



New Mexico Environment Department

Uranium Mine and Mill Cleanup

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(NMED)**

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November 15, 2024

Radioactive and Hazardous Materials Committee



HB 164 (NMSA 9-7A-16)

- Uranium Mine Reclamation bill
- Enacted in 2022
- Unanimously passed the Legislature
- NMED leading coordination of
 - ▣ Efforts of 11 other interested state agencies
 - ▣ Federal agencies
 - ▣ Tribal governments
 - ▣ Impacted communities
 - ▣ Workforce development
 - ▣ Other states
- Required NMED to
 - ▣ Develop a strategic plan
 - ▣ Create and maintain a central repository of reclamation activities
 - ▣ Report annually to the Legislature on the cleanup of mines and mills

1 HOUSE BILL 164
2 55TH LEGISLATURE - STATE OF NEW MEXICO - SECOND SESSION, 2022
3 INTRODUCED BY
4 Debra M. Sarifiana and Anthony Allison and D. Wonda Johnson and
5 Jeff Steinborn
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9
10 AN ACT
11 RELATING TO THE ENVIRONMENT; DIRECTING THE DEPARTMENT OF
12 ENVIRONMENT TO COORDINATE THE STATE'S EFFORTS TO CLEAN UP AND
13 RECLAIM FORMER URANIUM MINE AND MILL SITES; PROVIDING DUTIES;
14 CREATING THE URANIUM MINING RECLAMATION REVOLVING FUND; MAKING
15 AN APPROPRIATION.
16
17 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF NEW MEXICO:
18 SECTION 1. [NEW MATERIAL] URANIUM MINING RECLAMATION--
19 DEPARTMENT OF ENVIRONMENT--DUTIES.--
20 A. The department of environment shall:
21 (1) coordinate the state's efforts to clean up
22 and reclaim former uranium mine and mill sites and undertake
23 uranium mine and mill site reclamation projects. The energy,
24 minerals and natural resources department; the Indian affairs
25 department; the office of natural resources trustee; the state
.222289.1



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NMED Coordinator Activities

- Workforce Development
 - Economic Development Dept.
 - Dept. of Workforce Solutions
 - Industry
 - Internships

