



Fact Sheet

Aquifer Protection Permit
Place ID 100300, LTF 49735
TYPE 3.04 GENERAL PERMIT
PINENUT MINE

The Arizona Department of Environmental Quality (ADEQ) proposes to issue an authorization to discharge under a Type 3.04 General aquifer protection permit for the subject facility that is valid for 5 years, unless revoked pursuant to Arizona Administrative Code (A.A.C.) R18-9-A307. This document gives pertinent information concerning the discharge authorization. The requirements contained in the general permit will allow the permittee to comply with the two key requirements of the Aquifer Protection Program: 1) meet Aquifer Water Quality Standards; and 2) demonstrate Best Available Demonstrated Control Technology (BADCT). BADCT's purpose 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's Name:	Denison Mines (USA) corp.
Mailing Address:	1050 17 th Street, Suite 950 Denver, CO 80265
Facility Name and Location:	Pinenut Mine Mohave County, AZ

Regulatory Status

A Notice of Intent to Discharge for a Type 3.04 General Permit with supporting application and information for the Pinenut Mine was received by the Arizona Department of Environmental Quality on March 20, 2009. The Type 3.04 General Permit is for Non-storm Water Impoundments at Mining Sites.

The following environmental permits are currently in existence for the Pinenut Mine:

- 1) **Plan of Operations**, approved by the U.S. Department of the Interior, Bureau of Land Management, April 25, 1986.
- 2) **Septic System Permit No. 5918**. Authorized by the Mohave Count Department of Health Services, May 30, 1986 under **Type 1.09 General APP for Septic System**.

Facility Description

The Pinenut Mine site is located on the Kanab Plateau, approximately 30 miles southwest of the town of Fredonia in Mohave County, Arizona. The site encompasses an area of 17.24 acres on land owned by the U.S. Bureau of Land Management. Energy Fuels Nuclear filed ten unpatented lode claims in 1982 with Mohave County and BLM and filed a preliminary Plan of Operations in 1984 with BLM for the Pinenut mine site. In April 1986, BLM approved the Plan of Operations, ruling that an Environmental Impact Statement was not needed because there would be no significant adverse environmental impacts.

In 1986, Energy Fuels Nuclear began developing the surface facilities at the Pinenut mine site in accordance with the approved Plan of Operations. The surface facilities consist of:

- 1) Mine access shaft and headframe
- 2) Maintenance shop/warehouse
- 3) Equipment (vehicle) wash pad
- 4) Sanitary septic system
- 5) Office building
- 6) Storage building
- 7) Water supply well
- 8) Water tank
- 9) Fuel storage area
- 10) Non-storm water impoundment

Over 25,000 tons of ore were mined at Pinenut through 1989. The mine was placed on standby at the end of 1989 because of low uranium prices, and no mining has occurred at the site since that time.

II. BEST AVAILABLE DEMONSTRATED CONTROL TECHNOLOGY

The non-stormwater impoundment at the Pinenut Mine has been designed to conform to the requirements of Arizona Administrative Code (A.A.C.) R18-9-A301(A)(3), R18-9-A301(B), and A.A.C. R18-9-D304. The permittee must comply with all design, installation, operation, monitoring, recordkeeping, reporting and closure requirements specified in this general permit and the attachments to this discharge authorization. The permittee must also comply with all other applicable requirements of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2 and Arizona Administrative Code (A.A.C.) Title 18, Chapter 9 including the General Provisions of Article 3.

III. COMPLIANCE WITH AQUIFER WATER QUALITY STANDARDS

Monitoring and Reporting Requirements

On a voluntary basis, Denison agrees to conduct periodic sampling of water pumped from the underground mining areas at the Pinenut mine. Denison will sample water pumped from the underground mining areas at the point the water discharges to the evaporation pond on a quarterly basis. Denison will report the results of the quarterly

sampling on an annual basis to ADEQ. If the sampling results suggest that aquifer water quality standards could be exceeded in groundwater, Denison will voluntarily increase the frequency of pumping to mitigate any risk to groundwater.

IV. STORM WATER AND SURFACE WATER CONSIDERATIONS

The mine site has a berm around the perimeter to direct storm water runoff from the site. The site has been designed so that surface water runoff from within the mine site will flow overland into the non-stormwater impoundment.

VI. OTHER REQUIREMENTS FOR ISSUING THIS PERMIT

Technical Capability

Denison Mines (USA) Corp. 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). Arizona registered geologists and professional engineers have sealed all necessary documents associated with this application for an Aquifer Protection Permit.

ADEQ 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

The permittee has demonstrated financial capability under A.R.S. § 49-243(N) and A.A.C. R18-9-A203(C). The permittee shall maintain financial capability throughout the life of the facility. The estimated closure and post-closure cost is \$20,000 and was demonstrated pursuant to A.A.C. R18-9-A203(C)(2). The closure and post-closure costs shall be evaluated and financial capability updated, if necessary, with each 5-year renewal.

Zoning Requirements

Mining activity of greater than 5 contiguous acres is exempt from zoning requirements pursuant to A.R.S. § 11-830.

VIII. ADDITIONAL INFORMATION

Additional information relating to this proposed permit may be obtained from:

Arizona Department of Environmental Quality
Water Quality Division – APP & Drywell Unit
Attn: Richard Mendolia
1110 W. Washington St., Mail Code: 5415B-3
Phoenix, Arizona 85007
Phone: (602) 771- 4374