



COVE AREA ABANDONED URANIUM MINES

COMMUNITY INVOLVEMENT PLAN

INTRODUCTION

Navajo Nation was the site of widespread uranium mining from 1944 to 1986. While uranium mining no longer occurs within Navajo Nation, the legacy of uranium contamination remains. More than 500 abandoned uranium mine (AUM) claims, as well as homes and drinking water sources with elevated levels of radiation, are spread throughout Navajo Nation. Several of these AUM claims are located in the Cove Chapter, a remote and isolated area surrounded by the Lukachukai and Carrizo mountains in northeast Arizona. The Cove community is part of a larger area the United States Environmental Protection Agency (EPA) calls the Northern AUM Region. The Northern AUM Region is only a portion of Navajo Nation's Northern Agency and includes Aneth, Red Mesa, Teec Nos Pos, Beclabito, Sweetwater, Shiprock, Red Valley, Sanostee, Round Rock, Cove and Lukachukai Chapters.


Under the federal Superfund program, EPA is working with Navajo Nation Environmental Protection Agency (NNEPA) to oversee uranium mine assessments and cleanups on Navajo Nation. This Community Involvement Plan is a guide for community members and EPA, to ensure that information sharing and

dialogue regarding EPA's Cove Chapter activities is participatory, vibrant and meaningful. This document outlines specific outreach activities to address community concerns and to meet the following goals in the Cove Chapter:

- Provide community members with accurate, timely and understandable information about EPA abandoned uranium mine activities that is considerate to their communication preferences and culture.
- Coordinate with community members and tribal leaders to ensure that EPA understands community concerns and considers community goals in its decision-making process.
- Work with consideration of Dine Fundamental Law and Navajo traditional ways of life.

To put this plan together, EPA and NNEPA conducted a series of interviews with community members, local tribal officials and other stakeholders in the Cove community from March 2015 to September 2015. EPA and NNEPA conducted interviews in individual and group settings. Information from those interviews, along with information from EPA experiences in the community and from additional reports, were used to prepare this Community Involvement Plan.



 Community meeting participants discuss sampling results with EPA.

EPA also requested the assistance of EPA's Technical Assistance Services for Communities (TASC) program during the interview process. EPA requested the TASC program conduct a Technical Assistance Needs Assessment (TANA) to better identify community needs related to better understanding and participating in the cleanup process. TASC contractors assisted EPA with community meetings, discussions and follow-up activities. TASC then formulated recommendations, provided in this document's appendices, based on technical assistance needs identified during this process that could be fulfilled by EPA and other involved entities, with support from the TASC program where appropriate.



**AUM: Abandoned
uranium mine**



 EPA and community member discuss location of past mining operations in the distance.



 View of Cove Valley from Buffalo Pass overlook on Route 13.

COMMUNITY INVOLVEMENT PLAN ORGANIZATION

THE COMMUNITY

This section provides a brief community profile and identifies issues and concerns raised during the community interviews.

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THE COMMUNITY INVOLVEMENT ACTION PLAN

This section explains EPA's plan for addressing the issues and concerns identified in the interviews, and outlines opportunities for community members to provide input during EPA's process.

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APPENDICES

The appendices include information about:

- EPA's Superfund Process on Navajo Nation
- Glossary
- List of Acronyms
- Technical Assistance Needs Assessment Recommendations
- Uranium and Radiation Resource List

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THE COMMUNITY

COMMUNITY PROFILE

The Cove community is located in a remote and isolated area, surrounded by the Lukachukai and Carrizo Mountains. The Chapter House is about 42 miles from U.S. Highway 491 and 10 miles west of Red Valley, Arizona, on Navajo Route 33. The community is part of the larger Northern AUM Region, located on the eastern side of Navajo Nation, which includes the areas of Navajo Nation roughly between Tsaille, Arizona, and White Mesa, Utah. This region includes 11 Navajo Nation Chapters: Aneth, Red Mesa, Teco Nos Pos, Beclabito, Sweetwater, Shiprock, Red Valley, Sanostee, Round Rock and Lukachukai as well as Cove.

The Northern AUM Region is part of Navajo Nation's larger Northern Agency. The region lies within Navajo and Apache counties in Arizona, San Juan County in Utah, and San Juan and McKinley counties in New Mexico. The Northern AUM Region borders other Navajo Nation Chapters as well parts of Colorado's western and southern state lines.

From the late 1940s through 1967, uranium ore near the Cove Mesa area was mined from the mesas and cliff faces. Ore bodies at or near the surface were mined as open pits; buried ore bodies were mined through excavation into the mountainside. After the price of


uranium collapsed in the mid-1960s, the mines were abandoned, leaving behind radioactive uranium waste rock debris and exposed protore (unenriched mineral material). EPA in cooperation with NNEPA and the Cove community is in the process of investigating and eventually addressing the risk that the Cove Mesa AUMs pose to the community. EPA is conducting these activities under authorities granted in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) 104(a), also known as the Superfund law – removal actions in response to the release of a hazardous substance in the environment.

Community Overview

Cove Chapter residents live near the Chapter House or in rural locations. Many residents drive long distances to reach stores and regulated water hauling points.

Some community members in the area own and graze sheep, cattle and horses near their homesites and sheep camps. Most of the land in the area is used for grazing and farming, though to a lesser degree now than in the past, due to various factors including concerns over contamination. Various plants are also used for medicinal and traditional purposes.



 Navajo Nation Seal - Home of Cove Veterans.

Cove Community Vision Statement

Our vision for the community of Cove Chapter is simple. Cove will be recognized as a safe and desirable community that preserves its uniqueness and special qualities consistent with our Navajo way of life. We cherish our people and the land that we live on. We share a sense of place and take pride in our established and emerging family clustered homesteads. We are proud of our heritage and culture.

Our community enjoys a rich fabric of valley and woodland areas, interwoven with environmental resources, grazing, open space and the vast mountains, all representing a heritage of natural beauty. Our Chapter house serves and ties together the entire community. The Cove Chapter conducts meetings monthly to keep residents informed; residents have a forum to express their opinions to their Navajo Nation Council Delegate or to decide on matters concerning their Chapter.

