



Shiprock, New Mexico, Disposal Site

COMMUNITY INVOLVEMENT PLAN

**U.S. Department of Energy Office of Legacy Management
Shiprock, New Mexico, Disposal Site**

January 2019

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Section 1: Overview

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) developed this *Community Involvement Plan* (CIP) to facilitate communication and encourage community involvement within Navajo Nation communities surrounding the Shiprock, New Mexico, Disposal Site. LM will use the community involvement activities outlined in this plan to ensure that community members are informed and provided opportunities for meaningful engagement.

LM plans to support public awareness of the Shiprock site through the following activities:

- Informing the public about current and planned activities related to the site
- Educating the public about site activities
- Providing public access to site information, reports, and other documents
- Promoting the LM [Tribal Collaboration](#) webpage as a source of information

LM will foster communication with Shiprock site stakeholders by:

- Participating in regular meetings with stakeholders
- Sharing information
- Remaining open to all input and suggestions

LM used multiple information sources to develop this plan, including community interviews, site files, and community meeting records.

<https://energy.gov/lm/office-legacy-management>

Section 2: Site Overview

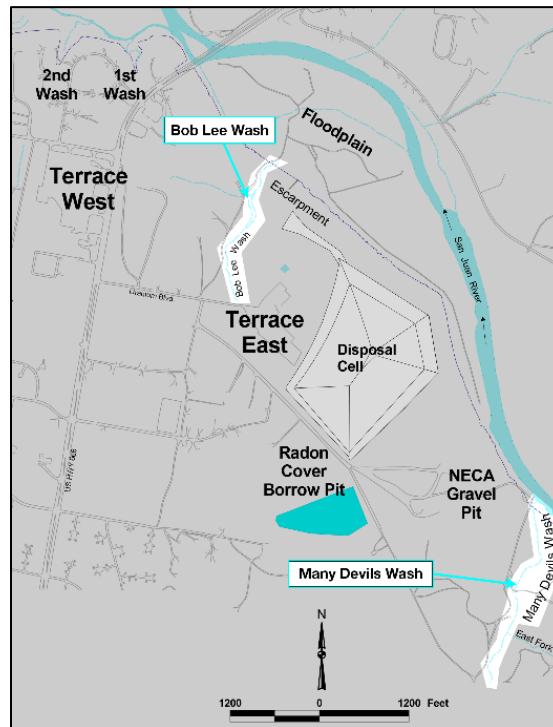
2.1: Shiprock, New Mexico, Disposal Site History

The Shiprock site is the location of a former uranium- and vanadium-ore processing facility. Kerr-McGee and its successor, Vanadium Corporation of America operated the facility. Kerr-McGee built the mill and operated the facility from 1954 until 1963. Vanadium Corporation of America purchased the mill and operated it until it closed in 1968. The milling operations created process-related wastes and radioactive tailings, a predominantly sandy material. The mill, ore storage area, raffinate ponds (ponds that contain spent liquids from the milling process), and tailings piles occupied approximately 230 acres leased from the Navajo Nation. In 1983, DOE and the Navajo Nation entered into an agreement for site cleanup. By September 1986, all tailings and associated materials (including contaminated materials from off-site vicinity properties) were encapsulated in the disposal cell built on top of the existing tailings piles.

Regulatory Setting

Congress passed the Uranium Mill Tailings Radiation Control Act (UMTRCA) in 1978 (Public Law 95-604). As a result, DOE remediated 22 inactive uranium-ore processing sites under the Uranium Mill Tailings Remedial Action (UMTRA) Project and in accordance with standards promulgated by the U.S. Environmental Protection Agency (EPA) in Title 40 *Code of Federal Regulations* (CFR), Part 192. The radioactive materials were encapsulated in U.S. Nuclear Regulatory Commission (NRC)-approved disposal cells. The NRC general license for UMTRCA Title I sites is established in 10 CFR 40.27. The Shiprock disposal site was included under the general license in 1996.

2.2: Site Description and Location



*Location of the Shiprock Disposal Site and the surrounding bodies of water:
Many Devils Wash, Bob Lee Wash, and the San Juan River*

The Shiprock site is within the Navajo Nation in the northwest corner of New Mexico, approximately 28 miles west of Farmington. Land near the site is used for grazing. Adjacent land is used for farming (both dry and irrigated) and rural residential purposes. The San Juan River (north of the site) is not used for domestic or industrial purposes; it is a water source for agricultural purposes. Shiprock domestic water is supplied by the City of Farmington. Farmington water comes from the Farmington reservoir, and the source for the reservoir is the Animas River.

