



# Northeast Churchrock & Quivira Mine Sites

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## Community Update

The United States Environmental Protection Agency (US EPA) is currently planning for two cleanup actions related to the Northeast Churchrock (NECR) Mine Site. The first action is a smaller cleanup of the Eastern Drainage area (Figure 1) that will occur during the summer of 2012. The second long-term action is the cleanup of the entire NECR Mine Site which is a four year construction project anticipated to begin in 2016 (Table 1). At the same time, US EPA is also finishing the site investigations for the Quivira Mine Sites. This Fact Sheet provides updates on both NECR cleanup actions as well as the status of the Quivira Mine investigations and includes an approximate timeline for upcoming work related to these sites.

### Quivira

Rio Algom is a company responsible for the two Quivira mines located between Red Water Pond Road and Pipeline Canyon Road (Figure 1). They are completing the Removal Site Evaluation report of the mines. They collected data in 2011 and they will collect more data in spring 2012 from Unnamed Arroyo #2. They will also do additional surface scanning around the edges of the two mine sites.

Rio Algom will publish a report with the results of the investigation in summer 2012. The data collected so far show that there is radioactive contamination on the mine sites and underneath Red Water Pond Road. Rio Algom paved the road as an interim measure to prevent dust, erosion and contact with the contamination. Rio

Algom will maintain and repair the paving as necessary until a final remedy is selected and implemented.

US EPA and Navajo EPA will work with the community to review the Rio Algom Removal Site Evaluation report and to begin evaluating future cleanup options. Then US EPA will write a report called an Engineering Evaluation/Cost Analysis (EE/CA) that will compare possible alternatives. After receiving input from the community, US EPA plans to select a final remedy in an Action Memo in 2013.

Rio Algom will perform any necessary repairs to the existing soil cover on the mine sites each year until a final remedy is implemented.



## Northeast Churchrock (NECR)

### Eastern Drainage Removal Action

In August 2012, General Electric (GE), under US EPA and Navajo Nation Environmental Protection Agency (Navajo EPA) oversight, will remove contaminated soil from approximately 15 acres located east of Red Water Pond Road. The contaminated soil comes from the Eastern Drainage area (see Figure 1). US EPA has also called the area Step Out Area 2.

The contaminated soil will be moved to the Northeast Churchrock (NECR) Mine Site and placed under a soil cover. This soil will ultimately be moved to the United Nuclear Corporation (UNC) Mill Site for final disposal, which is contingent on approval by US EPA Region 6 (see box at right) and the Nuclear Regulatory Commission (License Amendment).

Construction and cleanup work will begin in August 2012 and last approximately two months. US

EPA and Navajo EPA will require dust control measures and air monitoring to ensure that contamination is not spread offsite.

Most of the radioactive contamination is in the top six inches of soil. If any excavations deeper than one foot are necessary, US EPA will require backfill with clean soil. We will require GE to remove soil from as deep as necessary until testing shows that the cleanup level has been met. When the cleanup is completed, people will be able to live, farm, and keep livestock in the area.

The summer 2012 removal action in the Eastern Drainage is smaller than the 2009 removal that occurred in the area located west of Red Water Pond Road.

Temporary voluntary housing is being offered to families living near Northeast Churchrock Mine for the duration of the Eastern Drainage construction.



## Housing Update

US EPA and Navajo EPA are continuing to meet with community members about their voluntary housing options for the summer 2012 cleanup (Eastern Drainage) and the long-term removal (NECR mine site cleanup). The United States Army Corps of Engineers (US ACE) will work with US EPA, Navajo EPA and eligible community members living near the NECR mine and assist with housing options and facilitating the summer move and long-term move.



## NECR Mine Site Cleanup: Region 6 Proposed Plan

In order to place the mine waste from Northeast Churchrock at the United Nuclear Corporation (UNC) Mill Site, the US EPA Region 6 Office must complete a Record of Decision (ROD). The Proposed Plan is the first step of US EPA's ROD process. EPA expects the Proposed Plan to be out for public comment this summer and then US EPA will issue a Record of Decision by the end of 2012. The disposal of the NECR mine waste at the UNC Mill Site will be contingent upon the license amendment approval by the Nuclear Regulatory Commission which will include a final public comment opportunity anticipated to occur in 2015.