Our plan is nothing less than the best of the past merged with the best of the future, creating a community where we can lead healthy productive lives in harmony with our beliefs and environment. This vision holds true to the values of our community.

Economics

According to the Navajo Nation Division of Economic Development, most jobs on Navajo Nation are in the government and service sectors (including schools, hospitals, and hotels and motels). Additionally, many activities of the Navajo Nation economy are unreported, such as selling arts & crafts or food at food stalls. Regardless of whether unreported economic activities are not considered in employment calculations, the actual unemployment rate for the Navajo Nation is substantially higher than the U.S. national average.²

While economic information is not collected specifically for the Northern AUM Region, the government and service employment sectors are visible in the region. Tourism is also a visible part of the economy. The region features the Lukachukai and Carrizo Mountains as well as a desert landscape that includes mesas, arches and sandstone outcrops. Bringing visitors to the area is a major interest of the Cove Chapter.

Demographics

According to the 2010 U.S. Census, 430 people live in Cove. Those living in the community are primarily Native American – many Chapters in the region have Native American populations that are above 95 percent.

² Navajo Nation Division of Economic Development. 2009-2010 Comprehensive Economic Development Strategy of the Navajo Nation.



 Welcome sign to the Cove area.

The languages spoken in the Cove community are primarily Navajo and English. According to the 2009-2013 American Community Survey, more than half of community members in Cove Chapter (over 64 percent) speak a language other than English at home. Around a quarter of community members in Cove (26 percent) report speaking English “less than very well.”

COMMUNITY CONCERNS AND PREFERENCES

To better understand the community, its culture and concerns, EPA and NNEPA interviewed community members, local officials and stakeholders in the Cove Chapter. All interviewees had knowledge of the transfer

Cove Community Priorities

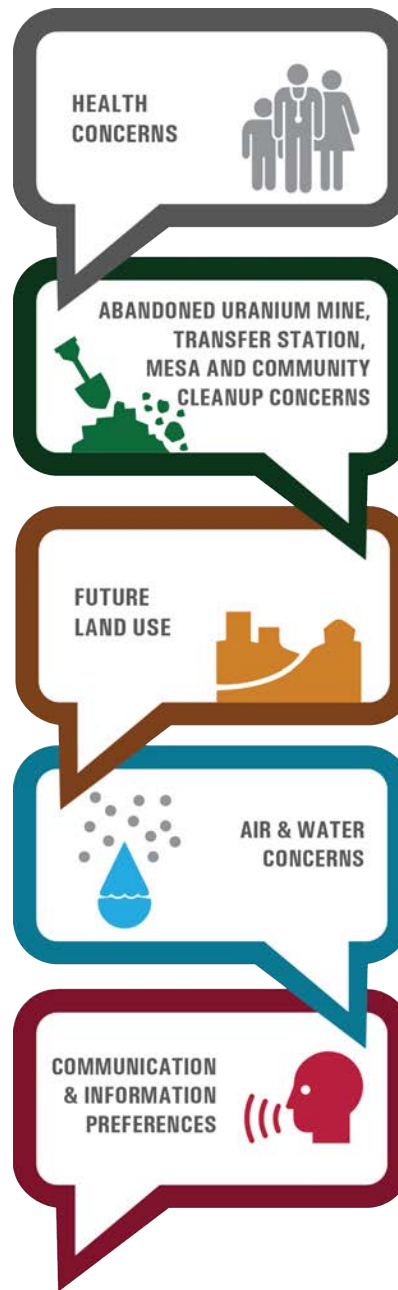
The Cove Chapter has identified the following priorities for the cleanup of the Cove Area Abandoned Uranium Mines site:

Employment and job training:
Employ students to carry out sampling and cleanup work where possible. Increase opportunities for people interested in building job skills.

Future use of farm plots:
Address community concerns about the safety of farming in these once-contaminated areas. Make community farm plots productive again.

Water safety:
Address water contamination in Cove Wash. Explore building retention dams for future agricultural uses.

Overall mines cleanup:
Focus on all mines in the area, including those not covered in the Tronox Settlement. Resolve concerns about the transfer stations and disposal of waste products taken from the area.



stations, mesas and abandoned uranium mines nearby. However, many were unfamiliar with EPA's role in the area. Many community members shared stories about family members that worked in the mines, grazed livestock on the mesas, and drank from and washed in local water sources. The community's livestock relied on these waters as well.

All interviewees shared the concern that cleanup be thorough, protective, lasting and timely. Some are concerned that large parts of the community may be contaminated, due in part to windblown dust and erosion. Others expressed concern about the long-term protectiveness of earlier cleanup efforts, including the transfer stations cleanup, building foundation replacements, Cove Day School cleanup and reclamation efforts. While community members expressed frustration at the delay in federal government involvement in the cleanup, most welcomed EPA's current efforts in the area.

Community concerns and preferences are outlined in this section, and EPA's community involvement action plan is outlined in the next section. The action plan will explain how EPA plans to address the concerns listed here. Some concerns are in the scope of EPA's work on abandoned uranium mines, and can be addressed by EPA working with the community and tribal leaders directly. For concerns outside of EPA's scope, EPA will collaborate with other federal, tribal and community organizations.

Community concerns and preferences are grouped into the following categories:



 Cove Valley, Arizona.

1. Health Concerns
2. Abandoned Uranium Mine, Transfer Station, Mesa and Community Cleanup Concerns
3. Future Land Use
4. Air and Water Concerns
5. Communication & Information Preferences

Health Concerns

Many community members and local officials asked for ways to better reduce their contact with uranium and wanted to better understand the risks of everyday activities as well as locations/areas to avoid. Many community members and local officials asked about the effects of dust blowing from the mines and area mesas. They were also concerned about

livestock and wildlife grazing in mine areas and drinking from contaminated water sources. Many interviewees were also concerned about the effects of drinking water or farming with uranium-contaminated water.