The disposal cell is an asymmetrical pentagon with a maximum side length of 1,800 feet and a minimum side length of 800 feet. The cell occupies approximately 77 acres of the 105-acre site. A chain-link fence surrounds the cell. The cover of the Shiprock disposal cell is a multicomponent system designed to encapsulate and protect the contaminated materials. The disposal cell cover comprises 1) a low permeability radon barrier (first layer placed over compacted tailings) consisting of compacted sandy, silty soils; 2) a layer of granular bedding material placed as a capillary break; and 3) a rock (riprap) erosion-protection layer. The use of these cover materials promotes rapid runoff of precipitation to minimize infiltration of storm water. Rock-lined drainage ditches divert surface water runoff around and away from the disposal cell to a rock-lined energy dissipation area.

Two major drainages, Bob Lee Wash and Many Devils Wash, intersect the area adjacent to the disposal cell and the former mill site. At the northeast edge of the terrace, a steep escarpment — approximately 50 to 60 feet high — forms the boundary between the San Juan River floodplain and the terrace area. The horizontal distance from the disposal cell to the San Juan River is about 600 feet.

Most groundwater in the terrace area probably originates as a result of human activities. Past milling operations contributed to some of the groundwater in the terrace groundwater system. However, irrigation, and leakage from the domestic water-supply system, likely contributes most of the water in the terrace groundwater system. The floodplain alluvial aquifer is north of the disposal cell in the floodplain area between the San Juan River and the base of the escarpment. In 1961, a test hole was drilled on the terrace about one-half mile northwest of the disposal cell area. This hole, drilled to a depth of 1,850 feet, was not capped. Artesian flow from this hole (now known as site Well 0648) has continued since 1961. It flows at a rate of about 64 gallons per minute across the terrace into Bob Lee Wash, which drains to the floodplain and eventually to the San Juan River. Inflow from Well 0648 supplies more than half of the groundwater to the floodplain aquifer. The floodplain aquifer also receives inflow from the San Juan River and from the terrace groundwater system. Past milling operations have left residual sources of contaminants in the terrace groundwater system and in the floodplain alluvial aquifer. Contaminated groundwater from the terrace has infiltrated the upper few feet of the underlying, weathered Mancos Shale bedrock. Terrace groundwater has also surfaced in several places as seeps at the edge of the escarpment and in Bob Lee Wash. The contaminants of concern are ammonia, manganese, nitrate, selenium, strontium, sulfate, and uranium.

Section 3.0: Community Background

3.1: Community Profile

The community of Shiprock is located within the Navajo Nation and is governed by a local Navajo Nation Government Chapter House. According to the U.S. Census Bureau's *2012-2016 American Community Survey 5-Year Estimates*, Shiprock is the second largest tribal community within the Navajo Nation, with a population of 8,135 people. In addition, the 2010 Census reported 2,343 households in Shiprock. Of these households:

- 16.2 percent are one-person households
- 19.2 percent are two-person households
- 17.8 percent are three-person households
- 17.6 percent are four-person households
- 16.1 percent are five-person households
- 6.3 percent are six-person households
- 6.8 percent are seven-or-more-person households

Racial makeup is:

- 96.4 percent Native American
- 1.9 percent Caucasian
- 1.3 percent Asian or Pacific Islander
- 0.3 percent black or African American

Age distribution of the population shows:

- 32.9 percent under the age of 18
- 28 percent from 25 to 44
- 22.7 percent from 45 to 64
- 8.5 percent are 65 or older
- 7.8 percent from 18 to 24
- The median age is 29.9

Shiprock's median household income is \$36,417, and the median income for a family is \$41,344. Males have a median income of \$31,122 versus \$28,622 for females. The per capita income for the census-designated area is \$14,102. Approximately 33.2 percent of families and 33.7 percent of the population were below the poverty line, including 48.1 percent of those under the age of 18 and 20 percent of those 65 and older.

Educational institutions in the Shiprock area include:

- Shiprock High School
- Northwest High School (7th to 12th grade)
- Career Prep High School
- Tsé Bit A'í Middle School
- Mesa Elementary School
- Nizhoni Elementary School
- Eva B. Stokely Elementary School
- Atsá Biyáázh Community School
- Diné College
- San Juan College
- Navajo Technical College

Education attainment (for a total population of 4,819, ages 25 and over)

- 328 are less than grade 9
- 361 are grades 9 to 12 (no diploma)
- 1,650 are high school graduates (includes equivalency)
- 1,096 have some college
- 746 have an associate's degree
- 418 have a bachelor's degree
- 220 have a graduate or professional degree¹

3.2: Community Involvement

By September 1986, DOE completed all surface remediation, including disposal of residual radioactive material and debris, in compliance with EPA cleanup standards and regulations. LM's involvement with the communities continues today with participation in technical meetings, open houses, and other outreach events. It is mission-critical for LM to collaborate with impacted communities and to ensure their health and the environment are protected. For example, in-person meetings are opportunities for LM to gather with stakeholders to discuss and address their concerns relating to ongoing groundwater compliance activities and technical studies.

