

Cleaning up Abandoned Mines Through Enforcement

Uranium Contamination Stakeholder Workshop November 8, 2011

U.S. Environmental Protection Agency



- Mine Identification and Assessment status
- ➤Current Enforcement Actions
 ✓USEPA
 ✓NNEPA
- Future Enforcement Efforts



Identification and Scanning of Abandoned Mines

- By the end of 2011, EPA will have completed scanning over 500 abandoned uranium mines
- Investigation and/or cleanup is on-going at 4 mines
- Prioritization of remaining mines is occurring now. EPA and NNEPA will be meeting with Chapter Houses across the Navajo Nation.



Current Enforcement Actions

- Tronox Bankruptcy
- Northeast Churchrock
- Quivira
- Mariano Lake



Tronox Bankruptcy

- Bankruptcy filing by Tronox Corporation, a successor to Kerr-McGee Corporation
- National settlement included \$12.1 million to US EPA and \$1.2 million to Navajo Nation for uranium mining and milling claims
- Additional recovery possible from ongoing litigation with Anadarko Corporation



Enforcement Orders

- The enforcement agreements are called Administrative Orders on Consent
- We typically start with an Order that requires the mining company to pay for investigating site conditions and mitigating immediate potential risks
- If risks are identified, we follow-up with a second Order requiring the mining company to address the problems



Northeast Church Rock Mine

- Largest underground uranium mine in country and highest priority for Navajo Nation
- Extensive investigation, cleanup of structure, yards, and soils in residential area and arroyo
- Most work performed and paid for by United Nuclear Corporation, an indirect subsidiary of General Electric Corporation

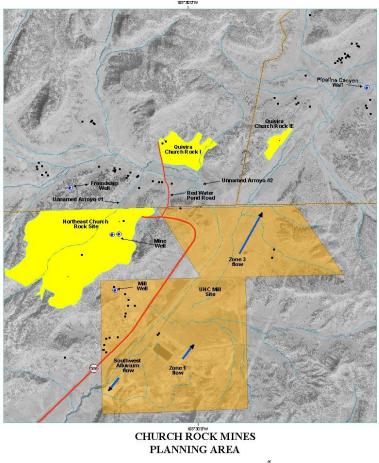


Northeast Church Rock Mine, cont'd

- In September 2011, Region 9 selected cleanup plan for mine soils
- Design and construction expected to take up to seven years
- EPA expects UNC to perform and pay for entire cleanup



 Quivira and NECR are adjacent to each other along Red Water Pond Road



Structure



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Quivira Mine

- Administrative Order on Consent requiring site investigation and control of immediate risks signed August, 2010
- Rio Algom is the party responsible for paying for the work









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Quivira Mine

- Rio Algom completed slope stabilization, fencing and gamma scans in early 2011
- Rio Algom recently sampled soil with many deep borings for the Removal Site Evaluation and submitted the results for USEPA and NNEPA review
- EPA and NNEPA will work with the local community before making any decisions
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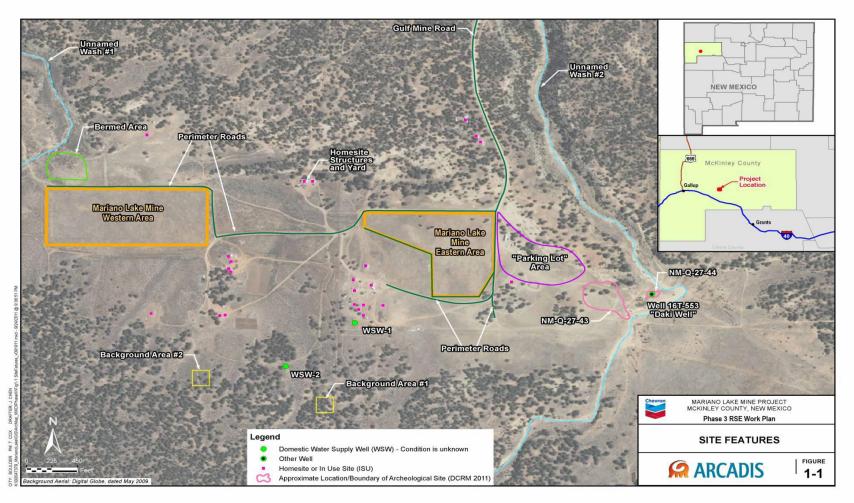
Mariano Lake Mine

- Administrative Order on Consent (AOC) signed in July, 2011
- Chevron is the responsible party
- Requires four phases of work:
 - 1) Scanning, background study and signage
 - 2) Fencing
 - 3) Removal site evaluation

4) Apply sealant to roads and a large dirt area outside of the mine entrance



Mariano Lake Mine



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Mariano Lake Mine

- Once the investigation and work required under the first Order is completed, we will work with the community to decide on future steps
- Any additional response will require a second Order



Navajo Nation Enforcement Perspective

- Navajo Enforcement Tools
 - Navajo Nation CERCLA
 - Navajo Nation Trespass Act
 - Jurisdictional Issues Facing the Navajo Nation
 - Fee Land- The Impact of HRI v. EPA (2010)
 - Trust Land-Potential Implications of Montana v. U.S.



Future Enforcement Efforts





Using Superfund Law

- Under Superfund Law, EPA can either
 - Conduct an action with trust fund monies, or
 - Pursue a PRP (Potential Responsible Party) to do work under an enforceable document (preference under "Enforcement First' Policy)



What is a PRP?

- Current & Former Owners/Operators of a Facility
- Persons who arranged for treatment or disposal of hazardous substances ("generators")
- Transporters of hazardous substances to disposal site



What is our PRP Search goal?

To identify potentially liable parties (PRPs) by finding sufficient evidence to establish a release of uranium from mining facilities where we have incurred response costs



PRP Search Tools

- Record Collection and File Review
- Corporate Research
- Interviews Governmental and Private
- Information Gathering Authority (104e)
- Site History of Operations
- Aerial Photographs
- Archives, Libraries, Title Searches
- Investigative Reports



Next Steps and How can you help?

- Information Gathering and Investigations are ongoing to recover costs at various mines
- Focused PRP search efforts to indentify additional liable parties
- PRP Search Contacts:
 - Kathi Moore, Manager, moore.kathi@epa.gov
 - Steve Arbaugh, Civil Investigator, arbaugh.steve@epa.gov