

Aquifer Protection Permit #102113  
 Place ID #1746, LTF #57508  
 Mormon Lake Lodge  
 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

Name of Permittee:	Mormon Lake Properties, LLC
Mailing Address:	P.O. Box 38012 Mormon Lake, Arizona 86038
Facility Name and Location:	Mormon Lake Lodge Wastewater Treatment Plant 1991 Mormon Lake Rd, Mormon Lake, Arizona (Coconino County)

### Regulatory Status

A Notice of Disposal (NOD) was received for this facility on July 12, 1989. A Determination of Applicability was performed for this facility with the determination that it qualified to operate under a general Aquifer Protection Permit (APP) in February, 1999. An Individual Reclaimed Water Permit was issued for the use of the effluent on the on-site pastures on June 23, 2000. An application for an Individual APP was received on October 14, 2014.

### Facility Description

The permittee is authorized to operate the Mormon Lake Lodge Wastewater Treatment Plant (WWTP), with a maximum monthly average flow of 0.0195 million gallons per day (mgd). The WWTP serves a restaurant, rental cabins, a recreational vehicle park, a western town with town hall, and a rodeo ground and maintenance facility. This is an existing treatment system which was built in 1984. The treatment system consists of an influent pump station, four clay-lined facultative lagoon cells (in series), an effluent pump station, chlorination, and a reclaimed water storage tank. Reclaimed water is piped to a 12-acre on-site pasture for beneficial reuse; the pasture is bermed and fenced. Sludge is hauled to a landfill for 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.

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

The WWTP shall be designed, constructed, operated, and maintained to meet the treatment performance criteria for existing facilities as specified in A.A.C. R18-9-B205.

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

### **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 shall be collected at reclaimed water pump station. The permittee shall monitor the effluent weekly for fecal coliform, monthly for total nitrogen, quarterly for metals, and semi-annually for volatile organic compounds (see Section 4.2, Table IA in the permit).

To ensure that site operations do not result in violation of Reclaimed Water Quality Standards for the beneficial use of Class C reclaimed water, the permittee shall monitor the reclaimed water at the same effluent sampling point as indicated above. The permittee shall monitor the reclaimed water weekly for fecal coliform (see Section 4.2, Table IB in the permit).

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

**Point of Compliance**

The point of compliance (POC) for this facility is designated at the following location:

<b>POC#</b>	<b>POC Location</b>	<b>Latitude</b>	<b>Longitude</b>
1 (conceptual)	Approximately 400 feet northeast of the treatment lagoons	34° 54' 52.2" N	111° 27' 46.08" W

Groundwater monitoring is not required at the point of compliance at the time of permit issuance. The Director may amend this permit to designate additional POCs if information on groundwater gradients or groundwater usage indicates the need.

**IV. HYDROGEOLOGIC SETTING**

The groundwater depth at this site ranges from 26 to 58 feet below ground surface. Based on the depth to groundwater and the surface elevation of the wells located within ½ mile of the site, the groundwater at this site is estimated to flow to the northeast.

**V. SURFACE WATER CONSIDERATIONS**

The facility is located in Map Panel 04005C7512G. The facility is located in Zone AE which is the area where base flood elevation is determined. The base flood elevation is EL 7120 feet. The facility has berms around the lagoons with the elevation of EL 7123 feet. The WWTP is protected from the 100-year flood.

**VI. COMPLIANCE SCHEDULE**

The permittee is required to update the facility closure and post-closure costs and update the financial assurance mechanism every six years following permit issuance.

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

**Technical Capability**

Mormon Lake Properties, 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**

Mormon Lake Properties, 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(C)(3). The estimated dollar amount demonstrated for financial capability is \$136,116. The permittee is expected to maintain financial capability throughout the life of the facility.

### **Zoning Requirements**

The Mormon Lake Lodge 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 prior to granting the significant amendment. 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