Under a cooperative agreement, LM works with the Navajo Abandoned Mine Lands (AML) Reclamation /UMTRA Program Department to conduct long-term surveillance and maintenance at the four Navajo Nation sites to ensure community and environmental safety.² LM also works with a variety of departments within the Navajo Nation government to help identify and protect cultural resources.

¹ Sources for Community Profile: *American FactFinder* and *2012-2016 American Community Survey 5-Year Estimates* (U.S. Census Bureau).

² In addition to the Shiprock site, the other Navajo Nation sites include: Mexican Hat, Utah, Disposal Site; Monument Valley, Arizona, Processing Site; and Tuba City, Arizona, Disposal Site.

In 2007, Congress directed DOE and other federal agencies — including EPA, NRC, Bureau of Indian Affairs, U.S. Department of Health and Human Services, and the Center for Disease Control (CDC) — to work collaboratively with the Navajo Nation to address uranium issues through a Five-Year Plan Community Outreach Network.

Along with the Five-Year Plan Community Outreach Network, a Tribal Intergovernmental Relations group (composed of LM, Hopi, and Navajo counterparts) was created to elevate community outreach and engagement with the Hopi and Navajo communities. The group was designed to share tribal information and to understand the lines of communication between all tribal and government entities.

In June 2016, LM and its contractor, Navarro Research and Engineering, Inc., opened an outreach office in Window Rock, Arizona. The Window Rock outreach office provides a place for the public to learn about LM and the sites on the Navajo Nation, the Navajo Nation Five-Year Plan, and the work being conducted to address uranium issues within the Navajo Nation. It provides community outreach and coordination assistance to LM, Navajo Nation leadership, and coordination of tribal programs, while also offering public affairs services to affected tribal communities.

3.3: Outreach Events associated with the Navajo Nation

In recent years, LM has attended, participated, or led the following outreach events:

2014

- December 5-6: Discovery Festival, Farmington, New Mexico
- December 12-14: Monument Valley, Utah, Balloon Festival

2015

- February 18: LM, Navajo, and Hopi Quarterly Meeting and Technical Exchange
- March 24-26: Navajo Land Summit II, Twin Arrows, Arizona
- May 1-2: Shiprock, New Mexico, Marathon
- May 26: Developing Productive Tribal Government and Community Relations Training
- May 28-29: San Juan Mining and Reclamation Conference (presentation), Telluride-Mountain Village, Colorado
- June 3-4: Traditional Law and Cultural Awareness Training, Grand Junction, Colorado
- June 24: LM, Navajo, and Hopi Quarterly Meeting and Technical Exchange
- July 2: Tuba City, Arizona, Chapter House Planning Meeting (presented to Chapter officials)
- September 23-25: LM Tribal Summit
- September 27-30: National Association of Abandoned Mine Lands Programs Conference, Santa Fe, New Mexico
- October 15: EPA Senior Leadership Meeting at Navajo Nation President's Office, Window Rock, Arizona
- October 15-18: Western Navajo Nation Fair, Tuba City, Arizona
- October 16-17: Discovery Festival, San Juan, New Mexico

- October 27: LM, Navajo, and Hopi Quarterly Meeting and Technical Exchange
- October 28: Navajo Five-Year Plan Outreach Network Meeting
- November 2: Oljato, Utah, Chapter House Planning Meeting (presented to Chapter officials)
- December 6: Shiprock, New Mexico, Regular Chapter House Meeting (presented to the public)
- December 4-6: Monument Valley, Utah, Balloon Festival

2016

- February 17: LM, Navajo, and Hopi Quarterly Meeting and Technical Exchange
- February 18: Tuba City, Arizona, Technical Presentations
- March 9-12: National Environmental Justice Conference and Training Program, Washington, DC
- March 19: Western Agency Chapter Meeting
- March 29-31: Navajo Division of Natural Resources Summit, Flagstaff, Arizona
- April 5: Tuba City, Arizona, Site Tour for Regulators and Agency Officials
- April 6: Tuba City, Arizona, Public Open House and Scoping Meeting
- April 7: Mexican Hat, Utah; and Monument Valley, Arizona, Site Tours for Regulators and Agency Officials
- April 8: Navajo Five-Year Plan Outreach Network Meeting, Monument Valley, Utah
- April 9: Public Open House, Monument Valley, Utah
- August 24: LM, Navajo, and Hopi Quarterly Meeting and Technical Exchange
- August 30-September 1: Citizen Participation Training
- September 6-11: 70th Annual Navajo Nation Fair, Window Rock, Arizona
- September 27-October 2: Northern Navajo Nation Fair, Shiprock, New Mexico
- October 7-8: Discovery Festival, San Juan, New Mexico
- October 13-16: Western Navajo Nation Fair, Tuba City, Arizona
- October 17-21: Radiation 101 Training
- October 21: Tuba City, Arizona, Open House and Public Site Tour
- November 15-16: LM, Navajo, and Hopi, Quarterly Meeting and Technical Exchange
- November 17-19: Monument Valley, Utah, Balloon Festival
- December 9: Shiprock, New Mexico, Christmas Parade of Lights

