

**United States Environmental Protection Agency**  
**Region IX**  
**POLLUTION REPORT**

**Date:** Sunday, August 24, 2008  
**From:** Harry Allen IV, Will Duncan III  
  
**To:** Harry Allen IV, Emergency Response Section

**Subject:** Cove Navajo Radioactive Structures  
BIA Route 33, Cove Chapter - Navajo Nation, AZ  
Latitude: 36.5833000  
Longitude: -109.2003000

<b>POLREP No.:</b>	1	<b>Site #:</b>	09RM
<b>Reporting Period:</b>		<b>D.O. #:</b>	
<b>Start Date:</b>	8/19/2008	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	8/18/2008	<b>Response Type:</b>	Time-Critical
<b>Demob Date:</b>		<b>NPL Status:</b>	Non NPL
<b>Completion Date:</b>		<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>		<b>Contract #:</b>	
<b>RCRIS ID #:</b>			

#### **Site Description**

The U.S.EPA has begun a Removal Action in the Cove, and Red Valley Chapters of the Navajo Nation (AZ & NM). EPA has determined that numerous homesites and structures exhibit elevated levels of gamma radiation. These structures are believed to be contaminated by uranium mining wastes either carried to the sites and used in building material or transported to the sites by natural means. These will be the models for future work this year at remaining contaminated structures in Teeec Nos Pos, AZ, Cane Valley, AZ/UT and Tuba City, AZ.

In Cove Chapter, 1 yard and the house at that homesite will be remediated. U.S. EPA and NNEPA visited the resident, acquired access, and provided a data packet and letter to the owners of the structure. EPA discussed resident specific temporary housing arrangements and demolition and reconstruction plans.

During this and upcoming reporting periods, START will also continue to reassess structures in Teeec Nos Pos and Cane Valley for upcoming Removal Actions.

#### **Current Activities**

Monday (8/18) – USEPA, Superfund Technical Assistance and Response Team (START), Emergency Response and Removal Service contractor (ERRS), and U.S. Coast Guard Pacific Strike Team (PST) mobilized to the Cove Site (HS-0044).

Tuesday (8/19) –

- START (2)/PST (1) conducted radiological reassessment at HS-0043 (in Red Valley Chapter).
- ERRS (2) mobilized residential storage trailers to multiple locations including HS-0044 (in Cove Chapter). One excavator and 1 front-end loader arrived on Site at HS-0044.

Wednesday (8/20) –

- ERRS (4) began locating and exposing utilities and began removing interior building materials such as interior framing, sheetrock, counters and fixtures, as well as doors, and windows at structure HS-0044-B. This structure is an abandoned house constructed of cinder block.

• START (2)/PST (1) was directed to conduct baseline air monitoring using F&J hi-volume air sampling pumps (for radiological monitoring) at HS-0044. START was directed to scan the interior of the storage boxes to identify possibly contaminated personal belongings.

- START conducted a reassessment of the HS-0035 property using the PIC, Bicron, and 3x3 ratemeter.

Thursday (8/21) –

- START (2)/PST (1) conducted baseline (2-hour) sampling with the F&J radiological air sampling pumps at HS-0044. START continued to conduct air monitoring daily throughout the reporting period. Radiological counts were collected from filters at the end of each day and again, each day for 3 days to measure initial radioactivity and decay rate. None of the results exceeded the Action Level of  $3 \times 10^{-10} \mu\text{Ci}/\text{ml}$

- START scanned personal belongings inside of 2 existing storage sheds to ensure cross contamination of

personal belongings had not occurred. START developed an Investigation Level (IL) by scanning a Cove specific background location near the Cove Chapter House. None of the belongings exceed the IL.

- START scanned the yard at HS-0044 to outline the areas of higher contamination (>IL) and confirm the Rapid Assessment Tools (RAT) radiological scanning data IL exceedence areas from the February assessment. The area immediately around the contaminated structure was confirmed to be the only elevated area of the homesite. START marked this area with pin flags and paint. Scanning confirmed that the exceedence area was approximately the same as the RAT data had indicated and the data analytical approach had suggested (approximately 1,000 sq. feet). ERRS will excavate this area in the coming week.

- START scanned a borrow area on the Site as a potential backfill source. Consultation with the resident identified a second area which was also scanned both were determined to be below the IL.
- ERRS (6) leveled a pad for equipment. The USEPA command post arrived; PST and ERRS assisted in setup. ERRS also mobilized a bulldozer to the Site.
- ERRS removed remaining building materials from the structure and placed either in storage or in a disposal pile. START proceeded to scan all of this material. No exceedences were encountered.

Friday (8/22)—

- EPA determined that archeological clearance for HS-0044 was not necessary because the homesite is a homesite lease and therefore has been cleared. Discussions between USEPA, NNEPA and Navajo Historic Preservation Office confirmed this.
- EPA and NNEPA acquired an access agreement from the resident of HS-0045. HS-0045 and HS-0046 will be prepped in the coming week. These areas also have archeological clearance because they too are homesite leases. EPA has retained an archeologist to confirm this beginning the week of August 25th.
- ERRS began demolition of the structure at HS-0044. The demolition required the full-size and mini-excavators. Building materials were segregated and crunched with the excavator thumb.

• ERRS also prepared the staging area in Red Valley.

Saturday (8/23)—

- ERRS continued demolition, crushing and segregating building materials (wood, sheet rock and cinder blocks). ERRS also removed the foundation of the building.
- START scanned the debris piles and did not find any exceedence areas.
- ERRS also improved the road to HS-0045 & 46, in the Red Valley response area.
- EPA and ERRS also traveled to Teeec Nos Pos. EPA delivered the data packet to the residents of HS-004 and attempted (unsuccessfully) to contact the resident of HS-002.

### **Planned Removal Actions**

Once HS-0044 is completed, no additional removal actions are planned for Cove NRS. Additional property removal actions are planned in Red Valley in the coming weeks.

EPA will construct a replacement structure at HS-0044 in the coming weeks.

### **Next Steps**

- ERRS will load debris and soil from HS-0044 into end dumps and haul to the Red Valley staging area where they will be loaded and disposed off-site.
- Access Required: USEPA and NNEPA must acquire access agreements form HS-0053 and HS-0048 (in Red Valley). Only yards will be excavated at these homesites (structures were not determined to be contaminated). EPA also requires access from HS-0032-D.
- Upcoming remediation activities: ERRS will begin to assist residents for HS-0045 and HS-0046 in packing and relocating to other nearby structures as a temporary housing accommodation. USEPA has acquired access to these 2 structures.

### **Key Issues**

- Archeological screening: USEPA is uncertain whether or not HS-0039 & HS-0043 have been cleared for archeological artifacts. The archeologist may assist USEPA on August 25th. USEPA has acquired access to these 2 structures.