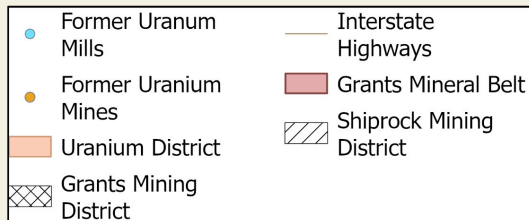
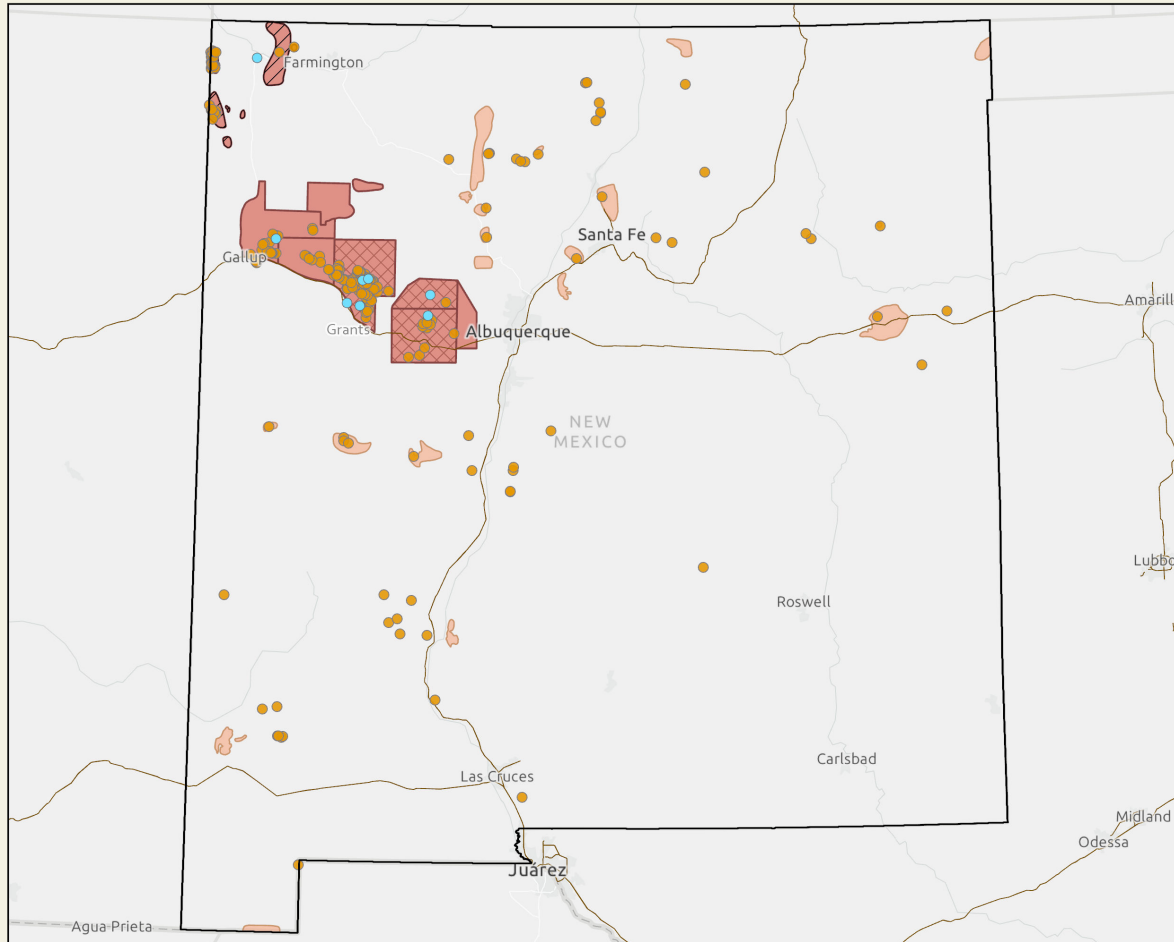
- Strategic Plan
- Centralized Data Repository (Database & Dashboard)
- Consultation and Coordination
- DOE, EPA, NRC, BLM, USFS, Communities, NGO, Tribal
- Reclamation Activities on State Permit Sites
- NMED Uranium Mine Cleanup Program

EMNRD Coordinator Activities

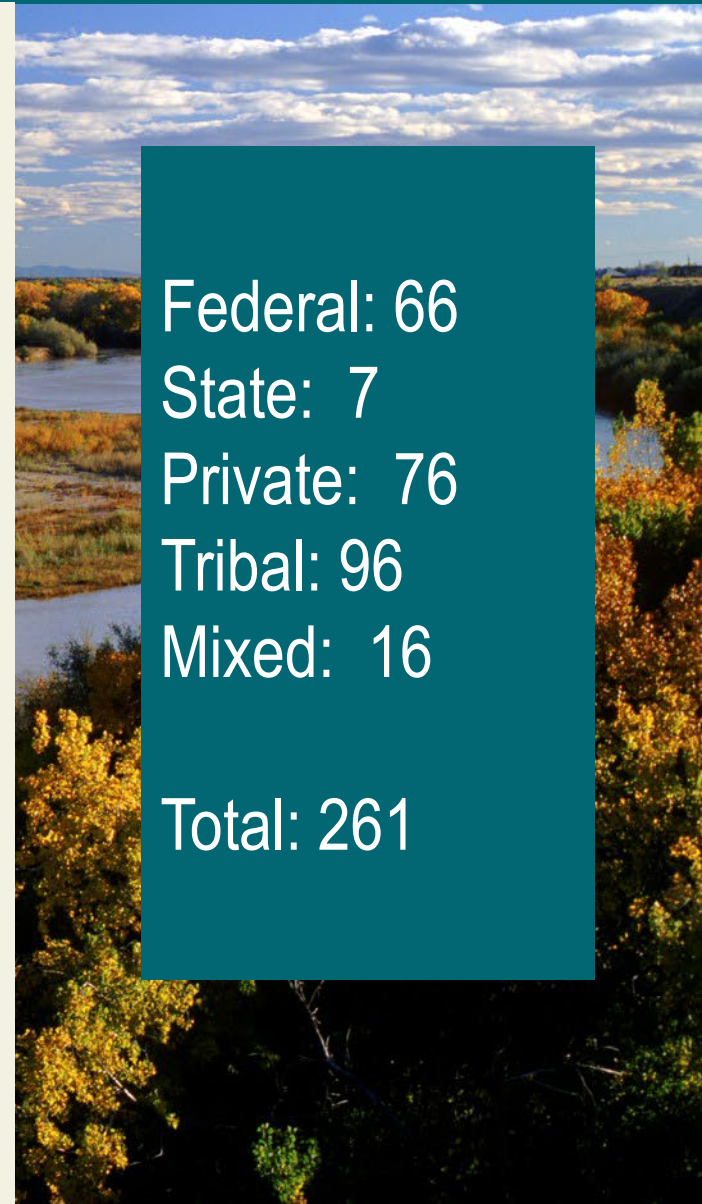
- Abandoned Uranium Mine Field Site Visits (NMED support)
- Technical Data Review & Site Inventory and Assessments (NMED support)
- Permit Lead on regulated mines in reclamation status