2017

- January 24 and 26: Presented with Navajo AML Reclamation/UMTRA Program Department at Diné College Campuses in Tsaile, Arizona; and Shiprock, New Mexico
- January 25: Open House with Navajo Nation Council Delegates, Window Rock, Arizona
- February 27: Governance Conference, Albuquerque, New Mexico
- February 27: Health Education and Human Services Committee Meeting, Window Rock, Arizona
- March 1: LM, Navajo, and Hopi Quarterly Meeting and Technical Exchange, Flagstaff, Arizona
- March 24: Navajo Five-Year Plan Outreach Network Meeting, Window Rock, Arizona; Shiprock, New Mexico

- March 25: Shiprock, New Mexico, Fun Run and Site Tour
- April 11: Eastern Agency Abandoned Uranium Mines (AUMs) Open House, Gallup, New Mexico
- April 12: Navajo Utah Commission Presentation, Mexican Water, Utah
- April 15: Tuba City, Arizona, Site Tour for Shonto Middle School Students
- April 27-28: Tuba City, Arizona, Site Tour for Tuba City Middle School Students
- May 1: Navajo Utah Commission Presentation, Window Rock, Arizona
- May 8-12: LM Director Navajo Nation UMTRCA Site Visits in Arizona, Colorado, New Mexico, and Utah
- July 24-26: LM, Navajo, and Hopi Quarterly Meeting, Grand Junction, Colorado
- July 20-22: Youth Day at the Boys and Girls Club and Parade, Crownpoint, New Mexico
- September 5-10: 71st Annual Navajo Nation Fair, Window Rock, Arizona
- September 21-23: American Indian Science and Engineering Society Conference, Denver, Colorado
- October 5-10: Northern Navajo Nation Fair, Shiprock, New Mexico
- October 12-15: Western Navajo Nation Fair, Tuba City, Arizona
- October 18-19: Tuba City, Arizona/Moenkopi Open House and Site Tour
- November 7-8: LM, Navajo, and Hopi Quarterly Meeting, Shiprock, New Mexico
- November 15-17: Navajo Nation Division of Natural Resources Summit, Flagstaff, Arizona
- November 17-18: Monument Valley Balloon Festival, Monument Valley, Utah
- December 4: Késhmish Tree Lighting Ceremony, Window Rock, Arizona

2018

- January 3: Oljato, Utah, Chapter House Planning Meeting (presented to Chapter officials)
- January 7: Oljato, Utah, Regular Chapter House Meeting (presented to the public)
- January 8: Kayenta, Arizona, Kayenta Township Meeting (presented to the Commission and public)
- January 25: Diné Uranium Remediation Advisory Commission (DURAC) Meeting, Tse Bonito, New Mexico
- January 30: Coconino County Supervisor Meeting, Flagstaff, Arizona
- February 5: Dennehotso, Arizona, Chapter House Planning Meeting (presented to Chapter officials)
- February 10: Navajo YES Lower Colorado Marathon AUM/UMTRA Outreach, Cameron, Arizona
- February 11: Dennehotso, Arizona, Regular Chapter House Meeting (presented to public)
- March 7-8: LM, Navajo, Hopi Quarterly Meeting and Technical Exchange, Tuba City, Kykotsmovi, Arizona
- March 14: STEM-sation Day Outreach, Shiprock High School, Shiprock, New Mexico
- March 17: Restoring K'é Conference 2018, Shiprock Youth Center, Shiprock, New Mexico
- March 29: DURAC Meeting, Cove, Arizona
- April 5: STEM-sation Day Outreach, Greyhills Academy High School, Tuba City, Arizona
- April 8: Oljato, Utah, Regular Chapter House Meeting (presented to the public)

