U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Cove Transfer Station - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IX

Subject: **POLREP #9**
Progress
Cove Transfer Station
09XL
Apache County, AZ
Latitude: 36.5580300 Longitude: -109.2174700

To:
From: Maggie Waldon,On Scene Coordinator
Date: 6/19/2013
Reporting Period: 6/15/2013-6/19/2013

1. Introduction

1.1 Background

Site Number:	09XL	**Contract Number:**	EP-S9-12-01
D.O. Number:		**Action Memo Date:**	9/15/2012
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	6/10/2013	**Start Date:**	6/12/2013
Demob Date:		**Completion Date:**	
CERCLIS ID:	NNN00906016	**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

Time Critical Removal: Uranium

1.1.2 Site Description

The Site consists of two transfer stations located in the Cove Chapter on the Navajo Nation Indian Reservation. The Cove Transfer Stations are 2.2 miles apart and located on opposite sides of Navajo Route 33. The geographic coordinates for the approximate center of the area of concern of Transfer Station 1 (TS1) is Latitude: 36° 33’ 41.00” N, Longitude: 109° 13’ 00.00” W. The geographic coordinates for the approximate center of the area of concern of Transfer Station 2 (TS2) is Latitude: 36° 35’ 03.00” N, Longitude: 109° 12’ 04.00”. TS1 occupies approximately 4 acres of land consisting primarily of undeveloped, open grazing land with a single-family residence located on the northern end with vacant land and a second single family residence approximately 200 feet farther to the north. The Cove Day School is located 250 feet from the southernmost corner of TS1. TS2 occupies approximately 2.5 acres of land consisting exclusively of undeveloped, open land, bordered by Navajo Route 33 to the east and vacant land to the north, west, and south. Land use of TS2 is exclusively open grazing land.

1.1.2.1 Location

The geographic coordinates for the approximate center of the area of concern of Transfer Station 1 (TS1) is Latitude: 36° 33’ 41.00” N, Longitude: 109° 13’ 00.00” W. The geographic coordinates for the approximate center of the area of concern of Transfer Station 2 (TS2) is Latitude: 36° 35’ 03.00” N, Longitude: 109° 12’ 04.00”.

1.1.2.2 Description of Threat

Portions of the Navajo Nation are on geologic formations rich in radioactive uranium ores. Beginning in the 1940s, widespread mining and milling of uranium ore for national defense and energy purposes on Navajo tribal lands led to a legacy of abandoned uranium mines. This Site is one of approximately 520 AUMs located on the Navajo Nation. Nearby residents have expressed concern to the Navajo Nation Environmental Protection Agency (NNEPA) regarding the potential for wind-blown and water-borne radioactive particles to migrate from the Site and impact their health as well as the health of their livestock and the environment.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

During a site inspection at TS1 on July 9, 2004, and during a site inspection at TS2 on October 19, 2005, both performed by the Navajo Nation Environmental Protection Agency (NNEPA), gamma radiation activity (gamma activity) counts greater than two times the NNEPA-referenced background level of 14 microroentgens per hour (µR/hr) were detected at multiple locations throughout each transfer station site. Based on these results, in 2011 the NNEPA requested assistance from the EPA in performing a removal assessment of TS1 and TS2 to determine the nature and extent of the contamination for the purpose of mitigating any potential impacts to human health and/or the environment.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The EPA Emergency Response Section conducted a CERCLA removal action of uranium mine waste from two former transfer stations located in the Cove Chapter of the Navajo nation in Sept. 2012. EPA removed most of the waste from TS1 and moved it to TS2. The waste at TS2 was excavated and consolidated into several stockpiles. The stockpiles were constructed to a 4:1 ratio and stabilized with soil sealant, fenced, and warning signs were placed on the perimeter fencing. This removal was not completed due to the discovery of previously undetected contamination. EPA demobilized off the site November 2012. A second action memo increasing the ceiling amount was approved in June 2013. EPA and the removal contractors remobilized on June 10, 2013. Removal action commenced on June 12, 2013.

2.1.2 Response Actions to Date

See PolReps 1-8

Summary of START activities at Cove Transfer Station (TS) Removal Week of 6/19-6/22

06/19/13- Performed Daily QA/QC on all instruments. Count previous two days air samples, no exceedance of applicable DACs for gross alpha or gross beta. Upwind, downwind, and work zone air sampling performed for gross alpha and beta activity. All DACs are below applicable limits. One air sample location (TS1N-03) was moved across the road to in front of the school. Downwind and work zone dust monitoring for PM10. One DataRAM did not data log (at location TS-02). All other DataRAM PM10 concentrations less than stipulated action levels.

Performed final RAT Gamma Activity scan at TS1W-06. Results were below the action level. Post-excavation RAT scan at TS1N-07. Collect 3 confirmation soil samples (including one duplicate) from TS1N-07. Samples to be submitted for analysis for Ra-226 to GEL (laboratory). Perform delineation RAT scan on TS1-S-02 to mark areas for excavation. START scans erosion rills near TS1N. Options to control erosion discussed, ERRS used loader to add borrow material to fill rills.

