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Community Involvement Plan

Monument Valley, Arizona, Processing Site



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SECTION 1: OVERVIEW

The U.S. Department of Energy Office of Legacy Management developed this Community Involvement Plan to facilitate communication and encourage community involvement with residents around the Monument Valley, Arizona, Processing Site located within Navajo Nation. Residents know the site as Cane Valley. LM will use the community involvement activities outlined in this plan to inform Cane Valley community members and provide them opportunities to get involved.

LM plans to support public awareness of the Monument Valley site by:

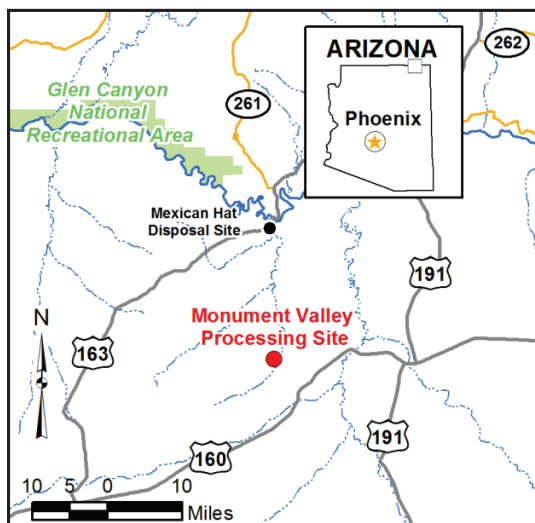
- ✦ Informing the public about current and planned site-related activities.
- ✦ Educating the public about site history.
- ✦ Providing public access to site information, reports, and other documents.
- ✦ Promoting using the LM website as a source of information.

LM will support communication with Cane Valley community stakeholders by:

- ✦ Participating in regular meetings with stakeholders.
- ✦ Sharing information through in-person outreach activities.
- ✦ Being open to all input and suggestions.

To develop this plan, LM used multiple information sources, including community interviews and feedback, site files, and community meeting records, and made every effort to make sure the information in this CIP is accurate.

SECTION 2: SITE OVERVIEW



Location of the Monument Valley, Arizona, Processing Site.

The Monument Valley site is located on the Navajo Nation in northeastern Arizona, about 15 miles south of Mexican Hat, Utah, on the west side of Cane Valley.

After a local resident discovered uranium in the area in 1942, the Vanadium Corporation of America opened the Monument No. 2 Mine, located about half a mile west of the site. From 1943 to 1968, the Monument No. 2 Mine, which utilized strip and underground mining, produced more uranium than any other mine in Arizona. Before 1955, there was no mill at the site, and all ore was hauled to uranium mills in Durango and Naturita, Colorado.

A uranium-ore processing mill opened in 1955 on property leased from the Navajo Nation and operated at the site until 1968. To process ore at the site, the mill used an upgrader, which crushed the ore and separated it by grain size.

The finer-grained material, which contained a higher uranium concentration, was shipped to Durango and Naturita mills for chemical processing. VCA used large amounts of water from on-site wells drawing from the De Chelly Formation to separate the finer- and coarser-grained material. VCA didn't use chemicals at the site other than minor amounts of flocculants, which are used to treat wastewater.

VCA processed the coarser-grained material on-site through a sulfuric acid batch leach process. The mill used the batch leaching process to extract the materials from 1964 to 1968, during which the mill produced about 1 million tons (900,000 metric tons) of sandy waste material known as tailings. VCA also used a separate heap leaching operation to process an additional 100,000 tons (90,000 metric tons) of low-grade ore. Heap leaching uses a series of chemical reactions to absorb and re-separate specific minerals to extract materials like uranium and other low-grade ores.

When the mill closed and the lease ended in 1968, site control returned to the Navajo Nation. Most of the mill buildings were removed shortly thereafter.

