

# **EPA** Tse Tah Area Mines Updates

U.S. Environmental Protection Agency

Region

San Francisco.

Tse Tah is in the Northern Abandoned Uranium Mine (AUM) Region and includes the following chapters: Sweetwater, Teec Nos Pos, and Red Mesa

## **Background**

Funds are available to assess and clean up 31 abandoned uranium mines in Tse Tah, 81 percent of the mines in Tse Tah. Funds are also available to assess and clean up 11 mines near Tse Tah (see Map A for locations).

## Funds to assess and clean up the mines are provided by:

- two legal settlements between Navajo Nation and the United States (more information below);
- a legal settlement with Cyprus Amax Minerals Company (Cyprus Amax);
- the Tronox legal settlement for mines operated by Kerr-McGee Corporation.

Uranium was mined in the Tse Tah area from the 1940s to 1960s. Beginning in the 1990s, the Navajo Nation Abandoned Mine Lands Reclamation Program addressed physical hazards at these mines. Under the direction of the U.S. Environmental Protection Agency (USEPA), detailed investigations, or Removal Site Evaluations (RSEs), are being conducted at 24 funded mines.



Phase 1 Trustee's team of experts assessing soil samples at Tse Tah abandoned uranium mine.

Settlement Name	Number of Funded Mines		Comparison d Dispares Status
	In Tse Tah	Near Tse Tah	Superfund Process Status
Phase 1 and Phase 2 Settlements (limited to mine cleanups, as needed)	3	1	Removal Site Evaluations (RSEs) for four Trustee 1 mines completed in October 2018
Cyprus Amax	27	9	RSEs for 18 mines to be completed in late 2019
Tronox	1	1	RSEs for two mines to be completed in late 2019
Total	31	11	

## Legal Agreements and the Superfund Cleanup Process

#### Phase 1 and Phase 2 Trusts

Four of the mines being assessed in and near Tse Tah are among 16 mines being assessed under the "Phase 1" legal settlement between the Navajo Nation and the United States. Sadie Hoskie is the trustee implementing the Phase 1 Trust. The results of the Phase 1 assessments in the Tse Tah area are included in RSEs and were shared with the community in fall 2018.

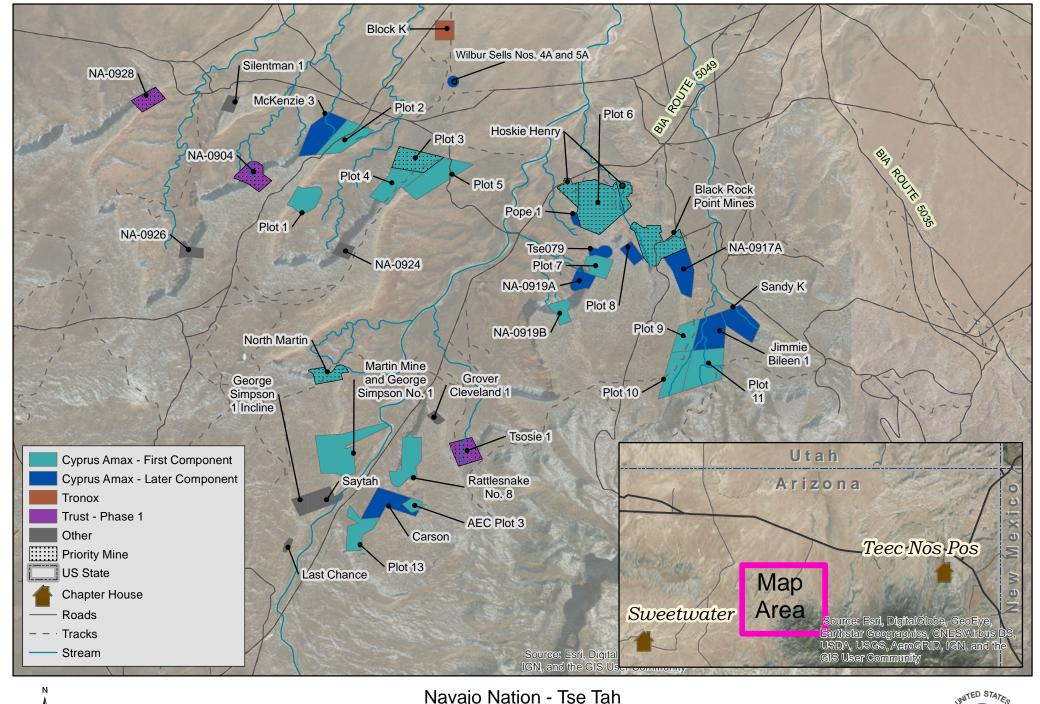
The mines assessed by the Phase 1 Trustee will be cleaned up using funds provided for in the Phase 2 PO Trust, as part of the Phase 2 Settlement. A trustee for this work has not yet been selected.

## Cyprus Amax Minerals Company Settlement

In 2017, the United States and the Navajo Nation entered into a historic settlement agreement with Freeport-McMoRan subsidiaries Cyprus Amax and Western Nuclear Inc. The settlement funds the assessment and cleanup of 94 abandoned uranium mines on the Navajo Nation, including 36 mines in and near Tse Tah. Cyprus Amax is currently finishing detailed investigations (RSEs) at 18 of these mines in Tse Tah.