Many community members shared stories about their own illnesses or illnesses of their loved ones. Community members requested that mobile clinics (the Indian Health Service (IHS) mobile clinic, “Journey to Wellness” bus) return and asked for contact information for agencies and organizations that could assist with diagnosis or treatment.

Many community members and local officials also shared their frustration with the lack of information about health effects of uranium

and radiation on Navajo Nation. Interviewees discussed health effects such as cancers, kidney problems, joint issues, asthma, heart problems, birth defects and vision problems. They expressed interest in understanding which health conditions may be related to uranium and radiation exposure.

Additionally, community members and local officials asked for more information about compensation. Many noted that it is difficult to meet Radiation Exposure Compensation Act (RECA) criteria. They also noted that RECA does not account for additional hardships, such as lost water wells, lost animals, lost grazing land and effects on family members of miners.

Abandoned Uranium Mine, Transfer Station, Mesa and Community Cleanup Concerns

Many interviewees discussed their concerns about community involvement in the cleanup process. Community members and local officials requested that Chapter officials and committees, affected families and the general community receive timely updates. Many community members expressed concern about whether EPA would consider their input in the decision-making process. Community members and local officials also asked for clarification on the roles of various agencies and organizations, and noted the need for more outreach and education about EPA's cleanup process. Community members were interested in more information on the radiological characterizations of the area, as well as help with understanding technical information and screening documents. Residents also requested more information on companies who mined in the area and potentially responsible parties.


Participants shared several concerns about the cleanup itself with EPA as well. Community members and local officials worry about the extent of cleanup, with a focus not just on area mines but also the mesas, community areas and homes, and the need for clean air and water supplies. Community members would like to make sure that cleanup investigations include review of earlier cleanup actions (transfer stations, building foundation replacements, Cove Day School, reclamation efforts) to ensure their long-term protectiveness. Interviewees also shared concerns about long-term monitoring of the cleanup and the availability of funding.

Finally, community members and local officials indicated a need for mapping and signage so that people can understand the location and number of mines in the area, as well as specific locations that should be avoided for the time being. Community members noted that there are several open mines on all five mesas that are still accessible.

Future Land Use

Many interviewees emphasized the need to ensure that, in addition to the mines, Cove community areas are safe for people to live in, work and gather. Community members and local officials requested regular and consistent



 Participants accessing hard-to-reach areas during June 2015 sampling activities.

communication between EPA and the community.

Community members and local officials also shared their thoughts about future land use of mine areas and mesas. Some questioned whether the land will ever be safe for humans or livestock. Many expressed their preference that the land be returned safely to farming and grazing use. Most agreed that the land should not simply be fenced off and restricted from use by current and future residents. Improving local infrastructure – many roads are in poor condition; some areas lack electricity and running water – is a priority for the Cove Chapter. Infrastructure improvements would benefit residents while also supporting tourism. Increasing tourism opportunities is a major interest for the Cove Chapter.

Air and Water Concerns

Air and water quality and access to water were among the most important environmental issues in the Cove community. Many community members and local officials expressed concerns that water sources have been contaminated by abandoned uranium mines. Many were concerned about the contamination of local wells, and the need to clarify which wells are safe for drinking. Community members are also worried about health risks from rainwater that runs off from mines and mesas and toward homes and community areas, and asked whether this runoff is being monitored.

Community members also expressed concerns about access to safe drinking water. People buy bottled water to drink but continue to use local

water supplies for bathing, crop irrigation and limited livestock use. Community members and local officials expressed concerns about effects of the mines on groundwater and its future use as a drinking water source. Finally, interviewees noted that wind-blown contamination and dust are major concerns. They asked how and when air monitoring could take place, and where air monitors would be located.


Communication & Information Preferences

Many community members shared their preferences for communication and receiving information. Most agreed EPA should be transparent about work and strive to include all community members. Community members want EPA to keep Chapter officials updated on all work and also share information directly with community members.

Most community members and local officials recommended that EPA share information primarily in written form, and include many pictures and maps. They stressed that information should be simple and easy to understand. Most recommended sharing written information with community members through regular mailings. Written materials should be provided in English, with Navajo translation services available for verbal communication.

Community members also emphasized the importance of in-person meetings, particularly to bring the community up to speed on past cleanup actions, sampling and survey findings to date, and upcoming activities. Suggestions



 Sampling activities taking place in the spring of 2016.

included stand-alone meetings at the Cove Senior Center, presentations as part of Chapter House meetings, and daylong or multi-day workshops with experts. Interviewees suggested that both the Cove Chapter House and the Cove Senior Center could serve as information repositories. Following the interviews, EPA established an information repository in a designated facility behind the Chapter House.

Additionally, community members and local officials were concerned about hard-to-reach groups, such as those in ill health, those living in remote locations, and those without the time or resources to attend meetings. Most recommended regularly mailed updates for remote community members, and in-person visits to reach those in ill health and others who are unable to attend meetings.

To make sure that outreach is as comprehensive as possible, EPA will also use local media channels – the Farmington Daily Times newspaper and two area radio stations, KTNN 660 AM and KNDN 960 AM.





THE COMMUNITY INVOLVEMENT ACTION PLAN

After interviewing community members, local officials and stakeholders to better understand community issues and concerns, EPA prepared this community involvement action plan for the Cove community. This action plan outlines the tools EPA will use to share information. The action plan also outlines how EPA will make itself available to receive input from the community that will be considered in the decision-making process. Finally, the action plan details EPA's recognition of tribal government and interaction with government officials.

Timing information is included with each outreach tool to help community members understand when EPA will conduct outreach activities and what type of activities to expect. Community members can also contact the EPA Community Involvement Coordinator or the Cove Community Liaison with questions about future outreach activities.

EPA understands that many residents, especially elders, are Navajo language speakers. To facilitate the inclusion of all community members, EPA will have an interpreter or tribal representative present during informational meetings, open houses and door-to-door outreach. Interviewees

Community members can discuss concerns with EPA whenever a representative is in the area, or contact the EPA Community Involvement Coordinator or Cove Community Liaison by phone, email, or mail at any time.

recommended that EPA develop printed materials in English.