Former Uranium Mine Sites



New Mexico Grants Uranium Belt and State-Wide Distribution of Former Uranium Mines and Mills



Federal: 66
State: 7
Private: 76
Tribal: 96
Mixed: 16

Total: 261



Formerly Operating Uranium Mine and Mill Sites Dashboard

A collaborative project with



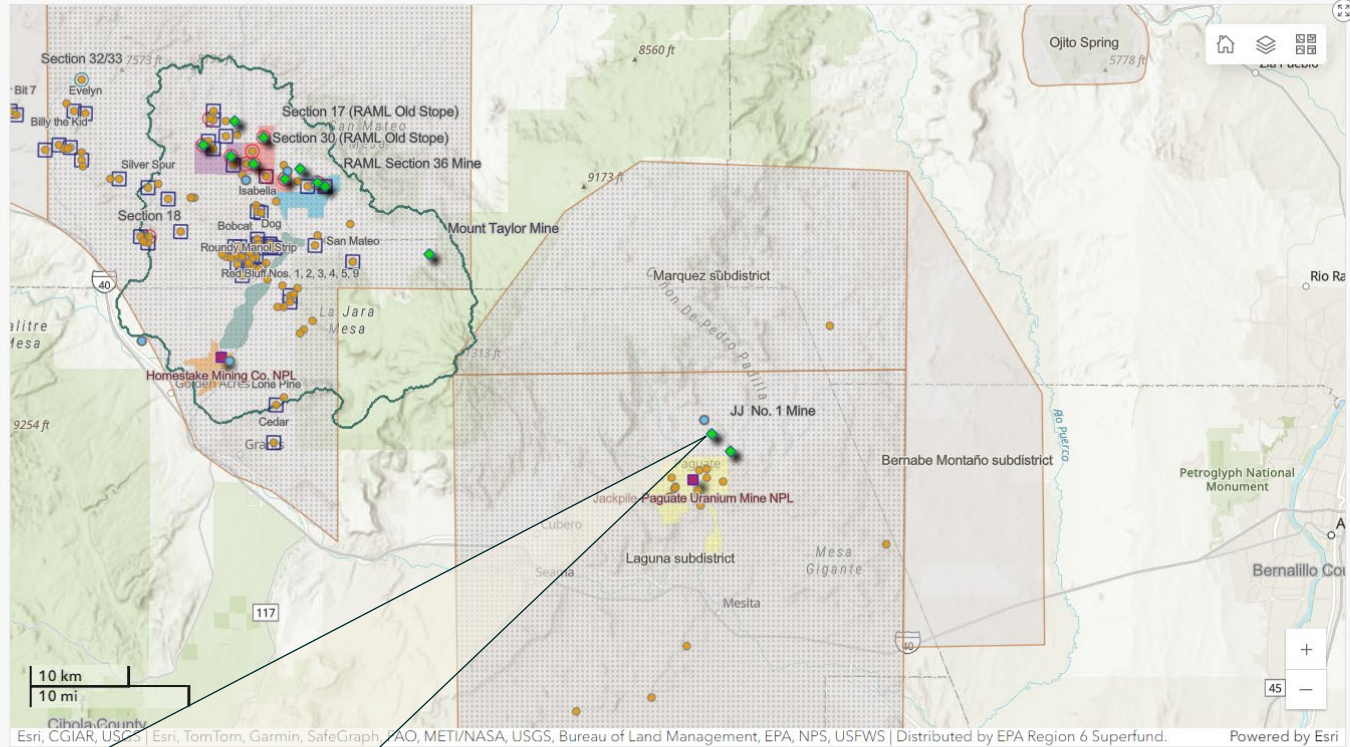
And



For Dashboard Instructions: [Click Here](#)
For Data Sources: [Click Here](#)

