

## Facts Regarding the Proposed Permit for Denison Mines Corp. Arizona 1 Mine

Pursuant to Arizona Administrative Code (A.A.C.) Title 18, Chapter 2 and Arizona Revised Statutes, Title 49, Chapter 3, the Arizona Department of Environmental Quality is proposing to issue a Class II air quality permit to Denison Mines Corp.

### OVERVIEW OF THE DENISON ARIZONA 1 MINE

The proposed Class II Permit No. 46700 is for the proposed underground mining of uranium ore. The Arizona 1 Mine is located on the Kanab Plateau in Mohave County, Arizona, approximately 35 miles southwest of Fredonia. The proposed mine production rate is 109,500 tons per year of uranium ore. No ore processing will be conducted on-site. The ore will be shipped to an off-site processing mill. If the ore cannot be shipped immediately to the mill, it will be placed in nearby stock piles within the Ore Stockpile Area (OSA). The OSA will encompass approximately one acre and can accommodate up to 9,680 tons of stockpiled ore.

### WHAT ARE THE DENISON ARIZONA 1 MINE'S AMBIENT AIR QUALITY IMPACTS?

The site of the proposed mine is located in a "clean air area" – one that has been designated as attainment or unclassifiable for all criteria pollutants under the Clean Air Act. An analysis of the ambient air quality impacts from the proposed mine was performed and this analysis demonstrated that the emissions would not cause or contribute to an exceedance of any applicable National Ambient Air Quality Standard.

In addition, Denison was required to conduct a visibility impact analysis from mine related activities. The results of the analysis demonstrate that there are no concerns regarding impairment to visibility from mine activities.

### WHAT ARE THE DENISON ARIZONA 1 MINE'S EMISSIONS?

The potential annual emissions from the emergency backup generator and the ore and waste rock unloading are 1.3 tons of oxides of nitrogen (NO<sub>x</sub>), 0.08 tons of sulfur dioxide (SO<sub>2</sub>), 0.38 tons of volatile organic compounds (VOC), 0.28 tons of

carbon monoxide (CO), and 1.44 tons of particulate matter with a diameter smaller than 10 microns (PM<sub>10</sub>). Fugitive emissions of PM<sub>10</sub> from unpaved haul roads are approximately 323 tons per year. Radon-222 emissions from the mine are limited by federal regulation not to exceed those amounts that would cause any member of the public to receive in any year an effective dose equivalent of 10 millirem.

### HOW DID ADEQ DEVELOP THE TERMS OF THE PROPOSED PERMIT?

The proposed permit includes emission limits and standards and compliance demonstration requirements from federal and state air quality regulations. Federal requirements for the mine come from Title 40 of the Code of Federal Regulations Part 61 Subpart B, National Emissions Standards for Radon Emissions. Other requirements set forth in this permit are a result of state rules and limitations based upon ambient air dispersion modeling.

### HOW WILL ADEQ ENSURE THAT THE DENISON ARIZONA 1 MINE COMPLIES WITH PERMIT REQUIREMENTS?

The proposed permit includes stringent monitoring, record keeping, and reporting requirements to provide assurance that airborne dust from mine operations, storage piles, haul trucks, and haul roads are minimized.

### OTHER DENISON MINES (USA) CORP. ACTIVITY

Along with the proposed mining activities at the Arizona 1 Mine, ADEQ currently has two Aquifer Protection Permit applications in process from Denison Mines (USA) Corp. for Type 3.04 General Aquifer Protection Permits. Each general permit will authorize the use of a non-stormwater impoundment at the Canyon Mine, located in Coconino County, and at the Pinenut Mine, in Mohave County.

The Canyon Mine site is located on the Coconino Plateau, approximately 6 miles southeast of the village of Tusayan in Coconino County, Arizona. The site encompasses an area of 15.3 acres on Kaibab National Forest land and extends across parts of three unpatented lode mining claims. Gulf

Oil Corporation began initial exploration activities at the Canyon Mine in 1978. In 1982, Energy Fuels Nuclear acquired the property from Gulf Oil and continued exploration activities at the site.

In August 1986, the U.S. Forest Service published a final Environmental Impact Statement with a Finding of No Significant Impact for the proposed mining activities at the Canyon Mine site, and in September 1986 issued a Record of Decision approving the Plan of Operations at the Canyon Mine. In November 1986, Energy Fuels Nuclear began surface development of facilities at the mine site in accordance with the approved Plan of Operations. The surface facilities consist of:

- 1) Mine access shaft and head frame
- 2) Maintenance shop/warehouse
- 3) Equipment (vehicle) wash pad
- 4) Septic system
- 5) Office building
- 6) Storage building
- 7) Water supply well
- 8) Water tank
- 9) Non-storm water impoundment

The Pinenut Mine site is located on the Kanab Plateau, approximately 40 miles southwest of the town of Fredonia, 4 miles east of the Arizona 1 Mine, 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 10 unpatented lode claims in 1982 with Mohave County and U.S. Bureau of Land Management (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.

Consistent with operations at the Arizona 1 Mine, Denison proposes to transport ore mined at Canyon and Pinenut Mines by trucks to the White Mesa Mill located near Blanding, Utah for processing. Any activities covered by these General Permits are limited to mineral extraction only.

### **HOW DOES THE PUBLIC COMMENT PROCESS WORK?**

A Public Notice will be published in the *Arizona Republic*, *Arizona Daily Sun*, and the *Kingman Daily Miner* on June 19, 2009, and on June 26, 2009. A public meeting and a public hearing will be held on July 22, 2009, at the Fredonia Elementary School, at 6 p.m. During the public meeting and hearing citizens will have the opportunity to hear a presentation and ask questions about the proposed permit. During the public comment period, and at the meeting and hearings, citizens are entitled to express any concerns that are relevant to the proposed permit. The public comment period will officially close on July 22, 2009. Therefore, all comments must be postmarked or hand delivered no later than July 22, 2009.

Additional information on the public notice, and copies of the proposed permits and technical support documents, will be available for review on the ADEQ Web site at:

[www.azdeq.gov/enviro/air/permits/index.html](http://www.azdeq.gov/enviro/air/permits/index.html) and can be accessed by clicking on the "Public Notices, Meetings, and Hearings" link.

### **WHERE CAN I GET MORE INFORMATION?**

We encourage you to be informed and involved in ADEQ activities. We need your involvement to help us protect our environment and public health. For more information, please contact:

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