TOOLS FOR SHARING INFORMATION

Interviewees noted a significant need for EPA to share information about abandoned uranium mines in the community. Community members and local officials stated that they lack information about the current status of uranium mine cleanup and EPA's cleanup process. They would like regular progress updates. EPA will use the following tools to provide information to Cove community members:

Written Communication

Most interviewees expressed a preference for receiving written communications from EPA. Additionally, community members and local officials noted that written communications are an effective tool for reaching remote residents. They stressed that written communications be short and simple, and include as many graphics as possible.

EPA will provide written communications through factsheets and flyers. EPA will use written communications, distributed through the mail and via email, to provide updates on work taking place in the region and to cover topics in

greater depth, in response to community need. Interviewees have already identified several topics – the EPA cleanup process and the roles of different agencies; past cleanup activities, sampling and surveys; mine locations (mapping) and areas of concern; water quality and well water status; air quality; compensation; future cleanup plans and timeframes; and health studies and clinics in the area. EPA will ensure that mailing lists are up to date and includes interested residents in the area. Community members on



EPA and NNEPA work with community members in Cove Chapter.

TOOLS FOR SHARING INFORMATION & FOR EPA TO LEARN FROM THE COMMUNITY












 <p>Fact sheets</p> <p>AS NEEDED DEPENDING ON UPCOMING WORK AND COMMUNITY CONCERNS THAT NEED IN DEPTH DISCUSSION</p>	 <p>Mail and Email updates</p> <p>TWICE A YEAR OR MORE OFTEN AS NEEDED</p>	 <p>Door-to-door</p> <p>WHEN FIELD ACTIVITIES MIGHT IMPACT SPECIFIC HOUSEHOLDS OR AS NEEDED</p>	 <p>Special events</p> <p>ONCE A YEAR</p>	 <p>Coordination with other agencies</p> <p>ONGOING</p>	 <p>Job training programs</p> <p>AS NEEDED DEPENDING ON UPCOMING WORK</p>
 <p>EPA presentations</p> <p>WHEN MAJOR WORK IS PLANNED, WHEN A NEW RESPONSIBLE COMPANY IS IDENTIFIED, AS NEEDED AND AS REQUESTED</p>	 <p>EPA informational gatherings</p> <p>AS NEEDED DEPENDING ON UPCOMING WORK AND COMMUNITY CONCERNS THAT NEED IN DEPTH DISCUSSION</p>	 <p>Community group meetings</p> <p>AS NEEDED DEPENDING ON UPCOMING WORK AND COMMUNITY CONCERNS THAT NEED IN DEPTH DISCUSSION</p>	 <p>Community Liaison</p> <p>ONGOING</p>	 <p>Cove Environmental Information Resource Center</p> <p>ONGOING</p>	

 Table describing information-sharing tools between EPA and the community.

EPA's mailing list will receive information, such as EPA factsheets or postcard meeting invitations.

EPA uses email and paper mailing lists to update community members on EPA activities and events hosted by other organizations, such as workshops and clinics. Generally, EPA sends these mailings about once a month. EPA includes community partners in this outreach, such as Chapter officials, local organizations and schools, and local post offices.

EPA has shared the following materials with Cove community members:

- **Health Factsheets**

EPA worked with the Agency for Toxic Substances and Disease Registry (ATSDR) and other partner agencies to create a series of factsheets on uranium and radiation in Navajo Nation. These factsheets discuss uranium and radiation basics, health effects of uranium and radiation, and how to reduce contact with uranium and radiation.

- **Agencies to Contact with Questions Factsheet**

EPA worked with partner agencies to create a factsheet to help community members determine the correct agency to contact for different questions related to uranium or radiation on Navajo Nation.

- **Cove Wash Sampling Factsheet**

EPA created a factsheet to describe sampling activities that took place during the summer of 2015 in the Cove Wash Area.

Contact the EPA Community Involvement Coordinator or Cove Community Liaison to be added to the mailing list.

- **HAZWOPER Factsheet**

EPA created a fact sheet to describe Hazardous Waste Operations and Emergency Response (HAZWOPER) training that was provided to Cove Emergency Response Team personnel and interns conducting sampling activities in the Cove Wash.

- **Cove Wash Sampling Preliminary Finding Factsheet**

EPA created a factsheet to explain the findings from sampling conducted in the Cove Wash area during the summer of 2015. The factsheet also explained next steps EPA planned for in response to the findings.

These materials are available on EPA's website (<https://www.epa.gov/navajo-nation-uranium-cleanup/cove-arizona-mines-cleanup>).

These materials will be housed in the local information repository and community members can request copies by contacting the EPA Community Involvement Coordinator.

Information Repository

Several interviewees noted that information should be made available to all community members.

As a part of the Superfund process, EPA maintains a set of documents and information locally, where the public can easily access printed or digital copies. This is called the "Information Repository." Information repositories contain copies of technical or planning documents, factsheets, results of previous meetings and other similar types of information.

The main Information Repository for the Cove Chapter is the Cove Community Environmental Resource and Information Center, which is located

behind the Cove Chapter House (see information below). However, it is important to provide documents to local Chapters and community partners as well.

Physical address:

Cove Community Environmental Resource and Information Center
Located behind the Cove Chapter House, 42 Miles from U.S. Highway 491 and 10 miles West of Red Valley, Arizona on Navajo Route 33.

Mailing address:

P.O. Box 378
Red Valley, AZ 86544

Website:

<https://www.epa.gov/navajo-nation-uranium-cleanup/cove-arizona-mines-cleanup>

EPA Website

While online resources were not specifically requested by community members, regular updates on EPA's website will provide cleanup information and important documents for those with internet access. Information will be available online at: <https://www.epa.gov/navajo-nation-uranium-cleanup/cove-arizona-mines-cleanup>


Door-to-door Outreach

Many community members and local officials expressed concerns that information should be shared specifically with families that live or have grazing permits near priority mines and mines where work will take place. EPA will share information and discuss concerns with these residents, as well as those in ill health and others



 Cove Environmental Resource and Information Center.