- April 14-15: Mexican Hat and Monument Valley, Utah, Community Information Meetings
- April 25: Diné College 50th Anniversary STEM Fest, Diné College, Tsaile, Arizona
- April 25-27: National Environmental Justice Conference, Washington, DC
- May 4: Shiprock, New Mexico, Marathon
- May 8-10: Navajo AML/UMTRA Program, OSMRE Coal Field Communications Training, Window Rock, Arizona
- May 24: DURAC Meeting, Blue Gap Chapter House, Blue Gap, Arizona
- May 30: Uranium Town Hall Meeting with Arizona Congressman Tom O'Halleran, Cameron, Arizona
- May 31: 150th Year of Treaty of 1868 Health Fair Event, Tse Bonito, New Mexico
- June 20-22: Navajo EPA Conference, Flagstaff, Arizona
- June 26-27: LM, Navajo, Hopi Quarterly Meeting and Technical Exchange, Flagstaff, Arizona
- June 28: DURAC Meeting, Mariano Lake, New Mexico
- June 30: ASPECT Plane Outreach Event, Tuba City, Arizona
- July 10-11: Community Outreach Group Meeting and Open House, Window Rock, Arizona
- July 19-21: Eastern Navajo Nation Fair Kids Day/Fair/Parade, Crownpoint, New Mexico
- July 26: DURAC Meeting, White Cone, Arizona
- July 31: Radiation Exposure Compensation Act Public Meeting, Shiprock, New Mexico
- August 20-23: 2018 Long-Term Stewardship Conference, Grand Junction, Colorado
- August 30: Shiprock Site Aerial Survey Outreach, Shiprock, New Mexico
- September 6-8: Navajo Nation Fair, Window Rock, Arizona
- September 13: STEM-sation Day Outreach, Kirtland Central High School, Kirtland, New Mexico
- September 19: Chartering Session with Navajo AML/UMTRA Program
- September 26: Shiprock Site Tour for DURAC, Shiprock, New Mexico
- September 27: DURAC Meeting, Shiprock, New Mexico
- October 4: National American Indian Science and Engineering Society (AISES) Conference, Oklahoma City, Oklahoma
- October 4-6: Northern Navajo Nation Fair, Shiprock, New Mexico
- October 11-13: Western Navajo Nation Fair, Tuba City, Arizona
- October 16-17: Navajo/Hopi/DOE Quarterly Meeting, Flagstaff, Arizona
- October 23: Halchita Community Information Meeting, Halchita, Utah
- November 8: STEM-sation Day Outreach, Chinle High School, Chinle, Arizona
- November 17: Monument Valley Marathon, Monument Valley, Utah
- November 26 and 28: Diné College STEM Fest, Tsaile, Arizona
- November 29: International Uranium Film Fest, Navajo Nation Museum, Window Rock, Arizona

3.4: Outreach Materials

LM provides informational materials at outreach events, including:

- Site fact sheets
 - Mexican Hat, Utah, Disposal Site
 - Monument Valley, Arizona, Processing Site
 - Shiprock, New Mexico, Disposal Site
 - Tuba City, Arizona, Disposal Site
 - Tuba City Uranium Ore Deposit Formation in the Tuba City, Arizona, Area Fact Sheet
 - Window Rock, Arizona, Navajo Nation Community Outreach Network Office Fact Sheet
- Community information sheets
 - Mexican Hat, Utah, Disposal Site
 - Monument Valley, Arizona, Processing Site
 - Shiprock, New Mexico, Disposal Site
 - Tuba City, Arizona, Disposal Site
- Energy Ant coloring book
- Gamma Goat coloring book
- Women of the Manhattan Project coloring book
- Historical Women in STEM 2017 coloring book
- LM overview brochure
- LM Sites on Navajo Nation Land brochure
- LM Strategic Plan brochure
- Uranium and Radiation on the Navajo Nation Agency Resource List
- LM video detailing the work conducted on the Navajo Nation
- Window Rock, Arizona, Outreach Office Map
- Working with the Navajo Nation fact sheet
- Uranium and Radiation on the Navajo Nation Resource List 2018
- LM children's brochure

Section 4.0: Community Concerns

Through a series of informal interviews, discussions, community meetings, and open houses, tribal community members and officials (tribal programs staff and Navajo Chapter representatives) from the Navajo Nation expressed the following concerns related to the Shiprock site:

- Contamination in groundwater making its way to the San Juan River
- Contaminated groundwater at the site affecting the tribal community's drinking water
- Contaminated groundwater at the site affecting livestock wells located near the site
- Radiation being emitted from the disposal cell
- Relocating the disposal cell
- Incidence of cancer within tribal communities
- Dust blowing off the site and into the communities
- Air quality survey near the homes of the site
- Residential housing near the site being exposed to radioactive contamination
- Restoration of natural and traditional lifeways impacted from the disposal cell
- Cultural significance of seepages, plants, and use of water (implementation of traditional ecological knowledge)
- Disposal cell is unlined
- Weekday-evening meetings are a challenge to attend

4.1: Response to Community Concerns

LM has conducted the following community involvement activities that provide opportunities to directly engage with the public and respond to community concerns:

