# EPA Old Gulf (Mariano Lake) Mine Site Update

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# Background

The Old Gulf Mine (or Mariano Lake Mine) is located 25 miles east of Gallup, N.M. and was operated from about 1977 to 1982 by Gulf Mineral Resources Company. Since then, Gulf Mineral Resources merged with Chevron, and, as such, Chevron is the lead company responsible for cleanup. The mine includes two separate areas, the eastern mine area (12.5 acres) and the western mine area (18.5 acres). The eastern mine area contained a mine shaft, which was about 520 feet in depth, and the western mine area was used as a pond to evaporate water that had been pumped out of the underground mine tunnels.

The two areas contain about 250,000 cubic yards of soil with radium and uranium at levels that could pose a health risk if not addressed.



Sampling of soil 10 feet under the surface at Old Gulf Mine

# What Has Been Done?

- Chevron completed an investigation of the mine site with radiation scanning and soil sampling to find out where contamination is located. The results were published in a report called a "Removal Site Evaluation" in 2013.
- Chevron also replaced fencing around the mine to stop access and paved the dirt perimeter roads. Chevron conducts monthly inspections to ensure the fencing and roads are in good condition.
- Navajo Tribal Utility Authority (NTUA) and Indian Health Service (IHS) installed water pipes to deliver safe drinking water to homes near the mine site in 2014. Chevron ensured NTUA and IHS workers installing the pipes were safe by testing the areas pipes were to be installed to ensure it did not contain mine waste.

# What is Happening Now?

Chevron is conducting a study known as an Engineering Evaluation/Cost Analysis (EE/CA) to evaluate options for addressing the soil contamination.

## What Will Happen Next?

The EE/CA evaluates alternatives to cleanup the mine site and assesses the effectiveness, implementability and cost of each alternative. The EE/CA will consider the potential risks to human health and the environment from the contamination, and show how the cleanup alternatives fit into future land use of the site. Once the EE/CA is complete, USEPA and Navajo Nation EPA will speak with the community again about the reports findings and get feedback on proposed next steps for final clean up



Gamma scanning at Old Gulf Mine

### Who is Involved?

EPA and Navajo Nation EPA work with Mariano Lake Chapter officials as well as community members for all outreach activities and information sessions. To keep the community informed, EPA:

- developed a Community Involvement Plan;
- meets with Chapter officials and the community to discuss the investigations and cleanup options; and
- distributes fact sheets describing work at the mine site;
- coordinates with other federal and Navajo agencies such as Indian Health Service, Bureau of Indian Affairs, Navajo Abandoned Mine Lands, Navajo Department of Economic Development and Navajo Department of Natural Resources

# How Can You Learn More?

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Freida S. White NNEPA (928) 871 - 6859 freidawhite@navajo-nsn.gov USEPA Eastern Region Abandoned Uranium Mine site page: https://www.epa.gov/navajo-nation-uraniumcleanup/eastern-region-abandoned-uranium-mines

General information on USEPA's strategy for investigating and cleaning up uranium mines on the Navajo Nation can be found in the: Five Year Plan to Address Impacts of Uranium Contamination 2014-2018:

http://www.epa.gov/navajo-nation-uranium-cleanup