Site remediation and cleanup began in 1992. The Monument Valley site is regulated under Title I of the Uranium Mill Tailings Radiation Control Act of 1978 (42 USC §7901, as amended), which addresses former uranium milling sites that were unlicensed as of Jan. 1, 1978, and essentially abandoned. The licensing agency for these sites is the U.S. Nuclear Regulatory Commission or an Agreement State. The state of Arizona is an Agreement State; however, the site is on Navajo Nation land, which prevents state authority.

In 1992, tailing piles, windblown tailings, concrete foundations, and debris removal from the site began. Between 1992 and 1994, remediation work removed about 1.3 million dry tons of contaminated materials from Cane Valley that was finished in the disposal cell located near Mexican Hat, Utah. Materials relocation was completed in January 1994.

Site remediation and cleanup also removed about 15,000 cubic yards (11,000 cubic meters) of contaminated materials from a property nearby, the northern frog pond, and sections of the old haul road north of the frog ponds, about 1 mile (1.6 km) east of the processing site along Cane Valley Wash.

Those contaminated materials were then hauled to and stored in the on-site disposal cell at the Mexican Hat, Utah, Disposal Site. However, subpile soil sample analysis (samples collected from under the former tailings piles) showed there is degrading ammonium adding to nitrate groundwater contamination.

From 2000 to 2003 through an interagency agreement, DOE and Indian Health Service installed a domestic water supply to provide potable water to Cane Valley residents. The project also included individual septic systems installation and expanded electricity supply. The Navajo Tribal Utility Authority retained responsibility for water supply system operation, monitoring, and maintenance.

REGULATORY SETTING

U.S. Congress passed UMTRCA in 1978 (Public Law 95-604), and DOE remediated 22 inactive uranium-ore processing sites under the Uranium Mill Tailings Remedial Action Project to comply with standards set by the U.S. Environmental Protection Agency in Title 40 *Code of Federal Regulations*, Part 192 (40 CFR 192). Subpart B of 40 CFR 192 regulated contaminated groundwater cleanup at the processing sites. The radioactive materials were stored in NRC-approved disposal cells. NRC general license for UMTRCA Title I sites is established in 10 CFR 40.27.

The Mexican Hat site was included under the general license in 1997 and transferred to DOE at that time.



SECTION 3: COMMUNITY BACKGROUND

3.1: COMMUNITY PROFILE

The community right next to the Monument Valley site is located on the Navajo Nation and is within the governmental jurisdiction of the Dennehotso Chapter, a local Navajo Nation governmental entity. However, many Cane Valley residents identify with the Oljato and Kayenta Chapters.

According to the 2020 U.S. census, Dennehotso has a population of 587 people with these racial identities:

- 581 are American Indian.
- One is Hispanic or Latino.
- Three are two or more races.
- Three are white.

There are 171 housing units, of which:

- 160 are occupied housing units, classified as:
 - 38.8% are married-couple families.
 - 25% are female householder with no spouse present.
 - 5.6% are male householder with no spouse present.
 - 30.6% are other.
- 11 are empty housing units.
- 29.9% are households with children under 18 years old.
- 49.7% are households with adults 60 years and older.

The average family size is 5.85.

The population's age distribution is:

- 14.9% are under 18 years old.
- 85.1% are 18 or older.
- 8.9% are 65 or older.
- 39.6 years old is the average age.

The median household income is \$16,518, and 35.1% of residents live below the poverty line. In addition, 53.1% of residents 65 years and older live below the poverty line.



The educational institutions that serve the Monument Valley and Cane Valley communities are:

- ✦ Tse'biinidzizgai Elementary School.
- ✦ Monument Valley High School.
- ✦ Utah State University, Monument Valley.

Educational achievement:

- ✦ 57.9% have a high school or equivalent degree.
- ✦ 17% attended some college, but didn't earn a degree.
- ✦ 4.1% earned an associate degree.
- ✦ 2.75% earned a bachelor's degree.
- ✦ 0% earned a graduate or professional degree.