 EPA presentation at Cove Chapter House.

who are unable to attend meetings, through door-to-door outreach. EPA will also coordinate with local officials to contact grazing permit holders, homesite leaseholders and homebound residents near these mine areas.

Newspaper and Radio Communication

EPA will use the following media channels for outreach in the Cove Chapter:

Newspaper Communication:

Farmington Daily Times

Radio Communication:

KTNN 660 AM Window Rock: The Voice of the Navajo Nation

KNDN 960 AM Farmington

Presentations at Cove Chapter House and Cove Senior Center

Many interviewees suggested that EPA present information about local uranium issues at the Cove Chapter House and/or the Cove Senior Center. This type of outreach was seen as an effective way to reach many in the Cove community. To date, EPA has presented information during Chapter meetings. EPA is planning for an in-depth series of presentations as part of a daylong- or multi-day community workshop, and will evaluate the need for follow-on presentations on an ongoing basis.

EPA will reach out to local officials and coordinate presentations with Chapter House meeting dates, Senior Center scheduling and other events. Parties interested in a particular presentation can contact the EPA Community Involvement Coordinator or the Cove Community Liaison.

Information repositories

- Check out the repository or visit the website
- Contact the EPA Community Involvement Coordinator or Cove Community Liaison if your school or group would like to host an additional repository location

Special Events


The Cove community has various events that EPA may be able to attend. These events are an opportunity for informal communication with local residents. EPA will work with the Cove Chapter to identify appropriate opportunities for participation, but events could include:

- Red Mesa Elderfest
- Navajo Area Aging Gathering
- Cove Memorial Day Celebration

Coordination with Other Agencies and Organizations

The interviews indicated the need for better coordination among organizations working on uranium issues in the area. Community members and local officials are often unsure of the missions of different organizations and find it difficult to



 Diné College interns participating in sampling activities during the summer of 2015.

stay updated on progress and events hosted by the various groups.

As part of the new Five-Year Plan (2014-2018), federal agencies are creating a community outreach network to coordinate federal efforts across Navajo Nation. In addition, EPA is working to strengthen ties with other federal, tribal and community organizations in the Northern AUM Region. EPA will also provide information to

Your input is important. Please provide input at any time by contacting the EPA Community Involvement Coordinator or Cove Community Liaison.

Key Contacts

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community members about the roles of different organizations and events hosted by various groups in the area.

EPA will continue to strengthen relationships with:

- Navajo Nation Environmental Protection Agency (NNEPA)
- Navajo Nation Abandoned Mine Lands Program (NNAML)
- Indian Health Service Community Uranium Exposure-Journey to Healing (CUE-JTH) program

- Indian Health Service Radiation Exposure Screening and Education Program (RESEP)
- Navajo Birth Cohort Study staff, especially the Clinical Cohort Liaisons (CCLs) and Community Health Environmental Research Staff (CHERS)
- Navajo Nation Department of Health Community Health Representatives (CHRs)
- Federal Five-Year Plan Partners, including the Bureau of Indian Affairs (BIA), Indian Health Service (IHS), Agency for Toxic Substances and Disease Control (ATSDR), Nuclear Regulatory Commission (NRC), and Department of Energy (DOE)
- Research universities, including the University of New Mexico (UNM) and Northern Arizona University (NAU)
- Chapter-level Community Land Use Planning Committees
- Others as suggested by community members and local officials



 EPA and NNEPA work with community members in Cove Chapter.

Summary

EPA and NNEPA interviewed community members, local officials, and other stakeholders in the Cove community from March 2015 to September 2015. EPA used information from these interviews to learn about community concerns and prepare this Community Involvement Plan. EPA would like to thank interviewees and the communities for their time, patience and willingness to share their stories and concerns with us.

EPA recognizes that receiving input and feedback from community members is crucial to the success of uranium cleanup on Navajo Nation. EPA will continue to work closely with community members and elected officials in our cleanup process, as outlined in this Community Involvement Plan. Additionally, community members are always welcome to provide input by contacting the EPA Community Involvement Coordinator or Cove Community Liaison.

Uranium Awareness Outreach Campaign

EPA has been working with ATSDR to increase awareness among Navajo people about uranium issues on Navajo Nation.

EPA, ATSDR and IHS developed a series of posters for 10 geographic regions of Navajo Nation. These posters feature a map showing locations of abandoned uranium mines, contaminated water sources, regulated watering points and other landmarks. These posters also include information about warning signs, reducing contact with uranium on Navajo Nation and maintaining good health. Some of these

materials were provided to Cove residents, but a broader distribution through the mail or via the Cove Chapter, could increase outreach.

IHS and the CHRs distributed these posters to IHS Health Clinics and Chapters across Navajo Nation. To prepare for this outreach, EPA, IHS and ATSDR trained the CHRs on information contained in the posters. EPA will continue to coordinate with IHS, ATSDR and the CHRs on uranium awareness outreach.

OPPORTUNITIES FOR EPA TO LEARN FROM THE COMMUNITY

In addition to sharing information, EPA will use various techniques to give community members opportunities to provide meaningful input and make sure community concerns are considered in the EPA cleanup process. In addition to the opportunities outlined here, community members can provide input at any time by contacting the EPA Community Involvement Coordinator or the Cove Community Liaison.

EPA Presentations

EPA periodically will make presentations at local meetings in the Cove community. These meetings include Chapter meetings, Community Land Use Planning Committee meetings, and both Chapter and District Level Grazing Meetings. These short presentations provide time for community members to ask questions and give feedback. Typically, EPA will make presentations when major work is planned in an area, when a

new responsible company has been identified, periodically to increase awareness about EPA work, and as requested by Chapter officials and community members. Community members may request in-depth technical forums or trainings from EPA.

EPA Informational Gatherings

Many interviewees recommended EPA also host informational gatherings, especially when more time is needed for deep engagement with community members. Examples for these types of meetings include discussion about signs and fences in a region, cleanup options for a mine or group of mines, large amounts of work planned for an area, or particular community concerns that need to be discussed in depth.