This map shows locations of former uranium mine and mill sites in NM. Detailed information is shown by clicking on a point on the map. The pop up menu will display data about map features. Zoom or pan the map to see number mines and mills in the extent view. Charts can be expanded for a better view; click on the circle in upper right of the chart rectangle. To minimize, click on the circle again.

More Information



Map Legend

EPA East, West and Central Study Areas (Tronox)

- Central GSA Study Area
- East GSA Study Area
- Section 10 Study Area
- West GSA Study Area

Grants Mineral Belt/Grants Mining District (EPA)

Uranium District

County

Formerly Operating Uranium Mine Site:

Zoom to Pan

JJ No. 1 Mine | Laguna Mining District

Reclamation Details: main shaft & 1 vent shaft included in L-Bar UMTRA Title II Site; 1986: dewatering stopped; 1986-1987 offices and change house were decommissioned, main hoist shaft was sealed with a concrete cap, steel vent shaft liners were capped with welded plates; MMD: Surface almost ready for release

Aliases	L-Bar, Sohio, J.J. No. 1
County	Cibola
MMD ID Number	NM0033
MARP Permit Number	CI007RE
NMED Discharge Permit	
NMED Site Assessment Link	View
Stage of Abatement	Approval or Deficiencies Notification for Stage 2 Abatement Plan
Regulatory Timeline	

Former Uranium Mills



Number of features in

Mines by Surface Land Status

Formerly operating uranium mines in extent shown.

Table of Mines

Clicking on a mine dot shows more info

Clicking "View" brings you to important documents like EJ screens, historical images, site assessments, and other reports (where available)



HB 164 (NMSA 9-7A-16)

Other Coordinating State Agencies

- Dept. of Cultural Affairs
- Dept. of Game and Fish
- Dept. of Health
- Dept. of Transportation
- Dept. of Workforce Solutions
- Dept. of Indian Affairs
- Economic Development Dept.
- Office of Natural Resources Trustee
- Office of the State Engineer
- State Land Office

Section 27 Temporary Repository





HB 164 (NMSA 9-7A-17)

Uranium Mine Reclamation Revolving Fund

- To advance large scale cleanup, funding is required. Current recurring funds can be used for small-scale reclamation but are very limited.
- No money has been appropriated for the Uranium Mine Reclamation Revolving Fund and the balance remains at zero dollars.
- In the future, funds received into the account may be used for site assessments, safeguarding, closure designs, surface reclamation, groundwater remediation, and monitoring, where appropriate.