3.2: COMMUNITY INVOLVEMENT

Though DOE finished remedial action at the Monument Valley site in 1994, the Department stays involved with the Navajo Nation by participating in technical meetings, community open houses, and other outreach events. LM works and collaborates with affected communities to keep human health and the environment protected. In-person meetings are opportunities for LM to talk with stakeholders and address their concerns about ongoing groundwater-remediation activities, technical studies done on behalf of tribal agencies, and any potential community impacts.

Under a cooperative agreement, LM works with the Navajo Nation Abandoned Mine Lands Reclamation/ Uranium Mill Tailings Remedial Action Department to conduct long-term surveillance and maintenance at the four sites on the Navajo Nation — the Monument Valley site, the Tuba City, Arizona, Disposal Site, and the Mexican Hat, Utah, and Shiprock, New Mexico, Disposal Sites. Site surveillance and maintenance keeps the community and environment safe. LM also works with several Navajo Nation departments to protect cultural and biological resources.

In 2007, Congress directed federal agencies — including DOE, NRC, EPA, the U.S. Bureau of Indian Affairs, and the U.S. Department of Health and Human Services — to work collaboratively with the Navajo Nation to address uranium issues on the Navajo Nation through a Five-Year Plan and Community Outreach Network. LM provided input for a second Five-Year Plan that was completed in 2014 and included a major objective to "support community outreach and information sharing." The Ten-Year Plan was released in February 2022.

In June 2016, LM and LM's Support Partner opened an outreach office in Window Rock, Arizona. The Window Rock outreach office provides a place for the public to learn about LM and its sites on the Navajo Nation, the Navajo Nation Ten-Year Plan, and LM's work to address uranium issues on the Navajo Nation. Office staff provide community outreach and support to LM and Navajo Nation leadership, coordinate tribal programs, and offer public affairs services throughout the Navajo Nation, such as leading site tours, hosting site open houses, and going door to door to update community members about site activities.



3.3: OUTREACH MATERIALS

LM provides informational materials at outreach events, all of which are also on LM's website:

- ✦ Site fact sheets.
 - ✦ Mexican Hat, Utah, Disposal Site fact sheet.
 - ✦ Monument Valley, Arizona, Processing Site fact sheet.
 - ✦ Shiprock, New Mexico, Disposal Site fact sheet.
 - ✦ Tuba City, Arizona, Disposal Site fact sheet.
 - ✦ Working with the Navajo Nation and Hopi Tribe fact sheet.
 - ✦ Window Rock, Arizona, Navajo Nation Community Outreach Network Office fact sheet.
- ✦ Women of the Manhattan Project coloring book.
- ✦ LM overview brochure.
- ✦ LM Strategic Plan brochure.
- ✦ LM video about work done on the Navajo Nation.
- ✦ Window Rock, Arizona, Outreach Office map.
- ✦ Uranium and Radiation on the Navajo Nation resource list.
- ✦ LM children's brochure.
- ✦ Community Outreach Network information sheet.

Many Monument Valley site projects require specific project information sheets that detail the work being done. LM distributes and shares these information sheets with the Chapter House, local businesses, and residences near the site.



LMSP public affairs staff leaving an informational flyer on a Cane Valley resident's door.

SECTION 4: COMMUNITY INVOLVEMENT STRATEGY







Along with the strategy and goals set in this CIP, LM will help support communication with community members and provide opportunities for Navajo peoples' meaningful, active involvement in Monument Valley site activities. The strategy is based on feedback from interviews, community meetings, and comments from local officials.

