address:</b>
City of Chandler Municipal Utilities Department	P.O. Box 4008, Mail Stop 413 Chandler, Arizona 85244-4008	3333 South Old Price Road Chandler, Arizona 85248
<b>Facility Contact:</b>	Robert Mulvey (480) 782-3411	
<b>Emergency Telephone Number:</b>	Lance Mason (480) 899-0191	
<b>Latitude:</b> 33° 15' 58' North	<b>Longitude:</b> 111° 53' 33' West	
<b>Legal Description:</b>	Township 2 South, Range 5 East, Section 18 of the Gila and Salt River Base Line and Meridian	

**1.2 AUTHORIZING SIGNATURE**

\_\_\_\_\_/s/\_\_\_\_\_  
**Karen L. Smith, Director**  
Water Quality Division  
Arizona Department of Environmental Quality  
Signed this 21<sup>st</sup> day of October, 1996

**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 permittee is authorized to operate the 10.0 million gallons per day (MGD) WRF which was expanded in September 1997 from 7.5 MGD. The treatment process consists of treating the sewage through nitrification, denitrification, filtration and chlorination. A portion of the effluent may be delivered for recharge at the City of Chandler Ocotillo Recharge and Recovery Facility (APP #P-105338), and a portion may be delivered for recharge at the Chandler Regional Park Recharge Facility (aka, the Tumbleweed Park Recharge Facility (APP #103145)). The remaining effluent may be used for beneficial purposes under a valid reclaimed water reuse permit. Sludge is dewatered, stored in a storage hopper, and hauled off-site to an approved landfill. There are no sludge drying beds. There are two clay-lined effluent storage basins on site.

All industrial hookups and other non-residential hookups to the treatment system shall be authorized according to the federal pretreatment program or as otherwise approved by federal, state or local regulations.

In addition to the APP permit conditions pertaining to treatment and disposal of sewage sludge, the permittee must also comply with the requirements for sewage sludge disposal in 40 Code of Federal Regulations (CFR) Part 503 and 18 Arizona Administration Code (A.A.C.) Chapter 9, Article 10. Violations of 40 CFR 503 and 18 A.A.C. Chapter 9, Article 10 do not constitute violations of this permit.

The site includes the following permitted discharging facility:

Facility	Latitude	Longitude
City of Chandler Ocotillo Water Reclamation Facility	33° 15' 58' N	111° 53' 33' W

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

The WRF utilizes the following Best Available Demonstrated Control Technology (BADCT):

**2.2.1 Engineering Design**

The wastewater is treated in an activated sludge process with nitrification and denitrification, capable of denitrifying the effluent to below 10.0 milligrams per liter (mg/l). The sludge will be aerated and disposed off-site. The WRF was designed, constructed, and located according to plans approved by Maricopa County Environmental Services Department, and on file with this permit at ADEQ.

**2.2.2 Site-specific Characteristics**

Site specific characteristics were not used to determine BADCT.

**2.2.3 Pre-Operational Requirements**

Not applicable, the WWTP is already in operation.

**2.2.4 Operational Requirements**

1. The permittee shall adhere to all requirements of the Operations and Maintenance (O & M) manual and any revisions thereof to the O & M manual. A copy of the O & M manual shall be maintained at the WRF site at all times and shall be available upon request during inspections by Arizona Department of Environmental Quality (ADEQ) personnel.
2. The pollution control structures shall be inspected for the items listed in Section 4.0, TABLE III.



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 (WQCS), Data Unit.

**2.2.5 Classification of Reclaimed Water**

This facility is classified as generating Class A+ reclaimed water according to A.A.C. R18-11-303. The facility may distribute Class A+ reclaimed water for use governed by a valid reclaimed water permit under A.A.C. Title 18, Chapter 9, Article 7.

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

Discharge from the WRF shall be monitored according to Section 4.0, TABLES I and II.

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

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

POC Location	Latitude	Longitude
North Property Line	33° 15' 28' N	111° 53' 16" W

Groundwater monitoring is not required at the POC at permit issuance. 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 effluent for certain constituents of the AWQS, including all nitrogen forms, at the point of discharge prior to reuse or recharge according to Section 4.0, TABLES I and II. A representative sample of the wastewater shall be collected at a point after disinfection and filtration.

Identification	Latitude	Longitude
After Disinfection and Filtration	33° 13' 18' N	111° 53' 31" W

**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.

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 WQCS. 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 SMRF.

2. 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

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

### 2.5.4 Surface Water Monitoring and Sampling Protocols

Not applicable.

### 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 West Adams Street, Room 203 North  
Phoenix, Arizona 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 (WPS) 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 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 (PL)

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

If the operational PL set in Section 4.0, TABLE III has been exceeded, the permittee shall:

1. Notify the ADEQ WQCS within five (5) days of becoming aware of a violation of a PL.
2. Submit a written report within thirty (30) days after becoming aware of a violation of a PL. The report shall document all of the following:
  - a. A description of the violation and it's cause;
  - b. The period of violation and it's cause;
  - c. Any action taken or planned to mitigate the effects or the violation, or the spill, or to eliminate or prevent 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; and
  - e. Any malfunction or failure of pollution control devices or other equipment or process.