Depending on the topics to be discussed, the following formats are recommended:

- Meetings and Open Houses – larger community meetings that may include EPA presentations, information presented on posters, and time for the community to ask questions and give feedback.
- Small Venue Meetings and Focus Groups – smaller and more informal gatherings focusing on a particular geographic region, interested group, or extended family.
- Listening Sessions – opportunities for community members to share their thoughts and concerns with EPA representatives.
- Workshops and Facilitated Discussions – facilitated meetings designed to answer specific questions or address specific community concerns.

EPA will send out meeting notices at least one week prior to any gatherings via the email list and by contacting community partners and other outlets as appropriate. Additionally, EPA can provide technical assistance to help community groups understand technical documents and the cleanup process through EPA's Technical Assistance Services for Communities (TASC) program. Interested community members should contact the EPA Community Involvement Coordinator.

WORKING WITH NAVAJO NATION TRIBAL GOVERNMENT

The Navajo Nation is a federally recognized tribe with its own governmental system. EPA policy is to consult on a government-to-government basis with federally recognized tribal governments when EPA actions and decisions may affect tribal interests.

EPA interacts with Navajo Nation government on several levels as a part of abandoned uranium mine assessment and cleanup on Navajo Nation. EPA consults directly with the Navajo Nation President for significant developments, such as major settlements and new federal Five-Year Plans for addressing uranium contamination on Navajo Nation. EPA collaborates with the NNEPA Superfund program and Navajo Nation Department of Justice on all abandoned uranium mine assessment and cleanup. Finally, EPA communicates periodically with officials such as local Navajo Nation Council Delegates and Chapter officials at key times during the Superfund process.



Technical Assistance Services for Communities

Contact the EPA Community Involvement Coordinator if you are interested in learning more about technical assistance services that EPA can provide to community groups.

APPENDICES

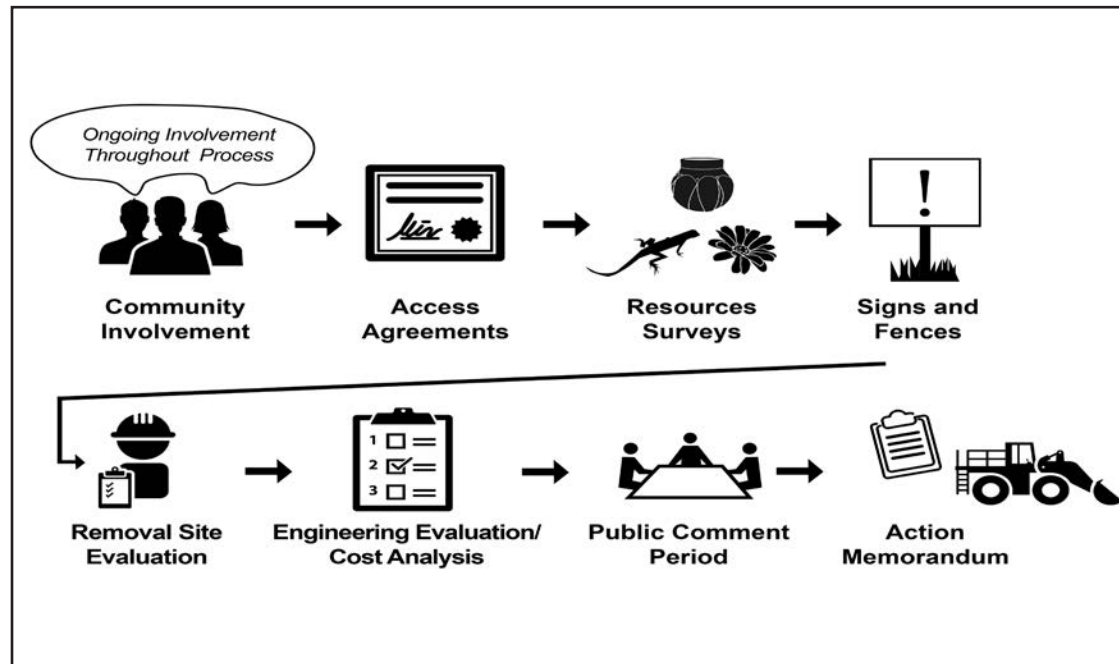
EPA'S SUPERFUND PROCESS ON NAVAJO NATION

EPA is addressing abandoned uranium mines on Navajo Nation through the EPA Superfund Program, in partnership with the Navajo Superfund Program. This section provides an outline of the Superfund Process on Navajo Nation. This outline is specific to cleanup actions requiring over six months planning time, as these are the most common on Navajo Nation.

A similar process is used for cleanup actions requiring less planning time.

EPA is initially focusing on moving priority mines through the Superfund Process. These mines have high levels of radiation and are near homes or water resources. There are X priority mines in and near the Northern AUM Region.

EPA can move forward with mine assessment and cleanup by either identifying a responsible company to fund the cleanup, or by using federal funding. Once EPA identifies a responsible company, EPA can either negotiate a legal agreement or order the company to assess mines and evaluate cleanup options. Any work completed by responsible companies requires EPA and NNEPA oversight and approval.



The Superfund Process on Navajo Nation begins with access agreements. EPA or the responsible company must get access agreements signed by affected grazing permit holders and homesite lease holders before beginning work. At this point, EPA or the responsible company completes a cultural resources survey, and EPA must consult with the Navajo Historic Preservation Department Director on cultural resources that might be affected by assessment or cleanup work at the mine. Additionally, a biological survey may need to be completed, and EPA may need to consult with the Navajo Nation Department of Fish and Wildlife and the U.S. Fish and Wildlife Service on potential impacts to fish and wildlife.

After getting the necessary approvals, EPA or the responsible company may begin placing signs and/or fences at mines, depending on community input as well as the location and

 Superfund Process on Navajo Nation.

level of radiation of the mine. Then a detailed assessment of contamination begins, which is outlined in a document called a Removal Site Evaluation (RSE). Next, an evaluation of cleanup options is completed, which is summarized in a report called an Engineering Evaluation/Cost Analysis (EE/CA).

