## GRAND JUNCTION GEOLOGICAL SOCIETY

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JANUARY MEETING
Joint meeting with the CMU geology students
Wednesday January 20, 2016
7:30 PM
SACCOMANNO LECTURE HALL
(In the Wubben Science Building)

Donald R. Metzler Moab Federal Project Director U.S. Department of Energy

Will Speak On

"Cleanup of Uranium Legacy in Southeastern Utah"

**Abstract on Reverse Side** 

**Guests Are Always Welcome** 

Your 2016 Dues-\$15.00-are due now. Make your check to the GJGS Foundation for a tax deduction as it is a non-profit organization. Bring to meeting or mail to GJGS, P O Box 4045, Grand Junction, CO 81502

## **ABSTRACT**

The U.S. Department of Energy (DOE) Moab Uranium Mill Tailings Remedial Action (UMTRA) Project site is located in southeastern Utah. A uranium mill operated from 1956 to 1984 on the now 480-acre site. When processing operations ceased, an estimated 16 million tons mill tailings and associated contaminated materials was present in a pile. In 2001, through Congressional legislation, ownership and responsibility for reclamation of the site was transferred to DOE. In 2005, DOE issued a Record of Decision to relocate the tailings primarily by rail to an engineered disposal cell constructed 30 miles north of the Moab site near Crescent Junction, Utah. The cell is in an ideal geologic setting with 2,000 feet of Mancos Shale as its floor and almost no groundwater present.

Removal of tailings began in 2009 and as of mid-May 2015, DOE had safely relocated 7.5 million tons. Revegetation is required following soils disturbance such as remediation. Riparian and upland zones have been established with a transitional zone in between. DOE's end state vision is to establish a park-like setting for the site and to transfer ownership to another entity for the public good.

Active remediation of contaminated groundwater at the Moab site is part of the project scope. Uranium and ammonia are the two main contaminants of concern. Elevated concentrations of ammonia can affect young-of-year endangered fish species in backwater channels adjacent to the Colorado River bank. In 2003, DOE began implementation of an interim action system that currently includes 8 extraction and more than 30 freshwater injection wells. The system is designed to protect surface water quality and to recover ammonia, uranium, and other contaminants prior to discharge to the Colorado River.

The status of soils and groundwater cleanup and revegetation are addressed in the presentation the along with a discussion of future use considerations.

## GJGS PAID UP MEMBERS AS OF 1/11/16

Allin, David
Allison, Larry
Barnes, Joe
Burch, Chuck
Cassin, Lee
Carie, Lee
Chenoweth, Bill
Cole, Rex
Cotter, Ed
Daub, Gerry

Glover, Nancy Goodknight, Craig Guillemette, Renald

Hase, Skip Hood, Bill Hood, Sandy Jaquet, Neil Johnson, Jim Johnson, Verner Jones, Larry

Kautz, Randall Lamm, Nancy

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