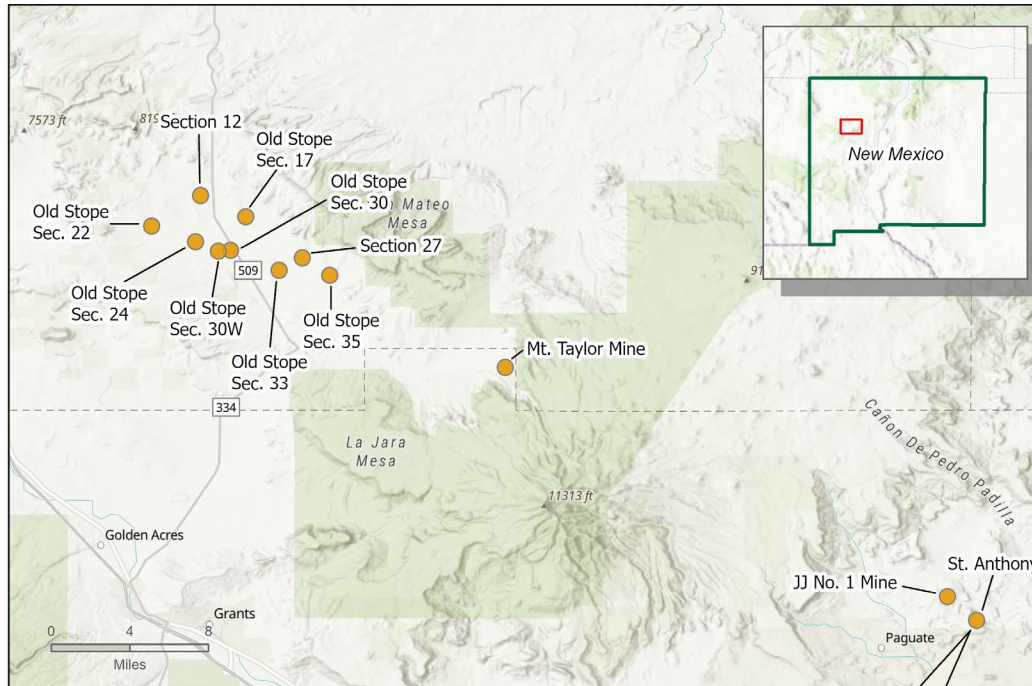
Monitoring well at J.J. No. 1 Mine



EMNRD Permitted Mine Sites

EMNRD's Mining & Minerals Division (MMD)
Mining Act Permits:

- Mt. Taylor Mine
- St. Anthony Mine
- Section 27 Mine
- Section 12 Mine
- Old Stope Leach Mines
- J.J. No. 1 Mine



St. Anthony Pit 1 (above)

Aerial Imagery of St. Anthony Mine (left)

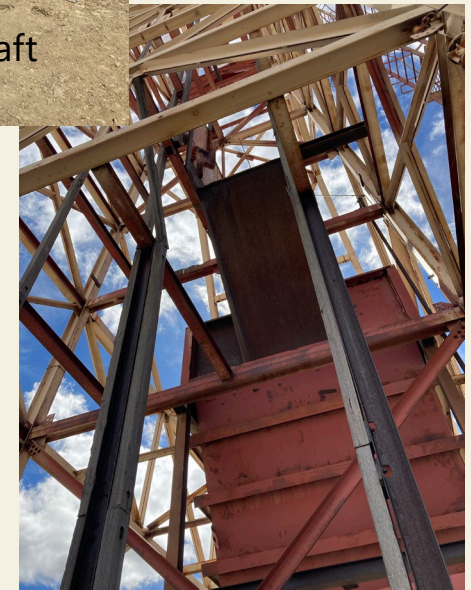


Section 12 Mine



Section 12 mine site visit in 2024

The site is under reclamation through a Director's Order with EMNRD, signed in 2020. The latest version of the Reclamation Plan and Construction Drawings were submitted August 2024 and are under review. Settlement Agreement finalization is expected by Spring 2025.



Headframe will remain after reclamation (historic value and no environmental benefit to removal)



NMED Permitted Mine Sites

- J.J. No. 1 Mine (Abatement)
- Mt. Taylor Mine (Discharge Permit [DP] and Abatement)
- Rio Algom and associated Old Stope Leach Mines (DPs and Abatement)
- Section 27 Mine (Abatement)
- St. Anthony Mine (Abatement)