EPA uses the information in the EE/CA, along with input EPA has been receiving from the community throughout the assessment process, to select a preferred cleanup option. EPA presents the EE/CA and preferred cleanup option to the community in a public meeting, and the community is given a period of time to provide public comments.

EPA uses this additional feedback from the community to choose a cleanup option, and issues an Action Memorandum on the decision that is being made. At this point the cleanup on the mine site can begin.

GLOSSARY

Abandoned Uranium Mine (AUM) Claim – An AUM claim is generally associated with a patented or unpatented mining claim or a lease of federal, state, tribal or private lands. A claim may represent a single feature such as a surface



 EPA and NNEPA work with community members in Cove Chapter.

or underground excavation, or it may include an area containing a complex of multiple interrelated excavations. As a result, one claim may represent multiple “mines” listed in other databases.

Action Memorandum – EPA’s primary decision document that determines the need for a removal action, authorizes the removal action, identifies the action and cleanup levels (if applicable), and explains the rationale for the removal response.

Contamination – Introduction into water, air, and soil of microorganisms, chemicals, toxic substances, wastes, or wastewater in a concentration that makes the medium unfit for its next intended use.

Engineering Evaluation/Cost Analysis (EE/CA) – An analysis of cleanup alternatives for removal actions requiring more than six months’ planning time. EPA selects one of the

alternatives outlined in the EE/CA in the Action Memorandum.

Groundwater – The supply of fresh water found beneath the Earth’s surface, usually in aquifers, which supply wells and springs. Because groundwater is a major source of drinking and irrigation water, there is growing concern over contamination from leaching agricultural or industrial pollutants.

Information Repository – An information repository is a record storage area at or near a Superfund site that contains reports, documents, and factsheets pertaining to the site.

Radiation – Energy that travels in the form of waves or high-speed particles. One way that radiation can be released to the environment is during the decay of radioactive elements such as uranium.

Removal Action – Short-term immediate actions that address releases of hazardous substances that require expedited responses.

Superfund – The program operated under the legislative authority of CERCLA and the Superfund Amendments and Reauthorization Act (SARA) that funds and carries out EPA solid waste emergency and long-term removal and remedial activities.


Uranium – A heavy, naturally radioactive, metallic element that is used to produce nuclear power and weapons.

LIST OF ACRONYMS

ATSDR	Agency for Toxic Substances and Disease Registry
AUM	Abandoned Uranium Mine
BIA	Bureau of Indian Affairs
CCL	Clinical Cohort Liaisons
CDC	Centers for Disease Control and Prevention
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CHERS	Community Health Environmental Research Staff
CHR	Community Health Representative
CIP	Community Involvement Plan

CUE-JTH	Community Uranium Exposure-Journey to Healing Program
DiNEH	Diné Network for Environmental Health
DOE (USDOE)	United States Department of Energy
EE/CA	Engineering Evaluation/Cost Analysis
EPA (USEPA)	United States Environmental Protection Agency
IHS (NAIHS)	Navajo Area Indian Health Service
NAU	Northern Arizona University
NDOH	Navajo Department of Health
NDWR	Navajo Department of Water Resources
NNAML	Navajo Nation Abandoned Mine Lands
NNEPA	Navajo Nation Environmental Protection Agency
NRC (USNRC)	United States Nuclear Regulatory Commission
NTUA	Navajo Tribal Utility Authority
RECA	Radiation Exposure Compensation Act
RESEP	Radiation Exposure Screening and Education Program
RSE	Removal Site Evaluation
SARA	Superfund Amendments and Reauthorization Act
TANA	Technical Assistance Needs Assessment
TASC	Technical Assistance Services for Communities
UMTRA	Uranium Mill Tailings Remedial Action Program
UNM	University of New Mexico



 Cove EPA and community member evaluate past cleanup work in Cove community.

Technical Assistance Needs Assessment Recommendations

This section describes recommendations formulated by EPA's Technical Assistance Services for Communities (TASC) program to help meet the community's needs based on conversations with community members and stakeholders. The recommendations are specific to technical assistance and could be fulfilled by EPA and other involved entities, with support from the TASC program where appropriate.

Addressing information needs

As outlined in the CIP, there is a need for plain language information regarding AUMs and issues related to AUM contamination. To address these information needs, EPA could consider the following actions:

- Implement a local liaison position that would employ someone familiar with and local to the Cove area. This liaison could assist EPA with community outreach efforts, as well as:
 - Hold regular office hours at the local information repository.
 - Attend monthly planning and chapter meetings to present information from EPA on recent activities, upcoming work and to answer questions from community members.
 - Assist with logistics and ground support for EPA sampling and cleanup in the area.
 - Maintain and update EPA's mailing list.
 - Distribute flyers and fact sheets.
 - Assist in door to door outreach.
- Distribute a regular newsletter (either from EPA or community generated with EPA support).
- Create targeted fact sheets addressing information gaps and community interests. In addition to areas of interest and concern identified in the CIP, these fact sheets could also include information on:
 - Radiological characterization of the Cove area, including water sampling and flyover results.
 - Plain language summaries of site screening documents.
 - Information on potentially responsible companies.
 - Funds available for cleanup.
 - Timeline of cleanup activities.

- Present information at community venues, including but not limited to:
 - Chapter meetings.
 - District Grazing meetings.
 - Schools.
 - Senior citizens groups.
- Create topic specific, inter agency workshops to address community concerns related to the mines but not entirely under the purview of EPA. Additional topics of interest not previously outlined in the CIP could include:
 - Superfund 101.
 - Information on historic exposure to AUMs.
 - RECA and downwinder claim information.
 - Health impacts of uranium and radiation.

