

STATEMENT OF  
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DEPARTMENT OF ENERGY

BEFORE THE

SUBCOMMITTEE ON CHILDREN'S HEALTH AND ENVIRONMENTAL  
RESPONSIBILITY

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

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Good afternoon Mr. Chairman, Ranking Member Alexander, and distinguished members of the Committee. My name is David Geiser and I am the Director of the Office of Legacy Management (LM) at the Department of Energy (DOE). LM is responsible for ensuring that DOE's post-closure responsibilities are met by providing: long-term surveillance and maintenance of environmental remedies; access to historical records and information; contractor benefits continuity; and beneficial reuse of Federal property no longer needed for Departmental missions.

### *LEGACY MANAGEMENT MISSION AND PROGRAM GOALS*

The mission of the DOE Office of Legacy Management (LM) is to manage the Department's post-closure responsibilities at remediated sites and ensure that they continue to protect human health and the environment in the future. LM currently has responsibility for 87 remediated sites. Post-closure site management is the primary activity in support of Goal 1 of LM: protecting human health and the environment. This first goal assures that DOE's environmental remedies continue to perform in a manner that is protective for the long term. LM continually evaluates the effectiveness and cost-efficiency of the remedies. Other LM strategic goals are to preserve, protect, and share records and information; meet commitments to the contractor work force; optimize the use of land assets; and sustain management excellence. More information on LM, including fact sheets on each of the sites it manages, is available at [www.lm.doe.gov](http://www.lm.doe.gov).

#### *Background Information on UMTRCA*

Congress passed the Uranium Mill Tailings Radiation Control Act (Public Law 95-604) or UMTRCA, in 1978. UMTRCA has two major sections: Title I, which addresses uranium milling sites that were inactive when the law was passed; and Title II, which addresses milling sites licensed as of 1978.

Pursuant to Title I, DOE completed remediation of inactive uranium milling sites as well as vicinity properties in 1998. UMTRCA also required all disposal cells that were created as part of milling site remediation to remain the responsibility of DOE in perpetuity. UMTRCA specified that the U.S. Environmental Protection Agency (EPA) would establish the standards to be used during remedial action. The Nuclear Regulatory Commission (NRC) was directed to concur on the type of remedial action that would be performed.

Title II of UMTRCA amended the Atomic Energy Act of 1954 to address the eventual remediation and closure of uranium milling sites that had active licenses as of 1978. All Title II sites must be transferred to either a state (who has first choice of ownership), or DOE. To date, all Title II sites have been transferred to DOE.

#### *LM Management of UMTRCA Title I and Title II Sites*

LM took over the long-term surveillance and maintenance of Title I sites, upon its establishment in 2003. LM currently manages 21 Title I sites and 6 Title II sites. An additional 17 Title II sites are expected to be transferred to LM by 2020 (see attached map). UMTRCA Title II sites are

cleaned up by the commercial site owners who hold a NRC license or a license issued by an “Agreement State” that implements NRC regulations. After site remediation is approved by the regulator, the site is transferred to DOE and then regulated by NRC under DOE’s General License. In addition to the cost of remediation, the licensee is responsible for a one-time payment to the U.S. Department of the Treasury to offset LM’s long-term care costs for the site. LM funding for long-term surveillance and maintenance of UMTRCA sites in fiscal year (FY) 2011 is \$6.6M for Title I sites and \$1.1M for Title II sites and is projected to be \$6.3M for Title I sites and \$1.4M for Title II sites in FY2012.

#### *DOE UMTRCA Vicinity Property (VP) Program*

The VP program was established to clean up sites where mill tailings were used for construction, including many residences. Mill tailings were removed from over 4,000 vicinity properties in the City of Grand Junction, Colorado. Although DOE’s UMTRCA Title I surface cleanup authority expired in 1998, as required by the UMTRCA extension in 1996, DOE must keep the Grand Junction Disposal Cell open for receipt of tailings discovered in the community

In 2011, DOE received at the Grand Junction Disposal Cell 7,200 cubic yards (yd<sup>3</sup>) of tailings materials from the City of Grand Junction, primarily excavated from city streets and sidewalks.

#### *Ongoing UMTRCA Remediation by the DOE Office of Environmental Management*

EM is conducting additional remediation under UMTRCA standards or authority. During the summer of 2011, mill-related contaminated soil at the “Highway 160 Site” near the Tuba City UMTRCA Title I was characterized, excavated, and shipped by truck to the Grand Junction Disposal Cell in Colorado. On August 29, 2011 the last shipment of more than 4,500 yd<sup>3</sup> of contaminated soil was delivered to the cell. The Omnibus Appropriations Act of 2009 funded DOE to remediate the site, and DOE established a cooperative agreement with the Navajo Nation to perform the work.

A larger effort is the Moab Project, where more than 16 million tons (12 million yd<sup>3</sup>) of mill tailings and other contaminated material is being excavated and shipped by train from the former Moab mill site to a new disposal cell near Crescent Junction, Utah. The project was authorized under UMTRCA Title I by the Floyd D. Spence National Defense Authorization Act for FY2001. EM began moving the tailings in 2009, and by the end of FY2011 approximately 29 percent (more than 4.6 millions tons) of the total material at the mill site has been relocated to Crescent Junction. EM is also characterizing groundwater contamination associated with the Moab tailings which are located adjacent to the Colorado River. As with other UMTRCA sites, the Crescent Junction disposal cell and any groundwater remediation systems in Moab will eventually be transferred to LM for long-term surveillance and maintenance.

