

# **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 and pits. 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 lands not listed in any database located on Navajo lands. Reconnaissance of any sites located on lands adjacent to Navajo lands but that are or 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, to record all immediate site information associated with the mine site and to document the recommendation and/or decision on what additional steps, if any, are needed at the site.*

## **Standing Rock AUM Site**

### **Navajo AUM Eastern Region**

**Prepared by:**

**Weston Solutions, Inc.**

**Contract: W91238-06-F-0083**

**12767.063.496.1111**

**May 2009**

**Part I Site Identification, Location and Status**

**Site Names and ID numbers as applicable**

**Mine ID:** 10006

**Map ID:** E10

**CERCLIS:** NNN 000 908 753

**NAMLRP:** NOT ASSIGNED

**New Mexico Mining and Mineral Division ID:** NOT ASSIGNED

**New Mexico Bureau of Geology and Mineral Resources:** NOT ASSIGNED

**Local name / Aliases:** N/A

**Chapter and local area:** Nahodishgish Chapter

**Lat/Long:** 35.7461961778 N / -108.303800511 W

**Nearby road and highway:** NM-371, Interstate 40  
NM

**Local Post Office:** Crownpoint,  
NM

**Land Status: check one or more and provide ownership and contact information below**

- Tribal Trust Land**
- Tribal Fee Land**
- Allotment**
- Fee land**
- Public lands**
- Private**
- Bureau of Land Mgmt**
- State**

**Ownership and contact information:**

No ownership was identified. The mine site property is classified as Navajo Tribal Trust land.

## **Part II Site Observations**

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

**0 to 200 feet:** 4 homes in located in along the eastern edge of the site along with sheep stable (Photos 3, 10-12). Gamma radiation levels around the homes were found at less than 2 times background levels. Field personnel were unable to gain contact with any of the residents.

**200 feet to 0.25 mile:** 3 homes were located approximately 0.25 miles south of the site.

### **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):**

- 4 houses and 4 wells at the east end of the site – measured at between 12,763 and 14,501 counts per minute (cpm)

### **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:** 4 wells were observed within the area surrounding the east homes (Photos 7-9, 13). Gamma radiation levels were found at less than 2 times background levels.

**0.25 miles to 4 miles:** A windmill well was located approximately 1.5 miles west of the site (Photo 14).

### **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 observed

### **Known Site History: include information from interviews with Chapter officials and residents.**

### **Note information on mine ownership, period of operation, and type of mining operation.**

Standing Rock mine consists of an area of 143,226.27 square meters. Any historical information pertaining to mining operations and historical ownership of the mine site appeared to be unclear.

**Part III      Type, number and reclamation status of mine features**

**Provide description and reclamation 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 reclamation caps.**

Reclamation status of the mine site is currently unknown.

**Part IV      Summary of radiological readings**

**Background Locations**

- #1 19,985 cpm
- #2 12,855 cpm
- #3 12,763 cpm
- #4 14,501 cpm

**Mine site:** Standing Rock  
- See Figures 1 and 2

**Nearby Structure Perimeter** – N/A

**Describe any other radiological measurements:**

A total of 2,528 gamma radiation measurements were collected from mine sites, ranging from 10,162 cpm to 36,036 cpm. The measurements are represented in Figures 1 and 2.

**Part V            Site sketch of all mine features and readings, including locations of all structures, sources of drinking water and any other important features and radiological readings.**

Presented in Figures 1 and 2

**Part VI Response Action Summary**

**Site Name(s):** Standing Rock      **Chapter:** Nahodishgish

**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?** N/A

**At what distances from the waste pile are there potential drinking water sources?** N/A

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

**Is the cap/seal functionally intact?** N/A

**Is the cap/seal sufficiently degraded to create a concern about releases?** N/A

**At what distance from the cap/seal is the nearest domestic structure located?** N/A

**At what distance from the cap/seal is the nearest domestic drinking water source?** N/A

**Summary of emergency response factors**

None

**Summary hazard ranking system factors**

4 homes were observed at the eastern edge of the property, as well as 4 wells found near the homes. Gamma radiation levels near the homes and wells were found below 2 times background levels. 3 homes were observed approximately 0.25 miles south of the site, and a windmill well was found approximately 1.5 miles west of the site.

**Summary of reclamation factors**

No known reclamation

**Part VII      Photos**



Photo 1. Standing Rock mine site, towards the southwest



Photo 2. Standing Rock mine site, towards the west



Photo 3. Standing Rock mine site and housing compound approximately 50 feet north of site, towards the north



Photo 4. Standing Rock mine site and housing compound approximately 0.25 miles south of site, towards the south





Photo 5. Standing Rock mine site geological survey point in the eastern portion of the site, towards the north



Photo 6. Standing Rock mine site geological survey point in the eastern portion of the site



Photo 7. Standing Rock mine site well at eastern end of the site, towards the north



Photo 8. Well located in northern housing compound, directly northeast of mine site, towards the north



Photo 9. Wells located in northern housing compound, directly northeast of mine site, towards the north



Photo 10. Housing compound directly north of mine site, towards the northeast



Photo 11. Housing compound directly north of mine site, towards the north



Photo 12. Wooden structure and sheep herd at housing compound directly north of mine site, towards the southwest



