Navajo Abandoned Uranium Mine

Site Screen Report

This form is for use at the site of abandoned uranium mines (AUM) located on Navajo Nation lands. Applicable sites include all mine and mine features that have or have not undergone reclamation by the Navajo Abandoned Mine Lands Reclamation Program, including features, adits, pits and waste piles. Applicable sites also include all AUM sites listed in the USEPA CERCLIS database, all sites listed in the 2008 AUM GIS Report issued by USACOE and USEPA, all AUM sites on allotment lands associated with the Navajo Nation, and any and all AUM sites not listed in any database located on Navajo lands. Reconnaissance of any sites located on lands adjacent to Navajo lands that may be impacting Navajo lands will need to be coordinated with the authorities appropriate to those lands.

The purpose of the form is to ascertain the status and location of the identified AUM site, and record all immediate site information associated with the mine site. Decisions and recommendations on what additional steps are needed will be provided on a separate document.

Pope 1 AUM Site

Navajo AUM Northern Region

Prepared by:

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Contract: W91238-06-F-0083

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Part I **Site Identification, Location and Status** Site Names and ID numbers as applicable Mine ID: 637 Map ID: N27 **CERCLIS:** NNN000909039 Navajo Abandoned Mine Land Reclamation Program: None Local name / Aliases: Pope No. 1; Pope #1 **Chapter and local area:** Teec Nos Pos Chapter **County:** Apache State: Arizona **Lat/Long:** 36.898109534 N / -109.2720102 W Nearby road and highway: Highway 160 Local Post Office: Teec Nos Pos Surface Land Status: check one or more and provide ownership and contact information below **Tribal Trust Land Public lands Private Tribal Fee Land Bureau of Land Mgmt Allotment** State Fee land **Subsurface Mineral Rights:** No information on subsurface mineral rights ownership was found in the EPA/AUM Database. **Claim and operator information:** The mine site surface land status is classified as Tribal Trust Land. Historical documents showed

the operator of the mine as Capitol Seaboard Corp. in 1959. No other historical ownership / lease information was identified in the EPA/AUM database.

Number of residential structures within 200 feet of mine: None

Estimated volume of mine waste onsite: None

Part II Summary of radiological readings

Highest gamma radiation measurement:

40,265 counts per minute (cpm)

Describe any other radiological measurements:

A total of 892 gamma radiation measurements were collected from the mine site, ranging from 5,828 cpm to 40,265 cpm. The measurements are represented in Figures 1 and 2.

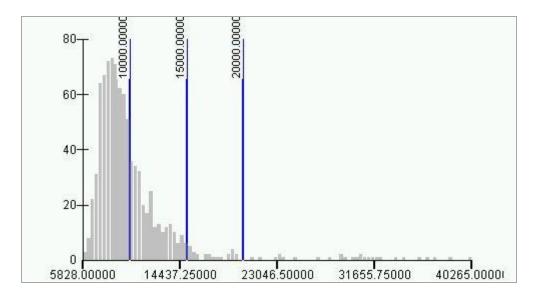
Background Locations

Average background = 9,156 cpm

#1 9,156 cpm

Distribution Chart and Statistics:

The following chart and statistics were generated by ESRI ArcGIS 9.3.1, and show the general distribution of the site gamma *radiation* measurements. The horizontal X axis represents the gamma radiation reading levels in cpm (lowest levels to the left). The vertical Y axis represents the frequency of each gamma radiation level.



 Count:
 892

 Minimum:
 5828,00000

 Maximum:
 40265,00000

 Sum:
 9138713,00000

 Mean:
 10245,19395

 Median:
 9150,50000

 Standard Deviation:
 4282,17358

Part III Status of Reclamation and Mine Waste

The following information was obtained from the Navajo Abandoned Mine Land Reclamation Program (NAMLRP) Point Features Database:

NAMLRP Status of the mine site: Reclaimed: Unknown Waste Pile onsite: No

NAMLRP Project Number: None

NAMLRP Mine features: None

The following information was obtained from field observations collected during the 2010 site screening:

Provide description and status of all mine sites and features at site. Include all waste piles, adits, pits and other features, and indicate whether they are open, closed, covered, capped, buried or unreclaimed. Indicate approximate size, shape and extent, including description of any reclamation caps. Note condition of all caps.

Adits

None

Waste Piles

None

Pits

None

Shafts

None

Other Debris and Mine Features

None

Part IV

Site observations and Environs

Observed Structures: list number of and describe human habitation status of structures at the following distances from mine:

0 to 200 feet: None

200 feet to 0.25 mile:

Observed Public or commercial structure: list and describe all schools, clinics, Chapter Houses, places of business and any other structure used by members of the community at the following distances:

0 to 200 feet: None

200 feet to 0.25 mile: None

Levels measured around the perimeter(s) of the identified structure(s):

Consistent with background levels

Observed water sources: list the number and type of wells and surface water sources that are potentially used for human consumption at the following distances from the mine:

0 to 0.25 miles: 0.1 mi N of site, water trough for grazing sheep immediately NW of site

0.25 miles to 4 miles: None

Sensitive environments: note and describe all sensitive environments located within visible range of the mine site, including: wetlands, endangered species, habitats and approximate locations of sites that may be under protection of the government of the Navajo Nation.

