



FW: DOE Office of Legacy Management - Summary of DOE Long-term Care Activities at UMTRCA Title I Sites in Navajo Nation

Steckley, Deborah to: Sara Jacobs, Cynthia Wetmore, Katrina Coltrain 06/27/2012 11:17 AM

From: "Steckley, Deborah" <Deborah.Steckley@lm.doe.gov>
To: Sara Jacobs/R9/USEPA/US@EPA, Cynthia Wetmore/R9/USEPA/US@EPA, Katrina Coltrain/R6/USEPA/US@EPA

Hi there,

Attached is a presentation which you all might be interested in. It provides just a little background about DOE LM's UMTRCA Program as well as information about LM activities which occur at the four UMTRCA Title I sites in the Navajo Nation. It was shared at an IHS-facilitated interagency agency which occurred in Shiprock, NM, in March. Federal agencies, Navajo Nation agencies and other interested folks (e.g., Chris Shuey, Perry Charley of Dine College) participated. U.S. EPA and Navajo Nation EPA Superfund were unable to attend this particular event due to competing priorities, I believe.

If look at it and are interested in learning more, please contact me.

Deb

-----Original Message-----

From: Steckley, Deborah
Sent: Wednesday, June 27, 2012 10:05 AM
To: Ma.Grace@epamail.epa.gov; Nicole Moutoux (Moutoux.Nicole@epamail.epa.gov)
Subject: DOE Office of Legacy Management - Summary of DOE Long-term Care Activities at UMTRCA Title I Sites in Navajo Nation

Hi Grace and Nicole,

Please note I noticed you both were included on the IHS email that Lisa Allee sent to a list of stakeholder agencies which attended, or were

invited to attend, an IHS facilitated interagency meeting which took place in Shiprock, NM on March 22, 2012, to discuss possible networking and outreach opportunities related to uranium issues in Navajo Nation.

I wanted follow-up with you as I believe we exchanged emails before and/or met at last November's Uranium Contamination Stakeholder Workshop which occurred in Farmington, NM.

Grace -- We spoke shortly before last fall's meeting in Farmington about the U.S. EPA/Navajo Nation EPA led tour of DOE's Shiprock UMTRCA Title I site which I now manage.

Nicole - I sat in on one of your presentations at the Farmington meeting, if my memory serves me right. We also might have been briefly introduced there.

Attached is a document which I presented at the IHS interagency meeting.

It provides an overview of long-term care activities that U.S. DOE

Office of Legacy Management performs at the four UMTRCA Title I sites in the Navajo Nation. I thought I'd reach out to inform you of our activities since we didn't have the opportunity to meet again in March.

Please don't hesitate to contact me if you ever have questions or concerns about the four UMTRCA Title I Sites in Navajo Nation.

If there

are opportunities to coordinate on outreach events in the future I hope

to work with you all. In addition to becoming the Shiprock UMTRCA Title

I site manager, I've very recently become DOE's outreach contact for the

Navajo UMTRCA Title I sites.

Best regards,

Deb

Deb Steckley

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- UMRCA_Navajo TitleI Briefing.pdf

Uranium Mill Tailings Radiation Control Act (UMTRCA) Program in Navajo Nation



Diné College students sampling fourwing saltbush at phytoremediation test plots at the Shiprock, New Mexico, Site.

U.S. Department of Energy (DOE)
Office of Legacy Management (LM)
March 22, 2012



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LM Mission

- “. . . to fulfill the Department’s post-closure responsibilities and ensure the future protection of human health and the environment.”



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LM Objectives

- Complying with environmental laws and regulations
 - Prepare, update, and implement long-term surveillance plans (LTSPs) that protect human health and the environment
 - Work closely with federal, state, local, and tribal governments to monitor results
 - Monitor, and prepare to act on, proposed changes to environmental laws and regulations
- Reducing health risks
 - Evaluate the range of risks and address the highest ones first



LM Objectives (continued)

- Partnering with other agencies to make environmental remedies better and last longer
 - Record and analyze data on long-term performance of disposal cells and groundwater treatment systems
- Overseeing DOE implementation of Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*
 - Promote and coordinate environmental justice activities across DOE
 - LM conducts a summer internship program for college students attending minority institutions



LM's 2011 summer interns.