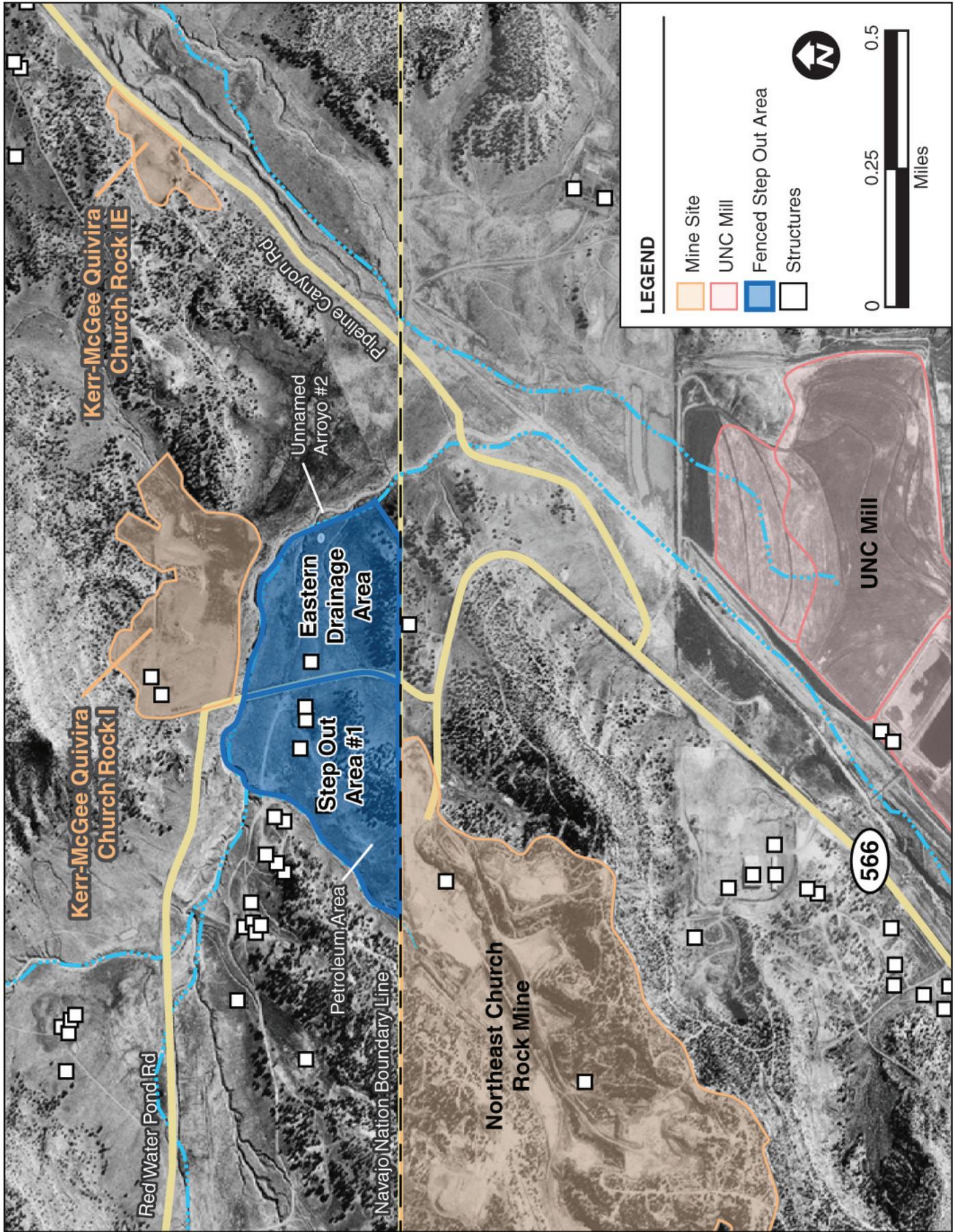


Figure 1: NECR Step Out Area Map

## Northeast Churchrock (NECR) Long-Term Schedule

- 2012**
  - Clean up Eastern Drainage and provide short-term voluntary move for residents
  - US EPA Region 6 issues Proposed Plan and Record of Decision (ROD) for NECR waste disposal at UNC Mill Site
  - Begin design process for long-term NECR cleanup
- 2013**
  - Develop NECR Cleanup Design
  - Continue working with residents to determine long-term housing plans during NECR cleanup
- 2014**
  - Finish NECR design and submit to Nuclear Regulatory Commission (NRC) for approval
  - Continue working with residents on voluntary housing options during long-term cleanup
- 2015**
  - NRC has public comment process for NECR waste disposal at UNC Mill Site
  - NRC makes License Amendment Decision
- 2016-2019**
  - If the ROD and License Amendment are approved, conduct clean up the NECR Mine Site
  - Provide voluntary housing options for the duration of the NECR Mine Site cleanup and construction
- 2020**
  - Finish NECR Mine Site cleanup

## Quivira Long-Term Schedule

- 2012**
  - Complete Removal Site Evaluation report
  - Write Engineering Evaluation/ Cost Analysis report
  - Continue interim measures to control erosion and direct exposures at Quivira Mines
- 2013**
  - Work with the community and Navajo Nation to evaluate cleanup options
  - US EPA selects final remedy to cleanup Quivira Mines
- 2014**
  - Design final remedy
- 2015-2020**
  - Continue working on final remedy for Quivira Mines

## Contact Info

We want to hear from you! Please call or e-mail and let us know how we can improve our cleanup plans.

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Documents and information are available at [www.epa.gov/region9/necr](http://www.epa.gov/region9/necr)