Monitoring well in the distance at JJ No. 1 Mine



Department of Energy DRUM (Defense Related Uranium Mine) Program

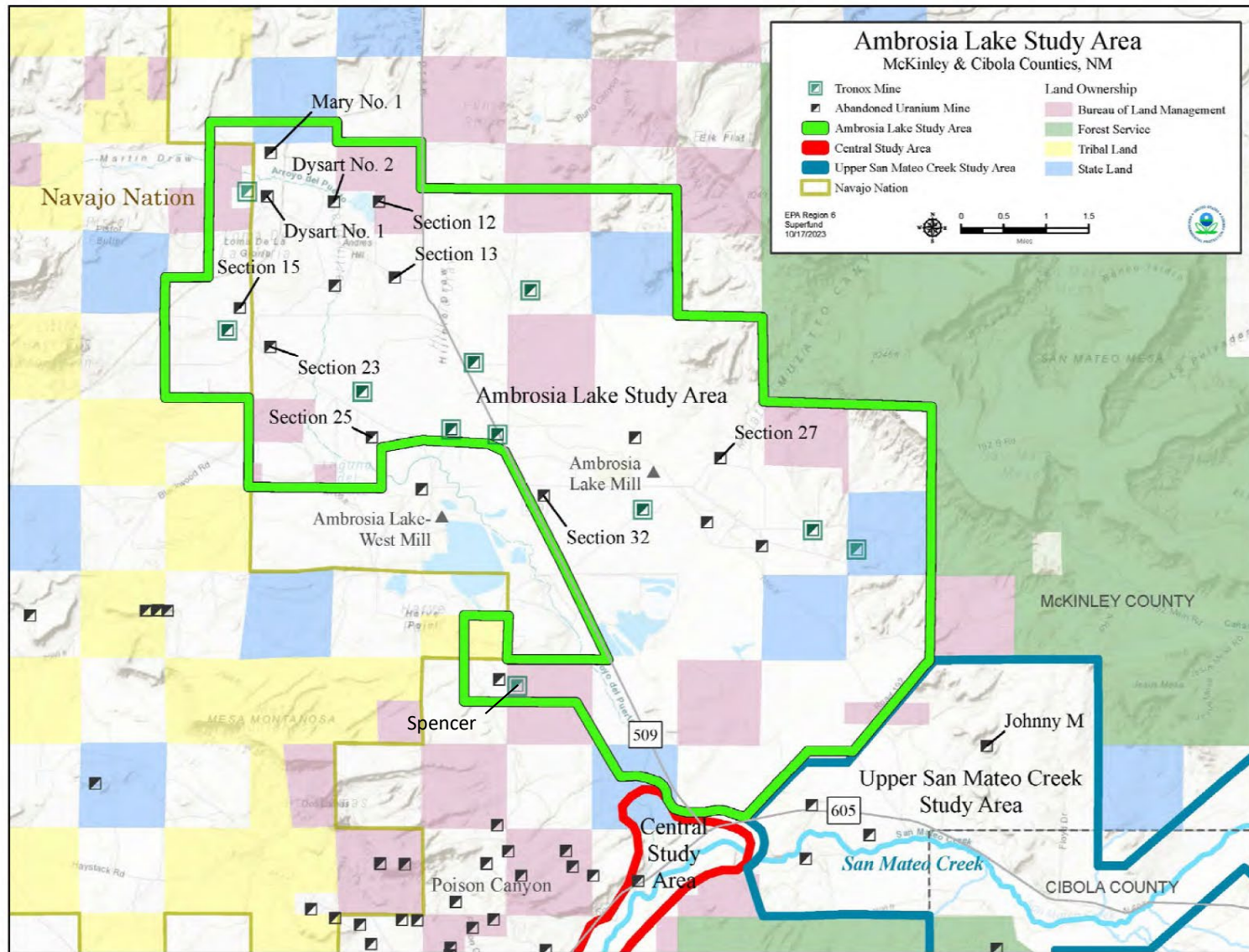
Red Head 2 DRUM Site
Visited September 26, 2024



- Verification & Validation (V&V) work on federal and tribal lands complete or near complete.
- V&V Work on state lands expected completion at end of 2024. Next phase is private lands.
- The DRUM program sunsets in 2030 (funding ends unless renewed).



EPA Region 6 Tronox Settlement



- 20 Mines in NM
- 12 Mines with surface expressions
- Spencer Mine reclaimed by EMNRD with BLM funding
- NMED and MMD provide technical assistance to EPA



EPA Region 9 Tronox Sites



Proposed Red Rocks Repository location (view looking south from top of landfill)

- ❑ Quivira Mine Waste
 - ❑ Church Rock 1
 - ❑ Church Rock 1 East
 - ❑ Church Rock 2
- ❑ Section 32/33 Mine
- ❑ EPA's preferred alternative for these sites is disposal near the Red Rocks Landfill (Northwest NM Regional Solid Waste Authority property) ~5 miles outside of Thoreau, NM
- ❑ EPA has not released an Action Memo for the sites.