### 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 WQCS, 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**  
Not applicable

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 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 Violation

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

### 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 Substances or Toxic Pollutants

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) 771-2330 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 the ADEQ Water Quality Field Service Unit (602)771-4841 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 the ADEQ Field Services Unit 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**

With the exception of emergency response actions taken under Section 2.6.5, the permittee shall obtain written approval from the WPS 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 WQCS, 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**

1. The permittee shall complete the SMRFs provided by ADEQ, and submit them to the WQCS, 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. Analytical 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 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 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 log book.

**2.7.3 Permit Violation and Alert Level Status Reporting**

1. The permittee shall notify the WQCS, 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, DL, or of an AL being exceeded.
2. The permittee shall submit a written report to the WQCS, 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 AWQS.
  - 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 SMRF provided by the Department to reflect facility inspection requirements designated in Section 4.0, TABLE II and submit to ADEQ WQCS 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  
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 WQCS shall be directed to:

Arizona Department of Environmental Quality  
Water Quality Compliance Section, Enforcement Unit  
Mail Code: 5415B-1  
1110 West Washington Street  
Phoenix, Arizona 85007  
Phone (602) 771-4614

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

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

**2.7.6 Reporting Deadline**

The following table lists the quarterly report due dates:

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 WPS and WQCS 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 WQCS upon ceasing operation of the facility for a period of

60 days or greater. The permittee shall take the following measures upon temporary cessation:

- a. Direct the wastewater flows from the facility to another State approved WRF (wastewater treatment facility).
- b. Correct the problem that caused the temporary cessation of the facility.
- c. Notify ADEQ with a monthly facility Status Report describing the activities conducted on the WRF 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 WQCS 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 WPS, a detailed Closure Plan which meets the requirements of A.R.S. § 49-252 and A.A.C. R18-9-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 WPS 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 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 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 this time.

### **2.9.2 Closure Completion**

Not required at this time.

## **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 WPS.



In the event clean closure cannot be achieved pursuant to A.R.S. § 49-252, the permittee shall submit for approval to the WPS 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 closure plan is not required at permit issuance.

**2.10.2 Post-Closure Completion**

Not required at permit issuance.

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

Not required at permit issuance.

## 4.0 TABLES OF MONITORING REQUIREMENTS

**TABLE I  
DISCHARGE MONITORING**

Sampling Point No.	Identification	Latitude	Longitude
1	After Chlorination and Filtration	33° 13' 18" N	111° 53' 31" W

Parameter <sup>1</sup>	AL <sup>2</sup>	DL <sup>3</sup>	Sampling Frequency	Reporting Frequency
Flow	Reserved <sup>3</sup>	Reserved	Daily	Quarterly
Average Daily Flow	Reserved	10.0	Calculated Monthly	Quarterly

**Nutrients:**

Total Nitrogen <sup>4</sup> (5-sample rolling geometric mean)	8.0	10.0	Quarterly	Quarterly
Total Coliform	Reserved	100 CFU	Monthly	Quarterly

**Metals (Total):<sup>5</sup>**

Arsenic	0.04	0.05	Quarterly	Quarterly
Barium	1.60	2.00	Quarterly	Quarterly
Cadmium	0.004	0.005	Quarterly	Quarterly
Chromium	0.08	0.1	Quarterly	Quarterly
Fluoride	Reserved	4.0 <sup>6</sup>	Quarterly	Quarterly
Lead	0.04	0.05	Quarterly	Quarterly
Mercury	0.0016	0.002	Quarterly	Quarterly
Selenium	0.04	0.05	Quarterly	Quarterly

<sup>1</sup> The permittee may use any approved analytical method for each parameter required under this permit as long as the method provides detection limits which are adequate for the regulatory limits of the parameters specified in the permit. In addition, the utilized lab test method must be recognized as being applicable in the ADHS Laboratory Licensure Rules. ADEQ reserves the rights to determine the adequacy of laboratory results based upon the achieved detection limits.

<sup>2</sup> AL = Alert Level. DL = Discharge Limit. All ALs and DLs are in mg/l, except flow which is in MGD; fecal coliform, which is in colony forming units per 100 milliliter sample (CFU); and turbidity, which is in NTUs. The ALs and DLs are maximum numbers. All ALs are calculated at 80% of discharge limit.

<sup>3</sup> Reserved means monitoring is required, but no limits have been established at this time.

<sup>4</sup> Total Nitrogen is equal to Nitrate-Nitrite-N plus TKN.

<sup>5</sup> If the DL for listed pollutants has not been exceeded during four (4) consecutive quarters, the owner or operator can apply to ADEQ WPS for a minor amendment to the Discharge Monitoring schedule for less frequent sampling and reporting requirements concerning these pollutants.