- May 1-2, 2015, Shiprock, New Mexico, Marathon.
- December 6, 2015, Shiprock, New Mexico, Regular Chapter House Meeting (presented to the public).
- September 27-October 2, 2016: Northern Navajo Nation Fair, Shiprock, New Mexico.
- January 24 and 26, 2017, Presentations shared with Navajo AML/UMTRA Program Department at Diné College Campuses in Tsaile, Arizona; Shiprock, New Mexico.
- March 25, 2017: Shiprock, New Mexico, Fun Run and Site Tour.
- October 5-10, 2017: Northern Navajo Nation Fair, Shiprock, New Mexico (information provided included information sheets detailing cleanup activities at the Shiprock site related to groundwater, sampling, monitoring, and disposal cell design). DOE technical staff, Mark Kautsky, was present to answer community questions and concerns. Staff from the Navajo AML/UMTRA Program Department were present to provide information on their coordination with LM, and their work to address AUMs within the Navajo Nation. Staff from the Birth Cohort Study were present to provide information on their findings related to the health impacts of uranium.
- November 7-8, 2017: LM, Navajo, and Hopi Quarterly Meeting, Shiprock, New Mexico. LM staff, representatives from the Navajo AML/UMTRA Program Department, the director of the Hopi

Tribe Department of Natural Resources, and Shiprock Chapter President Chili Yazzie were present for this meeting.

- March 14, 2018: STEM-sation Day Outreach, Shiprock High School, Shiprock, New Mexico. Materials provided to the community included site fact sheets detailing compliance activities related to groundwater, sampling, monitoring, and disposal cell design. Contractor technical staff presented a groundwater demonstration model and hands-on groundwater sampling.
- March 17, 2018: Restoring K'é Conference 2018, Shiprock Youth Center, Shiprock, New Mexico.
- May 4, 2018: Shiprock, New Mexico, Marathon. Materials provided to the community included site fact sheets detailing compliance activities related to groundwater, sampling, monitoring, and disposal cell design.
- September 27, 2018: DURAC meeting, Shiprock Chapter House. DURAC commissioners and members of the Shiprock community were present.

At each of these community involvement events, DOE shared information with the public about the status of groundwater contamination, construction of the disposal cell, and efforts to remove contamination from the groundwater. The LM site manager and staff provided information on the location and characteristics of contamination in groundwater, with the assurance that contamination levels reaching the San Juan River are not hazardous or dangerous to human health or the environment. DOE also provided additional information to inform tribal communities about engineering design and performance aspects of the disposal cell that mitigate exposure to toxic material.

4.2: Summary of Communication Needs

Community members have requested DOE address their communication needs through meeting notices provided at the Shiprock Chapter House, published in local newspapers, and aired on Navajo AM/FM radio stations (KTNN and KNDN). Tribal community members also expressed their desire to 1) host public events held on non-payday weekends when community members are likely to attend meetings, and 2) present and receive community feedback at Chapter planning meetings and Chapter meetings.

Section 5: Community Involvement Strategy

The goal of this strategy is to facilitate communication between community members and LM, while also providing opportunities for meaningful and active involvement regarding Shiprock site activities. DOE adopted this strategy based on feedback from community involvement interviews, previous community meetings, and comments received from local officials.

5.1: Community Involvement Activities

1. Information on current and proposed site activities	
<i>Activity 1A: Present information at Shiprock Chapter meetings</i>	
Objective:	Present information regarding site activities
Method:	LM representatives will present an update at Shiprock Chapter meetings. Tools may include presentations, site information fact sheets, and the LM website address for detailed site information.
Timing:	Semiannually
<i>Activity 1B: Conduct open houses and site tours.</i>	
Objective:	LM site manager and staff will provide in-depth information to community members about site activities and the scientific and engineering rationale for these activities
Method:	Host semiannual open houses at community meeting locations (e.g., Chapter House, local high school). Conduct mid-morning site tours that will include maps detailing cell location, and groundwater compliance strategy.
Timing:	Late spring and early fall
2. Timely outreach and information on community meetings, site open houses, and site tours	
<i>Activity 2A: Post flyers in public locations about upcoming community meetings, open houses, and site tour</i>	
Objective:	Post information about community meetings, open houses, and site tours
Method:	Post meeting information at the Shiprock Chapter House public information board, local businesses, and government offices (tribal, state, and federal)
Timing:	As needed
<i>Activity 2B: Advertise on local radio stations, tribal newspapers, and newsletters</i>	
Objective:	Provide public service announcements on community meetings, quarterly updates, open houses, and site tours
Method:	Contact KTNN and KNDN. Place information ads in the <i>Navajo Times</i> and <i>Farmington Daily Times</i> with information announcing upcoming community meetings, quarterly updates, open houses, and site tours. Establish a site point-of-contact for follow-up purposes.