### *Groundwater Program*

EM's groundwater work at Moab is consistent with amendments to UMTRCA in 1998 that authorized DOE to remediate groundwater exceeding EPA standards at former uranium milling sites. Groundwater restoration by LM is ongoing at nine Title I sites and one Title II site. Groundwater cleanup strategies include natural flushing, which must be completed within 100 years. Other "active" remediation being performed at some sites include a pump and treatment system at Tuba City, AZ; a pump and evaporation system at Shiprock, NM; a phytoremediation system at Monument Valley, AZ; and a nutrient enhancement/ biological remediation system at Rifle, CO.

#### *LM UMTRCA Long-Term Surveillance Plans*

LM uses NRC-approved Long-Term Surveillance Plans (LTSPs) to manage UMTRCA sites. The LTSPs are a condition of the NRC license issued to DOE for the long-term care and maintenance of UMTRCA disposal cells. As part of the LTSPs, LM performs annual site management activities, including inspections and maintenance. The primary objective of LTSPs is to ensure that the management of UMTRCA sites continues to protect public health and the environment. LTSP activities can include: inspecting disposal cells for subsidence, erosion, and other damage; performing cell maintenance, erosion control, weed control, fence repair, and property management; evaluating the adequacy of institutional controls; and conducting groundwater monitoring.

#### *LM UMTRCA Activities in New Mexico*

LM manages four former uranium milling sites in the State of New Mexico, three of which are located in the Grants Mineral Belt: Ambrosia Lake, L-Bar, and Bluewater. Two additional sites in the region (Homestake and Rio Algom) are being remediated by private firms under UMTRCA Title II and will be transferred to DOE after remediation is complete. In 2009, the New Mexico Environment Department (NMED) initiated the Five-year plan, Grants Mining District, New Mexico, (2010-2014): *Assessment of Health and Environmental Impacts of Uranium Mining and Milling (Five-year Plan)*. DOE, EPA and NRC are participants in the plan. DOE has committed to continue all long term surveillance, maintenance and groundwater monitoring at its UMTRCA sites. In addition, DOE is working with the State of New Mexico to better understand groundwater quality in the region.

Recent activities in response to concerns raised by NMED under the Five-year Plan include drilling additional groundwater wells at the Ambrosia Lake and Bluewater disposal cells, increasing groundwater sampling from once to twice a year, and monitoring additional analytes. In FY2012, another well will be drilled at Bluewater.

#### *Title X Uranium and Thorium Reimbursement Program*

Title X of the Energy Policy Act of 1992 directed DOE to reimburse certain licensees of uranium and thorium milling sites for the portion of their cleanup costs attributed to sale of material to the Atomic Energy Commission (AEC), the predecessor agency to DOE. Licensee claims for reimbursement are audited by LM and the Defense Contract Audit Agency, and eligible costs are reimbursed by EM annually, subject to the availability of appropriations.

Two New Mexico sites in the Title X Program are UMTRCA Title II sites (Rio Algom and Homestake) will become the responsibility of LM for conducting long term surveillance and maintenance and groundwater remediation. The Bluewater site, already managed by LM, also received Title X funds prior to closure. Since 1994, DOE has reimbursed \$628M under the program. Total federal payments under Title X are capped. The maximum remaining authorized payments are approximately \$210M.

### *LM Uranium Leasing Program*

Other LM activities include the Uranium Leasing Program (ULP) and its 31 uranium lease tracts located in the Uravan Mineral Belt of southwestern Colorado (approximately 25,000 acres). The ULP began in 1948 when Congress authorized the U.S. Atomic Energy Commission to withdraw lands from the public domain for the sole purpose of exploring for, developing, and mining uranium-vanadium ore bodies for national defense purposes.

In 1994, DOE recognized the lack of regulations pertaining to the reclamation of legacy mine sites, and collaborated with BLM to develop reclamation criteria tailored to abandoned uranium mines. From 1995 through 2001, DOE reclaimed 161 mine sites on the DOE lease tracts. During that time, DOE negotiated contracts with its lessees to perform reclamation at these legacy sites in lieu of annual royalty payments owed to the Government pursuant to 10 CFR 760.1.

By the late 1990s, various Bureau of Land Management (BLM) field offices began to recognize DOE's experience and expertise in reclaiming legacy mine sites and in 2000, BLM executed an interagency agreement with DOE, requesting DOE's assistance in performing mine closures and reclamation on BLM-administered public lands throughout the Uravan Mineral Belt. During an 8-year span, BLM funded DOE to perform reclamation activities at 182 mine sites.

### *Closing*

DOE will continue to work with other Federal agencies, tribal nations, and state and local governments to ensure that the legacy of uranium milling and processing sites is one that is protective of human health and the environment. It will also continue to be respectful of the concerns and values of stakeholders that live near the sites or on whose land the former milling sites are located.

## UMTRCA Title I and Title II Site Locations

