

Aquifer Protection Permit 101921  
 Place ID #128751, LTF #62165  
**SIGNIFICANT AMENDMENT**  
 Pioneer RV Resort  
 Wastewater Treatment Plant

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

## I. FACILITY INFORMATION

### Name and Location

Permittee:	Pioneer RV LLC
Mailing Address:	PO Box 74767 Phoenix, Arizona 85087
Facility Name and Location:	Pioneer RV Resort Wastewater Treatment Plant 36408 North Black Canyon Highway Phoenix, Arizona (Maricopa County)

### Regulatory Status

This facility was originally constructed in 1968, with modifications made in 1980. A Notice of Disposal was filed with ADEQ on January 8, 1985. The original APP for this existing facility was issued on April 12, 2012, and an “Other” Amendment was issued on December 11, 2013. An application for this Significant Amendment was received by ADEQ on June 26, 2015.

At the time of permit issuance, there were no open Notices of Violation.

### **Facility Description**

Pioneer RV LLC owns and operates the Pioneer RV Resort Wastewater Treatment Plant (WWTP), which 200 feet southeast of the southeast boundary of the land application has a treatment capacity of 35,000 gallons per day (gpd). However, due to the limited land application disposal capacity, the facility is limited to 20,000 gpd as a monthly average during the months of November through March, and 11,600 gpd as a monthly average during the months of April through October. The treatment process consists of an influent wet well, a bar screen, seven (7) aeration chambers, two (2) clarification units, a chlorination system, an effluent wet well, pumps, an effluent flow meter, four (4) sludge drying beds, an emergency generator, an odor control system, and two (2) lined effluent evaporation/holding ponds. Disposal of effluent shall occur by evaporation from the ponds and by land application to two (2) on-site tree farms. Dry solids from the sludge drying beds shall be delivered to an approved landfill for treatment and disposal in accordance with state and federal regulations.

In addition to the APP conditions pertaining to treatment and disposal of sewage sludge, the permittee must also comply with the requirements for any sewage sludge disposal in 40 Code of Federal Regulations (CFR) Part 503 and 18 A.A.C. Ch. 9, Art. 10.

The WWTP was designed and constructed according to the 'as-built' report approved by ADEQ.

### **Amendment Description**

The purpose of this amendment is to replace reuse with land application as a disposal method. References to sand filters and the comminutor have been deleted from the treatment process. The sand filters were never installed, as effluent polishing is not required. The comminutor (grinder/shredder) was removed from the facility because it did not function properly, causing ongoing clogging and maintenance issues. It was replaced with removable steel wire baskets to capture any large foreign objects (clothes, plastics, wood) as they enter the influent wet well. The financial assurance mechanism amount has been changed to reflect the correct amount approved and on file at ADEQ.

## **II. BEST AVAILABLE DEMONSTRATED CONTROL TECHNOLOGY**

The WWTP is designed to meet the treatment performance criteria for existing facilities as specified in R18-9-B205.

## **III. HYDRODEOLOGIC SETTING**

The facility is located within the Lake Pleasant Groundwater Sub-basin, near the northern margin of the East Salt River Valley Groundwater Sub-basin, and within the Phoenix Active Management Area. Groundwater occurs in unconsolidated and semi-consolidated alluvium

in the vicinity of the drainage washes. The depth to groundwater is about 200 feet below ground surface, as measured at a domestic well near the facility. The direction of groundwater flow is to the southeast.

#### **IV. STORM WATER/SURFACE WATER CONSIDERATIONS**

The facility is outside the 100-year floodplain. A FEMA-designated floodway and floodplain is located across the northwest margin of the property, along the channel trace of Deadman Wash, approximately 500 feet from the northwest corner of the RV Park. A delineated floodway and floodplain is also identified at the junction of Deadman Wash and an unnamed wash that trends northwest to southeast along the eastern margin of prominent hills located on the east margin of I-17, northeast of the site. Pioneer RV Resort is located south-southwest of the divergence of these two wash channel systems.

#### **V. COMPLIANCE WITH AQUIFER WATER QUALITY STANDARDS**

##### **Pollutant Management Area (PMA)**

Arizona Revised Statutes (A.R.S.) § 49-244(1) defines the pollutant management area (PMA) as “the limit projected in the horizontal plane of the area on which pollutants are or will be placed.” There are two (2) PMAs for this site. The boundary of the first PMA coincides with the boundary of the existing WWTP and the sludge drying beds. The boundary of the second PMA encompasses the boundaries of both the existing evaporation ponds and the land application areas.

##### **Discharge Impact Area (DIA)**

The DIA is defined by ARS §49-201(13). The DIA means the potential aerial extent of pollutant migration, as projected on the land surface, as the result of a discharge from a facility. There are two (2) DIAs for this site. The boundaries of the DIAs coincide with the boundaries of the PMAs.

##### **Monitoring and Reporting Requirements**

To ensure that site operations do not result in violation of Aquifer Water Quality Standards at the point of compliance, representative samples of the effluent will be collected from the effluent wet well. The permittee will monitor the effluent daily for total flow rate, weekly for fecal coliform, monthly for total nitrogen, quarterly for metals, and semi-annually for organic compounds (see Section 4.2, Table IA, in the permit).

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

##### **Point of Compliance**

The POC location is determined by an analysis of the pollutant management area (surficial area on which wastewater is treated and contained) at the WWTP site.

The hazardous/non-hazardous POC for this facility is designated at the following location:

<b>POC No.</b>	<b>Location</b>	<b>Latitude</b>	<b>Longitude</b>
1 (conceptual)	At the southeast property boundary, east of the WWTP and south of Land Application Area 2	33° 49' 11" N	112° 09' 09" W

Groundwater monitoring is not required at the time of permit issuance. The Director may amend this permit to require installation of a monitor well and commencement of groundwater monitoring at the POC or to designate additional POCs if information on groundwater gradients or groundwater usage indicates the need.

## **VI. COMPLIANCE SCHEDULE**

Not applicable.

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

### **Technical Capability**

Pioneer RV LLC has demonstrated the technical competence necessary to carry out the terms and conditions of the permit in accordance with A.R.S. § 49-243(N) and A.A.C. R18-9-A202(B).

The permit requires that appropriate documents be sealed by an Arizona-registered Geologist or Professional Engineer. This requirement is a part of an on-going demonstration of technical capability. The permittee is expected to maintain technical capability throughout the life of the facility.

### **Financial Capability**

Pioneer RV LLC has demonstrated the financial responsibility necessary to carry out the terms and conditions of the permit in accordance with A.R.S. § 49-243(N) and A.A.C. R18-9-A203. Roles Inn of America, Inc., a member of Pioneer RV LLC, provided ADEQ with a certificate of deposit in the amount of \$104,680 to demonstrate financial capability. The permittee is expected to maintain financial capability throughout the life of the facility.

### **Zoning Requirements**

Pioneer RV Resort WWTP has been properly zoned for the permitted use and the permittee has complied with applicable zoning ordinances in accordance with A.R.S. § 49-243(O) and A.A.C. R18-9-A201(B)(3).

## **VIII. ADMINISTRATIVE INFORMATION**

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

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

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

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

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

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

## **IX. ADDITIONAL INFORMATION**

Additional information relating to this permit may be obtained from:

Arizona Department of Environmental Quality  
Water Quality Division - APP Unit  
Attn: Marcy Mullins  
1110 W. Washington Street, Mail Code 5415B-3  
Phoenix, Arizona 85007  
Phone: (602) 771-4464