Timing:	Fifteen days and five days prior to site meetings, open houses, and site tours
<i>Activity 2C: Mail informational post cards</i>	
Objective:	Mail informational postcards detailing upcoming community meetings, quarterly updates, open houses, and site tours
Method:	Collect physical mail and email addresses from community members during community meetings, quarterly updates, open houses, and site tours for distributing information announcing similar upcoming events
Timing:	Fifteen days prior to planned community meetings, quarterly updates, open houses, and site tours

3. Make times and dates for open houses and site tours more accessible for members of the community

Activity 3A: Work with community leadership and community members to determine optimal date, time, and location for community meetings, open houses, and site tours

Objective:	Determine the best time frame to conduct community meetings, open houses, and site tours
Method:	Poll community leaders and community members during Chapter meetings (engage with Chapter House coordinator to schedule) and outreach events to determine the best time frame for conducting community meetings, open houses, and site tours. Coordinate times with scheduled events and gatherings in the community. Explore developing regular hours at the site to provide tours to the public.
Timing:	Conducted during Chapter House quarterly updates, informal polling within the community

4. Address community concerns about groundwater contamination, human health, and the environment

Activity 4A: Provide information on groundwater contamination

Objective:	Inform community about the groundwater conditions, and hydrology and geology near the site
Method:	LM site manager and technical staff presentations at community meetings, quarterly updates, open houses, and site tours. Give presentations illustrating the site hydrology and geology.
Timing:	Semiannually in the spring and fall

5. Address community concerns that radiation from the site is contributing to cancer in the community

Activity 5A: Provide joint information and presentations from Agency for Toxic Substances and Disease Registry, Indian Health Service, and LM on cancer, indeterminate causes for cancer, and site cleanup and monitoring activities reducing community's exposure to radiation

Objective:	Inform community of indeterminate causes of cancer. Provide information on site activities that reduce the community's exposure to radiation. Foster informational community dialogue (involving multiple federal and tribal agencies) and programs on community concern. Identify health resources available to community members. The information can explain the lack of exposure pathways and the low-level of radiation in tailings materials, if they are encountered. The key is increasing awareness and understanding of actual risks and how to personally mitigate or avoid them (e.g., do not access restricted water, use livestock water for drinking, stay out of abandoned uranium mines, report suspicious areas to Navajo EPA or other agencies, etc.).
Method:	This discussion may be included in community meetings, Five-Year Plan agencies' meetings, quarterly updates, open houses, and site tours. It may also be conducted at a community meeting designed to specifically address this community concern.
Timing:	Ongoing

6. Address recommendation that all outreach materials need to have a cultural connection to the community for better interpretation and understanding

Activity 6A: Provide expertise to the site leads and managers on culturally appropriate outreach materials regarding the four former uranium processing sites

Objective:	Inform the community about the site's groundwater conditions, the site's hydrology, and geology in all outreach materials, while also being culturally sensitive to community interpretation
Method:	This discussion may be exchanged between all site leads and managers for the four former uranium processing sites, community members, tribal officials, and the Navajo Nation Community Outreach Network Office located in Window Rock, Arizona
Timing:	Ongoing

5.2: Community Involvement Activities Time Frame Summary

Activity	Time Frame
Chapter House update meetings	Held semiannually (to be determined)
Open houses and site tours	Held in early fall and late spring
Announcements of meetings, open houses, and site tours	Distributed and published 15 days and five days prior to activity date(s)
Meetings to address community concerns	As needed

5.3: Community Notification

As part of DOE's ongoing effort to reach out to the Shiprock community regarding work conducted at the disposal site, it is vital that any public interaction involving federal, tribal, and contractor personnel, such as door-to-door notifications, be conducted in a safe manner. Staff will perform the following actions to ensure that the necessary steps are taken to thoroughly and safely communicate to the Shiprock community about site work:

- Attend regular meetings to notify community members and tribal members of DOE activities, as well as answer questions about upcoming site work
- Produce and post outreach flyers at public places, including the Chapter House and area businesses in Shiprock
- Post temporary announcement signs about site work along roadsides near the disposal site
- Produce door hangers, which communicate a clear description of the work that will be performed, and distribute to area residents in person or left on the door
- Conduct door-to-door outreach with no fewer than two staff members, including one member who is fluent in Navajo, if possible
- Exercise situational awareness before approaching homes. Do not approach if it doesn't seem safe
- During door-to-door notifications, keep a record of which homes are contacted and when, the result of that contact effort, and resident feedback; this record is to be provided to the Public Affairs manager and the site lead, for distribution

Appendix A: LM Regional Contacts

Acting Environment Team 1 Leader	Art Kleinrath U.S. Department of Energy Office of Legacy Management 2597 Legacy Way Grand Junction, CO 81503 (970) 248-6034
Shiprock Site Manager	Mark Kautsky U.S. Department of Energy Office of Legacy Management 2597 Legacy Way Grand Junction, CO 81503 (970) 248-6018
Public Participation Specialist	Karen Edson U.S. Department of Energy Office of Legacy Management 11035 Dover St. Westminster, CO 80021 (202) 631-5417
Public Affairs Specialist <i>Navarro Research and Engineering, Inc.</i>	Chrissy Largo Navarro Research and Engineering, Inc. 47552-D State Hwy 264 Window Rock, AZ 86515 (928) 810-2100
Outreach Liaison <i>Navarro Research and Engineering, Inc.</i>	Milton Bluehouse Navarro Research and Engineering, Inc. 47552-D State Hwy 264 Window Rock, AZ 86515 (928) 810-2101
Site Lead <i>Navarro Research and Engineering, Inc.</i>	Dave Miller Navarro Research and Engineering, Inc. 2597 Legacy Way Grand Junction, CO 81503 (970) 248-6652