Photo 13. Well located in northern housing compound, directly northeast of mine site, towards the north



Photo 14. Windmill well approximately 1.5 miles west of mine site, towards the east

**Part VIII      Contacts Reports and Information**

Name Stanley Edison

Title or official role (if any) Navajo EPA Superfund Program

Address PO Box 2946, Window Rock, AZ 86515

Telephone number 928-871-6861

Information provided General Background and Contact/Access Information

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Name \_\_\_\_\_

Title or official role (if any) \_\_\_\_\_

Telephone number \_\_\_\_\_

Information provided \_\_\_\_\_

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Name \_\_\_\_\_

Title or official role (if any) \_\_\_\_\_

Telephone number \_\_\_\_\_

Information provided \_\_\_\_\_

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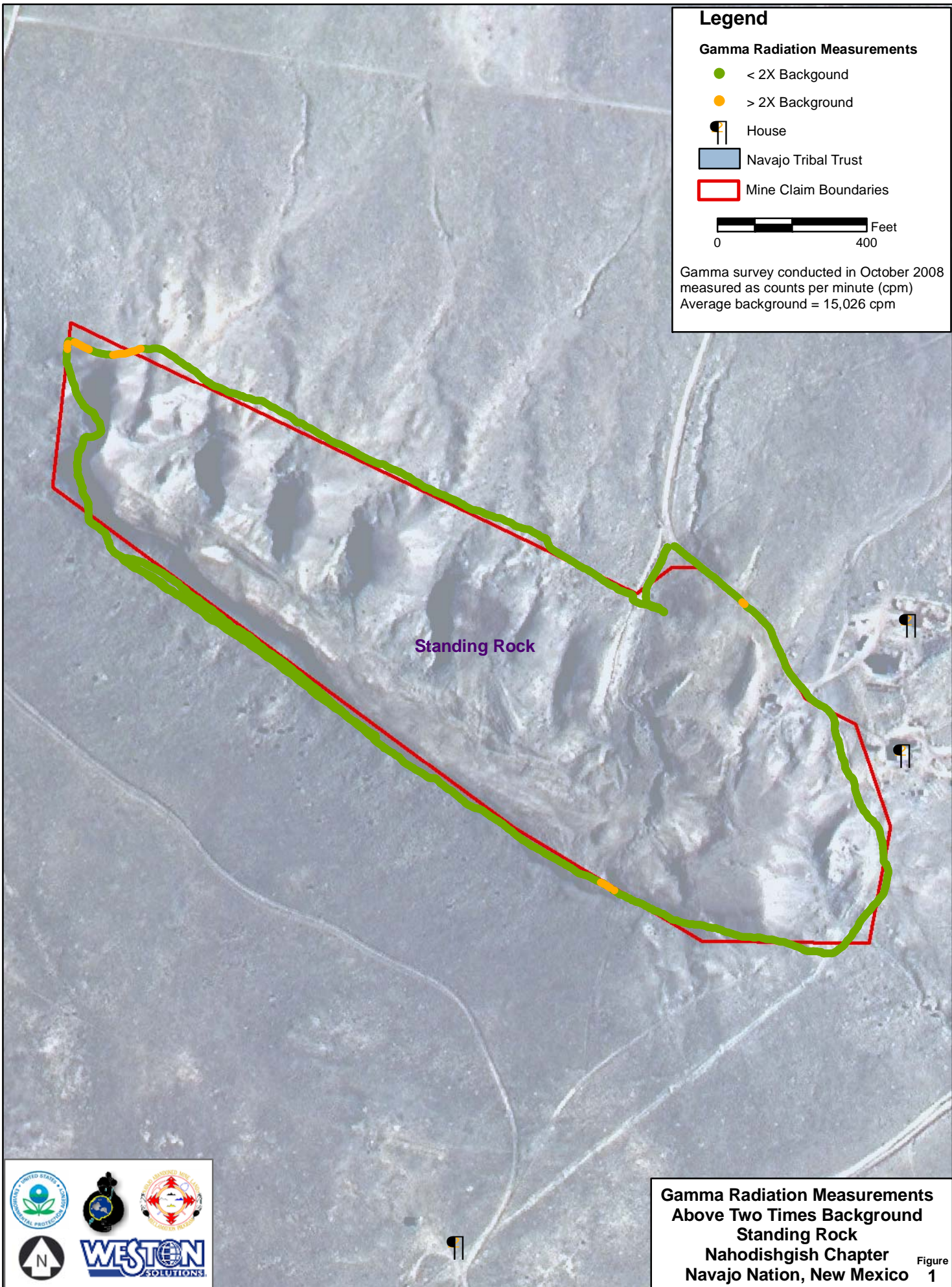
Name \_\_\_\_\_

Title or official role (if any) \_\_\_\_\_

Telephone number \_\_\_\_\_

Information provided \_\_\_\_\_

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**Legend**

**Gamma Radiation Measurements**

- < 2X Background
- > 2X Background



House



Navajo Tribal Trust



Mine Claim Boundaries



Gamma survey conducted in October 2008  
 measured as counts per minute (cpm)  
 Average background = 15,026 cpm

Standing Rock



**Gamma Radiation Measurements  
 Above Two Times Background  
 Standing Rock  
 Nahodishgish Chapter  
 Navajo Nation, New Mexico**