4.1: COMMUNITY INVOLVEMENT ACTIVITIES

1. Share information about current and proposed site activities.	
<i>Activity 1A: Provide information to tribal and federal partners, including Dennehotso, Kayenta, and Oljato Chapter House officials.</i>	
Objective:	LM staff will present information about site activities (e.g., water monitoring and sampling, results and data, future site activities).
Method:	LM representatives will present updates at Chapter meetings, as requested. Tools may include presentations, site information fact sheets, and LM's website to provide detailed site information. Before each project begins, LM will notify tribal and federal partners, including Chapter House officials, via email.
Timing:	As needed or at residents' request.
<i>Activity 1B: Conduct resident outreach.</i>	
Objective:	LM site manager and staff will share in-depth information with community members about site activities and the scientific and engineering rationale for the activities.
Method:	LM staff will visit community residences, going door to door to notify community members. Staff will also email and mail information about upcoming activities.
Timing:	LM staff will lead site tours to support site activities or at residents' request. LM will invite Cane Valley residents to meetings held in Halchita, Utah.



4.2: COMMUNITY INVOLVEMENT ACTIVITIES TIME FRAME SUMMARY

TOOLS FOR SHARING INFORMATION					
					
<p>Verbal and written updates</p>	<p>Door-to-door notifications</p>	<p>Mailings</p>	<p>Flyers</p>	<p>Social media</p>	<p>Local events</p>
<p>▼</p>	<p>▼</p>	<p>▼</p>	<p>▼</p>	<p>▼</p>	<p>▼</p>
<p>Notify officials and residents through emails and phone calls</p>	<p>One to two weeks before a project starts</p>	<p>Two weeks to one month before a project starts</p>	<p>As needed</p>	<p>One day to one week before an event takes place</p>	<p>Annually and/or when events take place</p>

4.3: COMMUNITY NOTIFICATION

As part of DOE's ongoing efforts to reach out to the surrounding community, it is important that federal, tribal, and support partner personnel interact with the public safely, such as during door-to-door visits to homes or businesses. The following guidelines ensure safety is the number one priority when performing outreach:

- ✦ Notify site security personnel about upcoming community announcements and site visits.
- ✦ Post outreach flyers at public places, including Chapter Houses and area businesses near Mexican Hat and Monument Valley.
- ✦ Create information sheets that communicate a clear description of LM's work and hand them out in-person to area residents or leave them on the door.
- ✦ Conduct door to door outreach with no fewer than two staff members, including one member fluent in Navajo, if possible. If LM can't go door to door, LM staff will contact residents by phone and email.
- ✦ Exercise situational awareness before approaching homes. Do not approach or enter if it doesn't seem safe. During door to door visits, record which homes staff contact and when, the result of that contact, and residents' feedback. Give the record to the public affairs manager and site lead to share out.



SECTION 5: OFFICE OF LEGACY MANAGEMENT REGIONAL CONTACTS

Monument Valley Site Manager	Joni Tallbull U.S. Department of Energy Office of Legacy Management 1 Uranium Way Shiprock, NM 87420 (505) 592-2447
Program Communication Specialist	Shawn Montgomery U.S. Department of Energy Office of Legacy Management 2597 Legacy Way Grand Junction, CO 81503 (970) 248-7666
Public Affairs Specialist	Gwen Smalls U.S. Department of Energy Office of Legacy Management 2597 Legacy Way Grand Junction, CO 81503 (970) 248-6182
Site Lead LM Support Partner	Larry Martin U.S. Department of Energy Office of Legacy Management 2597 Legacy Way Grand Junction, CO 81503 (970) 248-6004
Public Affairs Lead to the Navajo Nation LM Support Partner	Jennifer Grossheim Harris U.S. Department of Energy Office of Legacy Management 2597 Legacy Way Grand Junction, CO 81503 (970) 248-6248
Community Outreach Network Coordinator and Public Affairs Specialist LM Support Partner	Shine Salt U.S. Department of Energy Office of Legacy Management Highway 264 and Indian Route 12, Suite 10 Window Rock, AZ 86515 (928) 810-2104



SECTION 5: OFFICE OF LEGACY MANAGEMENT REGIONAL CONTACTS

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