Appendix B: Navajo Nation Local Government Officials

Navajo Nation President	Jonathan Nez Navajo Nation Office of the President P.O. Box 7440 Window Rock, AZ 86515 (928) 871-7000
Navajo Nation Vice President	Myron Lizer Navajo Nation Office of the President P.O. Box 7440 Window Rock, AZ 86515 (928) 871-7000
Navajo Council Delegate	Eugenia Charles-Newton Council Delegate Navajo Nation Council P.O. Box 3390 Window Rock, AZ 86515 (928) 871-7160
Shiprock Chapter President	Duane “Chili” Yazzie P.O. Box 3810 Shiprock, NM 87420 (505) 368-1081
Shiprock Chapter Vice President	Nevina Kinlahcheeny P.O. Box 3810 Shiprock, NM 87420 (505) 368-1081
Navajo AML Reclamation /UMTRA Program Department	Madeline Roanhorse, Director P.O. Box 1875 Window Rock, AZ 86515 (928) 871-6982
Shiprock Navajo AML Reclamation /UMTRA Program Department	Rose Grey, Program Manager P.O. Box 3605 Shiprock, NM 87420 1-800-215-6226
Window Rock Navajo AML Reclamation /UMTRA Program Department	Cortasha Upshaw, Sr. Public Information Officer P.O. Box 1875 Window Rock, AZ 86515 1-866-458-4390
Navajo Nation EPA	Dr. Donald Benn, Executive Director P.O. Box 339 Window Rock, AZ 86515 (928) 871-7692

Appendix C: Elected State Officials

Governor of New Mexico	Michelle Lujan Grisham (Democrat) Office of the Governor 490 Old Santa Fe Trail-Room 400 Santa Fe, NM 87501 (505) 476-2200
State Senator	John Pinto, District 3 509 W. Morgan Ave. Gallup, NM 87301 (720) 357-9275
State Representative	Sharon Clahchischilliage P.O. Box 585 Kirtland, NM 87417 (505) 986-4453

Appendix D: Elected Federal Officials

Senator	Tom Udall, District 3 400 Gold Ave. SW Suite 300 Albuquerque, NM 87102 (505) 346-6791
Representative	Debra A. Haaland, District 1 400 Gold Ave. SW Suite 680 Albuquerque, NM 87102 (505) 346-6781
Representative	Ben Ray Lujan (Democrat) 2246 Rayburn Building Washington, DC 20515 (202) 225-6190

Appendix E: Environmental and Active Citizens Groups

Southwest Research and Information Center	105 Stanford SE P.O. Box 4524 Albuquerque, NM 87106 (505) 262-1862
Forgotten People CDC	P.O. Box 1289 Tuba City, AZ 86045 (928) 640-6110
Diné C.A.R.E. (Citizens Against Ruining our Environment)	10A Town Plaza, Suite 138 Durango, CO 81301 (970) 759-1908
Sacred Water Speaks (To' Nizhoni Ani)	P.O. Box 657 Kykotsmovi, AZ 86039 (928) 265-9459
Black Mesa Coalition	408 E. Route 66 Flagstaff, AZ 86002 (928) 213-5909
Haul No!	www.haulno.org stopcanyonmine@gmail.com
Diné Uranium Remediation Advisory Commission (DURAC)	P.O. Box 7440 Window Rock, AZ 86515 (928) 871-7186

Appendix F: Media Contacts

<i>Navajo Times</i>	P.O. Box 370 Window Rock, AZ 86515 (928) 871-1130
<i>Farmington Daily Times</i>	203 W. Main St. Farmington, NM 87401 (505) 325-4545
<i>Associated Press</i>	Felicia Fonseca, Reporter
KTNN	Public Service Announcements (928) 871-3553 Webmaster@ktnnonline.com
KWYK/KNDN	Public Service Announcements 1515 W. Main St. Farmington, NM 87401 (505) 325-1996

Appendix G: Meeting Locations

Shiprock Chapter House

P.O. Box 3810
Shiprock, NM 87420
(505) 368-1081

Shiprock High School

P.O. Box 3578
Shiprock, NM 87420
(505) 368-5161

Diné College-Shiprock Branch

1228 Yucca St.
P.O. Box 580
Shiprock, NM 87420
(505)368-3500

Shiprock Navajo AML Reclamation Department/UMTRA Program

P.O. Box 3605
1 Uranium Blvd.
Shiprock, NM 87420
1-800-215-6226

Farmington Civic Center

200 W. Arrington
Farmington, NM 87401
(877) 599-3331
