



Fact Sheet

Aquifer Protection Permit
Place ID 106193, LTF 52718
TYPE 3.04 GENERAL PERMIT
EZ 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:	EZ Mine Fredonia (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 EZ Mine was received by the Arizona Department of Environmental Quality on June 15, 2010. The Type 3.04 General Permit is for Non-Stormwater Impoundments at Mining Sites.

There are currently no existing environmental permits for the EZ Mine. The following permits shall likely be required for the project:

- 1) Type 2.02 General Permits for the ore and wasterock stockpiles
- 2) CWA 404 Permit from U.S. Army Corps of Engineers for the surface water diversion channels
- 3) Plan of Operations Approval from Bureau of Land Management

Facility Description

The EZ Mine site is located in northeastern Mohave County, Arizona, approximately 36 miles south of the town of Fredonia. The site encompasses a total area of 67.2 acres, which includes a 41-acre mineshaft site that would support underground mining of the EZ-1, EZ-2 and WHAT pipe deposits. Each of the individual breccia pipes would have approximately 3 acres of surface disturbance associated with ventilation/escape shafts at each deposit. Denison proposes to upgrade approximately 7 miles of existing road, build approximately 1.4 miles of new road to provide access to the Area of Operations, and install 15 miles of 34.5 kV single-pole above ground power lines to provide the mine with permanent electric power. The site is located on U.S. Bureau of Land Management (BLM) land and extends across parts of 24 unpatented mining claims. No facilities currently exist at the proposed mine site.

II. BEST AVAILABLE DEMONSTRATED CONTROL TECHNOLOGY

The non-stormwater impoundment at the EZ 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 EZ 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. The non-stormwater impoundment shall cover an area of approximately 4.4 acres in the northwestern part of the mine site. The pond measures 1,013 feet in length by 222 feet wide at the top of the pond, and is four feet deep from top of the liner to the bottom of the pond. The total capacity of the pond, with freeboard, would be 20.3 acre-feet. The maximum operational capacity of the pond is estimated to be 10.5 acre-feet, including capacity to hold runoff from the 100-year/24-hour storm event,

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 \$52,467 and has been demonstrated pursuant to A.A.C. R18-9-A203(C)(2) with the use of a Performance Surety Bond for that amount. 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