Addressing resource needs

Some resource needs related to AUMs in the Northern Agency go beyond what EPA can address. However, EPA and other agencies could consider assisting with the following activities:


- Increasing local access to safe drinking water, including more hauling points.
- Increasing fencing and signage for known mine areas.
- Creating a document repository and information resource center in Cove, Arizona, to ensure easier community access to site information.
- Working with health agencies to increase mobile clinics for screening and making local treatment options more readily available.
- Working with the Cove Chapter to identify infrastructure improvements during cleanup that could also benefit efforts to build a tourism economy in the area.
- Support a job training program in the future, as cleanup gets underway.

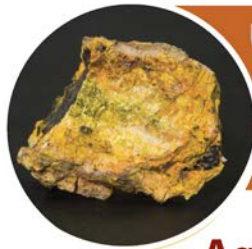
Addressing reuse needs

In considering potential reuse plans for AUMs, EPA and other appropriate agencies could consider creating a reuse assessment before completion of the cleanup.

URANIUM AND RADIATION RESOURCE LIST



 Farm plot sampling during summer 2016.



Uranium and Radiation on the Navajo Nation

Resource List 2016


Agencies to Contact with Questions

Topic	Program and Agency	Telephone Number
Mines and Structures		
Cleanup of chemical and radiological hazards at abandoned uranium mines	Region 9 Superfund Program, USEPA, San Francisco, CA	(800) 231-3075 (toll free)
	Eastern Region (505) 240-0093 Central Region (480) 250-0990 Northern Region (928) 215-9402 Western Region (415) 972-3068	
Contaminated structures	Navajo Superfund Program, NNEPA, Window Rock	(800) 314-1846
Actions to reduce physical hazards at abandoned mines	NNAML/Uranium Mill Tailings Remedial Action (UMTRA) Window Rock Office (928) 871-6982 Shiprock Office (505) 368-1220 Tuba City Office (928) 283-3188	
Radon in your home, Radon test kits	Radon Program, NNEPA, Window Rock	(928) 871-6790
Uranium Mill Sites		
Disposal sites – Long term care and maintenance	Office of Legacy Management, USDOE, Grand Junction, CO Manager for Mexican Hat (970) 248-6621 Manager for Shiprock (970) 248-6018 Manager for Tuba City (970) 248-6073	
Former processing site – Long term care and maintenance	Office of Legacy Management, USDOE, Grand Junction, CO Manager for Monument Valley (970) 248-6621	
Technical oversight, community outreach	NNAML/Uranium Mill Tailings Remedial Action Program (UMTRA), Window Rock	(505) 860-7279
Disposal sites – General licensing and oversight	US Nuclear Regulatory Commission, Washington DC	(301) 415-6749
Former processing site - Oversight	US Nuclear Regulatory Commission, Washington DC	(301) 415-6749

URANIUM AND RADIATION RESOURCE LIST, CONTINUED

Topic	Program and Agency	Telephone Number
Health		
Preventive health information, uranium awareness posters	Community Health Representative / Outreach Program, NDOH, Window Rock	(928) 871-6786
Uranium medical screening and monitoring program	Community Uranium Exposure – Journey to Healing, NAIHS, Northern Navajo Medical Center, Shiprock	(505) 368-7391 or (505) 368-7402
Navajo Birth Cohort Study	University of New Mexico, Albuquerque, NM ATSDR Division of Toxicology and Human Health Effects, Atlanta, GA	(877) 545-6775 (770) 488-1347
Downwinders radiation exposure compensation claim	Radiation Exposure Screening and Education Program (RESEP), NAIHS, Northern Navajo Medical Center, Shiprock Office of Navajo Uranium Workers, NDOH, Shiprock	(505) 368-7054 (505) 368-1260
Uranium workers radiation exposure compensation claim	Radiation Exposure Screening and Education Program (RESEP), NAIHS, Northern Navajo Medical Center, Shiprock Office of Navajo Uranium Workers, NDOH, Shiprock	(505) 368-7054 (505) 368-1260
Water		
Water hauling practices from safe drinking water sources	Public Water Systems Supervision Program, NNEPA, Window Rock	(928) 871-7755 http://www.navajopublicwater.org/
Locations of regulated watering points	Navajo Tribal Utility Authority, Fort Defiance	(800) 528-5011
Water quality of NTUA piped water in your home, or from an NTUA public water system	Navajo Tribal Utility Authority, Fort Defiance	(928) 729-6207 Ask for "consumer confidence report". Also available online at: http://www.ntua.com/ccr14.html
Surface water and groundwater quality	Water Quality Program, NNEPA Fort Defiance, Chinle Northern, Eastern Western	(928) 871-7185 (505) 368-1037 (928) 890-7599
Operation and maintenance of livestock water sources Locations of unregulated sources, livestock wells, windmills, earthen dams	Technical, Construction, and Operations Branch, NDWR, Fort Defiance Contact a district office:	To'hajillee: (505) 908-2740 Chinle: (928) 674-2210 Crownpoint: (505) 786-2396 Dilkon: (928) 657-8094 Fort Defiance: (928) 729-4003 Ganado: (928) 755-5971 Leupp: (928) 686-3289 Pueblo Pintada: (505) 655-5402 Shiprock: (505) 368-1146, 1062 Teec Nos Pos: (928) 656-3674 Tuba City: (928) 283-3170 Vanderwagon: (505) 778-5337
Tuba City Dumpsite		
Project lead	Western Regional Office, BIA, Phoenix, AZ	(602) 379-3723
BIA coordination	Division of Environmental and Cultural Resources, BIA, Central Office	(703) 390-6482
BIA community outreach	Navajo Regional Office, BIA, Gallup, NM	(505) 863-8285
Hopi Tribal water	Water Resources Program, Kykotsmovi, AZ	(928) 734-3712
Remedial investigation and feasibility study oversight	Region 9 Superfund Program, USEPA, San Francisco, CA	(800) 231-3075 (toll free)
Navajo Nation Solid Waste Act	Resource Conservation and Recovery Program, NNEPA, Window Rock	(928) 871-7816



 Cleanup work taking place at Transfer Station.

Cove Area Abandoned Uranium Mines
<https://www.epa.gov/navajo-nation-uranium-cleanup/cove-arizona-mines-cleanup>

Community Involvement Plan
2016