#### **Tronox Settlement**

In 2015, the United States entered into a historic legal settlement that provides almost \$1 billion to investigate and clean up approximately 50 abandoned uranium mines on or near Navajo Nation that were operated by Kerr-McGee and its successor, Tronox. Two of these mines are in or near Tse Tah.

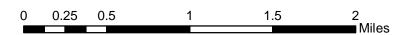




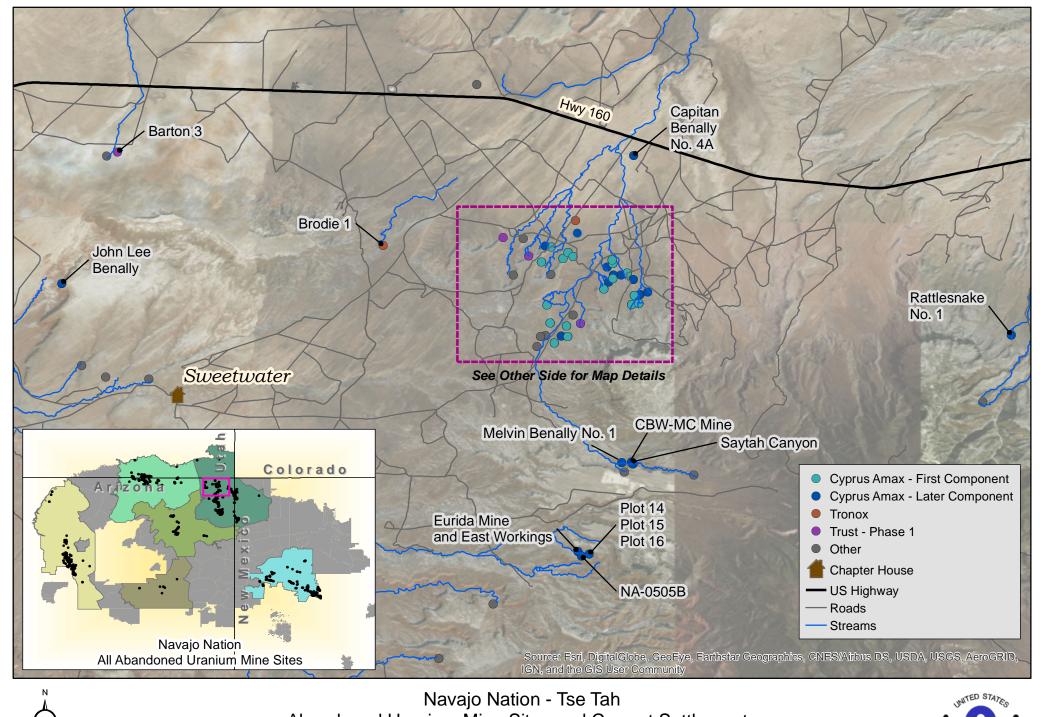
March 15, 2018

Navajo Nation - Tse Tah

Abandoned Uranium Mine Sites and Current Settlements









March 15, 2018

Abandoned Uranium Mine Sites and Current Settlements





## **What Has Been Done?**

- Legal settlements have been reached to provide funds to assess, evaluate, design and clean up 42 mines.
- USEPA met with chapter officials, hosted two informational meetings for the Tse Tah communities, and began developing a Community Involvement Plan.
- The Phase 1 Trustee completed RSEs for four mines, shared results with the communities and heard comments on October 23, 2018.

## What is Happening Now?

- USEPA will have a Community Involvement Plan by Spring 2019.
- Cyprus Amax is finishing field work to investigate 18 mines.
- USEPA is conducting field work to investigate two mines funded by the Tronox settlement.
- A community Liaison will be hired for Tse Tah area.

## **What Happens Next?**

- In early 2019, USEPA will finalize and implement the Community Involvement Plan and share it with the community.
- Cyprus Amax will complete investigations at 5 mines in 2018 and 13 mines in 2019.
- USEPA will complete investigations at two Tronox mines.
- Once RSE reports are complete:
  - ▶ the risk the mines pose to people and the environment will be assessed:
  - cleanup alternatives will be evaluated;
  - > a final cleanup alternative will be selected; and
  - ▶ the mines will be cleaned up.
- USEPA will continue to investigate companies responsible for all other mines not currently funded.

#### Superfund Process on the Navajo Nation **Assessment Decision Making** Cleanup Removal Site Access Resources Signs and Engineering **Public** Removal Removal Surveys Evaluation / Memorandum Design Agreements **Fences Evaluation** Comment Action **Cost Analysis** Period Community Involvement and planning for a site's future are ongoing throughout the process Coordination with the Navajo Nation government including NNEPA, Navajo AML, and the Diné Uranium Remediation Advisory Commission



## **Reduce Your Contact with Uranium and Radiation**

#### Steps to keep yourself safe:

- Stay away from abandoned mines and mills
- Find out if your home is a contaminated structure
- Use regulated water for human needs
- Never use unregulated water for human needs even if it looks OK
- Use good water hauling practices to keep your water clean
- Get regular cancer screenings, like pap tests, mammograms, colonoscopies, and other cancer screenings

## **For More Information**

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Navajo Nation Abandoned Uranium Mines webpage: https://www.epa.gov/navajo-nation-uranium-cleanup