06/20/13- Performed Daily QA/QC on all instruments. Count previous two days air samples, no exceedance of applicable DACs for gross alpha or gross beta. Upwind, downwind, and work zone air sampling performed for gross alpha and beta activity. All DACs are below applicable limits. Downwind and work zone dust monitoring for PM10. TWA dust concentrations less than stipulated action levels. One DataRAM did not data log for this date (at location TS2-02).

Perform delineation gamma activity scan at TS1-S-02 using USEPA's RAT. START marks areas for further excavation as gamma activity ranged between 40,000 and 55,000 cpm, which is equivalent to 5-12 pCi/g (background is 25,000-27,000 cpm or 0.7-2 pCi/g). Elevated areas most likely due to historic ore pit identified as TS1S-01. Approximately 15 cu. yd. were excavated from TS1-S-02.

Clean fill rock material arrived to site via haul truck. Work began spreading fill rock along drainage gully north of TS1-S1 (north of historic ore pit).

06/21/13- Performed Daily QA/QC on all instruments. Count previous two days air samples, no exceedance of applicable DACs for gross alpha or gross beta. Upwind, downwind, and work zone air sampling performed for gross alpha and beta activity. All DACs are below applicable limits. Downwind and work zone dust monitoring for PM10. DataRAM PM10 concentrations less than stipulated action levels.

One resident visited the site and requested a scan of a portion of her property. START and OSC accompanied resident with Ludlum 2241-3/44-90 to perform hand scan. The area scanned was located across the road and immediately southeast of TS2. Hand scan results were between 26,000 and 30,500 cpm, which is considered background for the area.

Performed additional final gamma activity scans and soil sampling at TS1-North-02&03 (TS1-N-02&3) using USEPA's RAT. Zones 2 and 3 were combined due to proximity.

To the south of TS1N2 and N3 was a localized (~2 foot diameter) area of exposed ore discovered with 800,000 cpm. ERRS was notified of the area and will remove using a shovel. Final RAT scan of TS2-02 along the road indicated areas exceeding twice background. START marks elevated areas. ERRS was notified of the area and plans to place one foot of additional cap material on the elevated areas.

Approximately 216 cu. yd. were excavated from TS1 between 6/19 and 6/22. Collected an additional 4 soil samples from TS1-S1. Gamma activity generally less than approximately 33,000 counts per minute (background is 25,000-27,000 cpm) in all areas except TS1-N-06. All removal work is completed in zones 2&3, 4, and 5.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Not Applicable

2.1.4 Progress Metrics

Cove Transfer Stations Removal Volumes to Date

	Truckloads	Excavated Volume*	Transported TS2 Volume*
6/19/2013	25	180	300
6/20/2013	3	36	36
6/21/2013	0	0	0
6/22/2013	0	0	0

*12 yds^3/truckload

2.2 Planning Section

2.2.1 Anticipated Activities

Soil sealant will be applied to the stockpiles on TS2 beginning Monday, june 24.
Decontamination of equipment will begin on Monday, June 24.

A return trip to address the erosion of the residence on TS1 is planned for the fall of 2013.

2.3 Logistics Section

All logistical issues are being handled by the ERRS contract. No logistical issues at the moment.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

The START and PST are jointly overseeing site safety. The START contract has an excavation area air surveillance plan in place that involves the total particulate monitoring and sampling for dust contaminated with alpha radiation. The samples collected for alpha radiation are countered several times over a 48 hour period in Ludlum Model 3030 wipe counter for alpha radiation. By counting over a 48 hour period, activity due to radon can be accounted for. The action level for the monitoring is 5000 µg/m3 and 10% of the derived air concentration of the isotopes of concern. The air surveillance data has documented that the action levels have not been exceeded. No personal sampling is being conducted.

2.5.2 Liaison Officer

OSC Waldon is the the Liaison Officer with the Tribe.

2.5.3 Information Officer

N/A

3. Participating Entities

NNEPA is the only participating agency for this site.

4. Personnel On Site

USEPA OSC: F. Stroud (ERT) 6/22 -6/26

START: Two START
ERT: 1
ERRS: 1 RM, 1 PAS, 11 laborers/equipment operators

5. Definition of Terms

CERCLA: Comprehensive Environmental Response Compensation and Liability Act of 1980
DAC: Derived Air Concentration
EPA: United States Environmental Protection Agency
ERRS: Emergency and Rapid Removal Services contractor (EQM, Inc.)
µg/hr: Micrograms per hour
µR/hr: Microroentgen per hour
NNEPA: Navajo Nation Environmental Protection Agency
OSC: On-Scene Coordinator
PST: United States Coast Guard Pacific Strike Team
START: Superfund Technical Assessment and Response Team contractor (Ecology and Environment, Inc.)
TDD: Technical Direction Document
TO: Task Order
TS1: Cove Transfer Station 1
TS2: Cove Transfer Station 2
TWA: Time Weighted Average

6. Additional sources of information

6.1 Internet location of additional information/report

website located at www.epaosc.org/covetransferstations

6.2 Reporting Schedule

7. Situational Reference Materials

Photos in image section.