<sup>6</sup> The DL for Fluoride will be calculated using a rolling, 5-month geometric mean. If the facility samples more than once a month, then an arithmetic mean of the measurements for that month will be the value used to calculate the rolling geometric mean.

TABLE I - Discharge Monitoring (continued)

**Volatile & Semi-Volatile Organic Compounds (VOCs & SVOCs):**

Benzene	0.004	0.005	Annually	Annually
Carbon tetrachloride	0.004	0.005	Annually	Annually
o-Dichlorobenzene	0.48	0.6	Annually	Annually
para-Dichlorobenzene	0.06	0.075	Annually	Annually
1,2-Dichloroethane	0.004	0.005	Annually	Annually
1,1-Dichloroethylene	0.0056	0.007	Annually	Annually
cis-1,2-Dichloroethylene	0.056	0.07	Annually	Annually
trans-1,2-Dichloroethylene	0.08	0.1	Annually	Annually
1,2-Dichloropropane	0.004	0.005	Annually	Annually
Ethylbenzene	0.56	0.7	Annually	Annually
Monochlorobenzene	0.08	0.1	Annually	Annually
Styrene	0.08	0.1	Annually	Annually
Tetrachloroethylene	0.004	0.005	Annually	Annually
Toluene	0.8	1.0	Annually	Annually
Trihalomethanes (total) <sup>7</sup>	0.08	0.1	Annually	Annually
1,1,1-Trichloroethane	0.16	0.20	Annually	Annually
Trichloroethylene	0.004	0.005	Annually	Annually
Vinyl Chloride	0.0016	0.002	Annually	Annually
Xylenes (Total)	8.0	10.0	Annually	Annually

<sup>7</sup> Total Trihalomethanes comprises of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane. Modified: September 18, 1998; Transferred: August 10, 1999; July 1, 2003; Amended August 18, 2003

TABLE II  
RECLAIMED WATER MONITORING - CLASS A+

Sampling Point No.	Identification	Latitude	Longitude
1	After Chlorination and Filtration	33° 13' 18" N	111° 53' 31" W

*Immediately downstream of the  
BY Discharge Units*

Parameter <sup>8</sup>	AL <sup>9</sup>	DL <sup>10</sup>	Units	Sampling Frequency	Reporting Frequency
Flow: Daily	Reserved <sup>10</sup>	Reserved	MGD <sup>11</sup>	Everyday <sup>12</sup>	Quarterly
Flow: Total monthly flow provided for reuse	Reserved	Reserved	MGD	Monthly Calculation	Quarterly
Total Nitrogen <sup>13</sup> : Five-sample rolling geometric mean	8.0	10.0	mg/l	Monthly	Quarterly
Fecal Coliform: Single-sample maximum	Reserved	23	CFU or MPN <sup>14</sup>	Daily	Quarterly
Fecal Coliform: Four (4) of last seven (7) samples	Reserved	Non-detect <sup>15</sup>	CFU or MPN	Daily	Quarterly
Turbidity <sup>16</sup> : Single reading	Reserved	5	NTU <sup>17</sup>	Everyday <sup>18</sup>	Quarterly
Turbidity: 24-hour average	Reserved	2	NTU	Everyday	Quarterly

<sup>8</sup> Analytical test methods must be approved by the Arizona Department of Health Services, Laboratory Licensure and Certifications, and must achieve detection limits which are adequate for the limits specified in this permit.

<sup>9</sup> AL = Alert Level. DL = Discharge Limit. The ALs and DLs are maximum numbers unless otherwise indicated.

<sup>10</sup> Limits may be established at a future date.

<sup>11</sup> Million Gallons per Day

<sup>12</sup> Flow rate shall be measured using a continuously recording flow meter.

<sup>13</sup> Nitrate N, plus Nitrite N, plus Total Kjeldahl Nitrogen (TKN).

<sup>14</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>15</sup> If at least four (4) out 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) 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).

<sup>16</sup> Turbidity shall be measured with an instrument with a signal averaging time not exceeding 120 seconds. An occasional spike 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>17</sup> Nephelometric Turbidity Units

<sup>18</sup> For the single turbidity reading, "everyday" means the maximum reading during the 24-hour period.

**TABLE III**  
**FACILITY INSPECTION**

<b>Parameter</b>	<b>Performance Levels</b>	<b>Inspection Frequency</b>
Liner Integrity	No Visible Cracks	Monthly
Berm Integrity	No Visible Erosion	Monthly
Pump Integrity	Good Working Condition	Weekly
Free Board in Ponds	Minimum of 3 Feet	Monthly
Treatment Plant Components	Good Working Condition	Weekly

**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(s), dated:        January 10, 1996 (original APP)  
   April 27, 1998 (modification)  
   September 13, 2002 (other amendment)
2. Public Notice, dated:            March 20, 1997 (original APP)  
   July 16, 1998 (modification)
3. Public Hearing, dated: n/a
4. Responsiveness Summary, dated: n/a

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 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 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 AWQS at the applicable point of compliance 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.

6.7 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 WPS 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.