None

Known Site History: include information from interviews with Chapter officials and residents. Note information on mine ownership, type of mining operation, period of operation, known amount of production, and any other information as provided.

Pope 1 mine consists of an area of 6,647.79 m². The mine was identified as being operational in 1959. Historical documents showed the operator of the mine as Capitol Seaboard Corp. in 1959. While operational, the mine had a total reported production volume of 423 tons. No other historical information or any additional ownership / lease information was identified in the EPA/AUM database.

Part V Response Action Summary

Site Name(s): Pope 1 **Chapter:** Teec Nos Pos

Decision Criteria

Is there an unreclaimed waste pile at the site? No

At what distance from the waste pile is the nearest residential structure located? None

At what distances from the waste pile are there potential drinking water sources? None

Is there a reclamation cap or sealed adit in place at the site? No

Is the cap/seal functionally intact? None

Is the cap/seal sufficiently degraded to create a concern about releases? None

At what distance from the cap/seal is the nearest domestic structure located? None

At what distance from the cap/seal is the nearest domestic drinking water source? None

Summary of emergency response factors

None

Summary hazard ranking system factors

None

Summary of reclamation factors

None

Part VI Photos



Photo 1. Pope 1 site



Photo 2. Pope 1 site

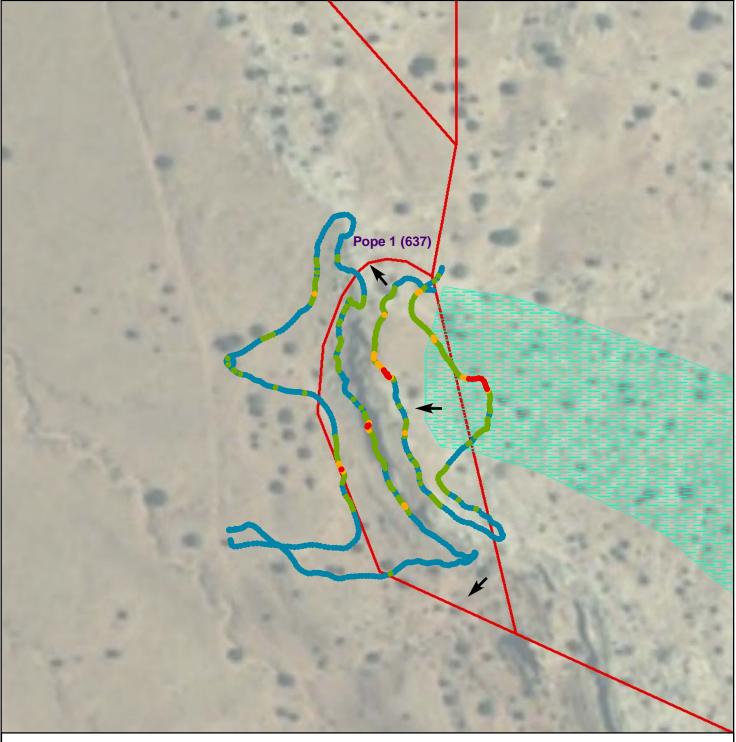
rt vII	Contacts Reports and Information
Name:	<u>Stanley Edison (928) 871-6861</u>
	Eugene Esplain (928) 871-7331
Title or official role (if any) Navajo EPA Superfund Program	
Address_	PO Box 2946, Window Rock, AZ 86515
Information provided <u>Lead Regulatory Agency</u>	
Name:	
Title or official role (if any)	
Information provided	
Name:	
Title or official role (if any)	
Information provided	
N	
Name:	
Title or official role (if any)	
Address	
Information provided	

Figure 1 - Gamma Radiation Measurements, Above Two Times Background Pope 1 (637) Teec Nos Pos Chapter, Navajo Nation Pope 1 (637) Legend **General Direction Down-Slope Gamma Radiation Measurements Mine Claim Boundaries** Feet < 2X Backgound 150 > 2X Background **Observed Reclamation Cap** Gamma survey conducted 06/2010

Measured as counts per minute (cpm)

Average background = 9,156 cpm

Figure 2 - Gamma Radiation Measurements
Pope 1 (637)
Teec Nos Pos Chapter, Navajo Nation



Legend

Gamma Radiation Measurements

- 0 10,000
- 10,000 15,000
- 15,000 20,000
- 20,000 50,000
- 50,000 100,000
- > 100,000



Gamma survey conducted 06/2010 Measured as counts per minute (cpm)

Average background 9,156 cpm