National Priority List (NPL) and Superfund Alternative Approach Sites



Jackpile-Paguate Site

Site Name	Ownership	Type
Homestake Mill	NPL, Non-Tribal Land	NPL
Jackpile-Paguate	NPL, Laguna Pueblo	NPL
UNC Church Rock Mill	NPL, Navajo Nation, Non-Tribal Land	NPL
Central Study Area	Superfund Alternative Approach Site, Non-Tribal Land	Alternative



Other Uranium Work in the State

Completed cleanups:

Mine Site Names	Ownership / Responsible Party (RP)
Spencer and Barbara J 1, 2, and 3 Mines	Bureau of Land Management with NM Abandoned Mine Land Program
Old La Jara, Taffy, Vallejo, and Zia Mines	Forest Service (USFS)
San Mateo Mine	Responsible Party led under USFS oversight

Sites in progress:

Mine Site Names	Ownership / RP	Actions
Johnny M	EPA	Removal Action
Haystack	EPA, Navajo Nation	Removal Action
Mac No. 1 and 2, Black Jack No. 1 and 2, Ruby 1, 2, 3, 4	EPA, Navajo Nation	Removal Action
Mary #1, Dysart #1, #2, Section 13, Section 15, Section 23, Section 25, and Section 32	EPA, Homestake Mining Co.	Removal Action
Ann Lee, John Bully, and Sandstone	EPA, United Nuclear Corporation	Negotiations underway



Uranium Mill Regulation

Site Name	Responsible Party	Oversight
1. Ambrosia Lake Mill (Phillips)	Not applicable (Title I site)	DOE long-term stewardship
2. Ambrosia Lake West Mill	Rio Algom Mining LLC	NRC Regulation, NMED (Discharge Permit and Abatement)
3. Bluewater Mill	Not applicable (Title II site)	DOE long-term stewardship
4. Bokum Mill	Decommissioned, never operated	Not applicable
5. Church Rock Mill	United Nuclear Corp.	NRC Regulation, EPA (NPL Superfund)
6. Homestake Mill	Homestake Mining Company of California	NRC Regulation, EPA (NPL Superfund), NMED (DP and Abatement)
7. L-Bar Mill	Not applicable (Title II site)	DOE long-term stewardship
8. Shiprock (Navajo) Mill	Not applicable (Title I site)	DOE long-term stewardship



Homestake mill tailings impoundment

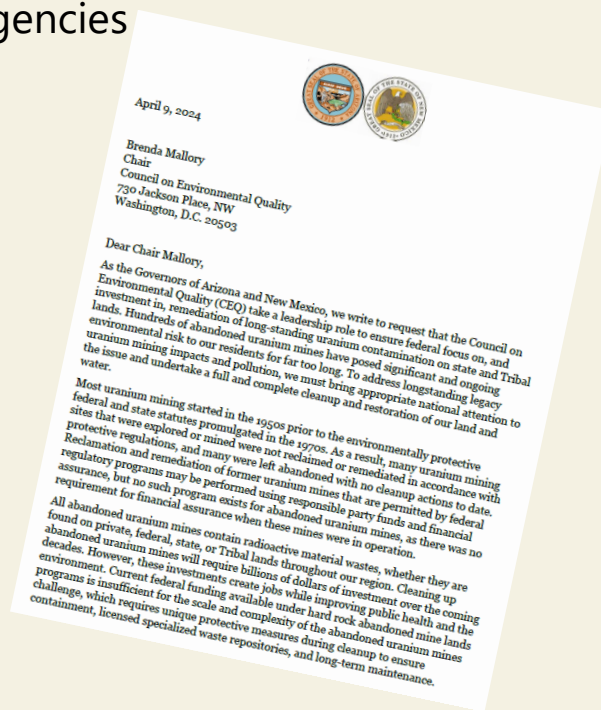


Engaging Beyond New Mexico

NM & AZ Joint Letter

- On April 8, 2024, the New Mexico and Arizona Governors sent a joint letter to the Council on Environmental Quality* (CEQ) calling for coordination of federal agencies to address the largest roadblocks holding back uranium cleanup.

*CEQ advises the President and develops policies on climate change, environmental justice, federal sustainability, public lands, wildlife conservation, and other areas.



CEQ Responded

- On July 17, 2024, NM Secretary of Environment Department (James Kenney) and AZ Secretary of Department of Environmental Quality (Karen Peters) met with CEQ to discuss a path forward.
- A follow up meeting on September 25, 2024, indicated that a federal working group was formed, and agency deputies have been meeting regularly.
- An additional meeting is expected in November 2024.



Thank you for your time.