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Background on the UMTRCA Program

- Congress passed the UMTRCA in 1978
- Title I of UMTRCA authorized DOE to clean up 21 inactive uranium milling sites
- DOE established the Uranium Mill Tailings Remedial Action (UMTRA) project in 1979 to execute cleanup obligations
- DOE completed surface cleanup of the sites in 1998
- DOE's congressional authorization to conduct surface cleanup terminated on September 30, 1998
- Long-term surveillance and maintenance (LTS&M) of UMTRCA Title I sites became the responsibility of LM with its establishment in 2003



UMTRCA Title I Site Locations



Management of UMTRCA Title I Sites

LTSPs

- LM uses LTSPs to manage UMTRCA sites
- LM performs annual site management activities, including inspections and maintenance. LTSP activities may include:
 - Inspecting disposal cells for subsidence, erosion, and other damage
 - Performing cell maintenance, erosion control, weed control, fence repair, and property management
 - Evaluating whether institutional controls remain in place
 - Conducting groundwater monitoring and sampling



LM technical support performing cell inspection activities.



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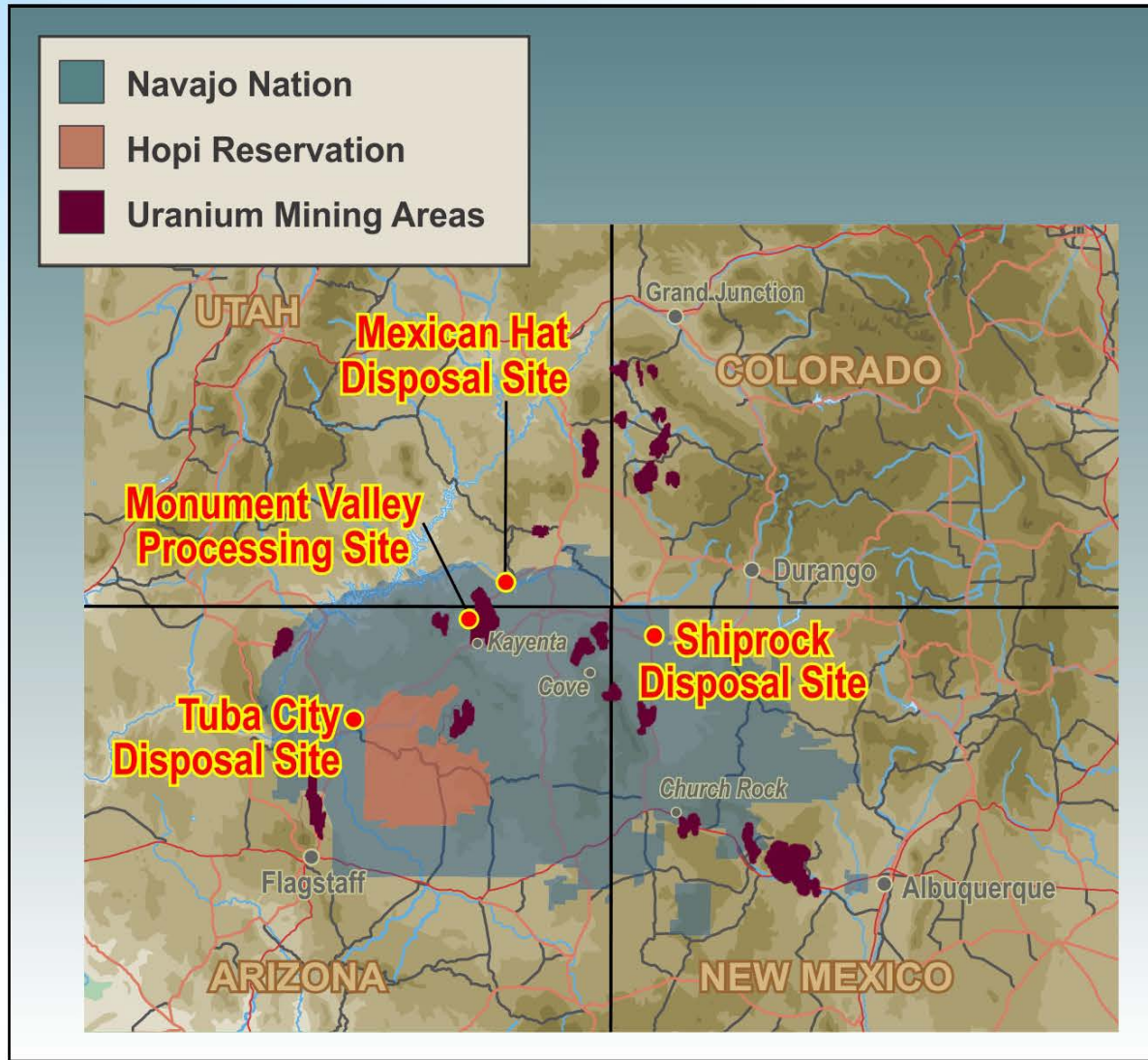
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Management of UMTRCA Title I Sites

