

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IX

Subject: POLREP #10
Re-vegetation and Erosion Control
Cove Transfer Station
09XL
Apache County, AZ
Latitude: 36.5580300 Longitude: -109.2174700

To:
From: Christopher Weden, On Scene Coordinator
Date: 9/29/2013
Reporting Period: 9/23-9/29/2013

1. Introduction

1.1 Background

Site Number:	09XL	Contract Number:	EP-S9-12-01
D.O. Number:	9029	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:	9/22/2013	Start Date:	9/23/2013
Demob Date:	9/30/2013	Completion Date:	10/30/2013
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 ($\mu\text{R/hr}$) 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 and the removal action commenced on June 12, 2013. In September 2013, a 12 Month Exemption Request and increase Project Ceiling amount to address the erosion of the protective cap was approved. This response was dedicated to improvements (erosion control) of the protective cap, per section 2.2.1 of Polrep 9.

2.1.2 Response Actions for the week of 23Sept 2013

Please refer to PolReps 1-9 for details of previous actions.

Equipment delivered and job trailer and 2- 1000 gallon fuel tanks staged. Began excavation of soil from borrow area (more fertile soil) and stockpile soil near home. Began regrading of the West and East side slopes around the house and excavation of overburden soil around the Westside and East side of the house. Prepared drainage ditches for placement of rock.

START Placed four P- Dataram units around the house for dust monitoring. Calibrated the gamma and Alpha probe for personal decon screening and area scanning. Developed a plan for placing straw wattles

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

Not Applicable

2.1.4 Progress Metrics

2.2 Planning Section

2.2.1 Anticipated Activities

This project is intended to accomplish the following elements and will continue pending the Congressional budget debates:

1. Scarifying the existing surface;
2. Placing topsoil from neighboring farmfield to the north and amending the scarified material;
3. Disking or tilling in the topsoil;
4. Directing areas of channelized flow as necessary to prevent erosion potentially with rip-rapped drainage installation;
5. Revegetation and site closure

More specifically, ERRS is transferring soil from the borrow source area near Transfer Station #1 (approximately 2500 CY), as directed by the OSC. Using heavy equipment, the crews are stockpiling soil and transferring the soil to scarified areas. Approximately one foot of material is being placed over the affected area. The existing material on the property is being disturbed (scarified) using heavy equipment, using care to not disturb the preexisting contaminated material. After final placement, the area is compacted using a roller. Rock-lined channels will be installed near the residential property to route surface water around the steeper slopes on-site. Once compaction is complete, the surface area will be prepared for revegetation. The area will be fertilized and seeded with a drought-tolerant seed mix, containing species typically found in the southwestern United States (the seed mix can be made available upon request). Erosion control measures will be utilized as needed and practical in the affected areas. Straw wattles have been previously placed on-site and these areas can be re-evaluated for additional activities to be performed or separate erosion control measures to be installed. Water will be delivered to the site via water trucks using the Frog Pond Well, under Permit #13-PP12, located along Highway N36. Some watering will be done to assist in seed propagation. Dedicated water trucks will be on-site for the duration of the project.

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 is overseeing site safety.

2.5.2 Liaison Officer

OSC Weden 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: Weden

START: One-Two START

ERRS: 1 RM, 1 PAS, 12 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: Microrentgen 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.