- Groundwater cleanup strategies
 - Natural flushing is used at most sites
 - Goal is to remediate within 100 years
 - UMTRCA groundwater standards set by U.S. Environmental Protection Agency (EPA)
 - Active groundwater remediation used at Monument Valley, Arizona, Processing Site; Tuba City, Arizona, Disposal Site; and Shiprock, New Mexico, Disposal Site
- LM holds cooperative agreements with states and tribes to oversee LTS&M activities



Navajo Nation UMTRCA Title I Sites



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Navajo Nation UMTRCA Title I Sites

- LM-managed UMTRCA Title I Sites in Navajo Nation
 - Tuba City and Monument Valley, Arizona; Shiprock, New Mexico; and Mexican Hat, Utah, Disposal Site
- Navajo Nation provides regulatory and technical oversight over DOE environmental programs
 - Navajo Abandoned Mine Lands/UMTRA Department
 - Navajo Nation EPA Water Quality Program
- In FY 2011, DOE spent an average of approximately \$1.1 million per Navajo site versus an estimated \$220,000 per site at other UMTRCA sites
- Reasons for higher costs at the Navajo UMTRCA sites
 - Three of the four Navajo sites actively remediate groundwater
 - Permanent staff at Tuba City site



Shiprock Site

- Disposal cell containing mill tailings is stabilized-in-place and has a capacity of 1.9 million cubic yards covering 77 acres
- Cell sits on a bluff above the San Juan River and is near the fairgrounds
- Legacy groundwater plume is pumped into an 11-acre evaporation pond located east of cell
- Contamination has been reduced
- Town of Shiprock has grown since cell construction and residents have moved closer to the site
- Significant resident and stakeholder concerns remain



Tuba City Site

- Mill tailings are stabilized-in-place
- The disposal cell is located 4 miles east of Tuba City
- Tuba City is the only UMTRCA site with an active mechanical groundwater treatment system
- Decisions are made in consultation with Navajo Nation and the Hopi Tribe
- Both tribes value water in the arid climate. The goal of minimizing water loss led to the use of a mechanical system.



Monument Valley Site

- The Monument Valley site is 15 miles south of Mexican Hat
- Mill tailings from the site were relocated to Mexican Hat
- An alternate water supply was installed to provide water to nearby residents
- This site is adjacent to abandoned uranium mines
- LM is conducting a phytoremediation pilot study to determine if natural processes using four-wing saltbrush will clean up nitrate and ammonium and control groundwater plume movement
- Uranium levels are below regulatory standards



Mexican Hat Site

- The Mexican Hat disposal cell contains about 3.6 million cubic yards of residual radioactive materials
- Sampling is completed with the concurrence of Navajo UMTRA staff
- Active groundwater remediation is not required



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Questions About LM Site Activities?

- Please contact:

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- Or visit the LM website at <http://www.lm.doe.gov/>



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