

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Cowboy Timber - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VIII

Subject: POLREP #6
Progress POLREP for Cowboy Timber Site
Cowboy Timber
A872
Manderson, WY
Latitude: 44.2839069 Longitude: -107.9603291

To:
From: Craig Myers, OSC
Date: 7/5/2016
Reporting Period: 6/27 through 7/4

1. Introduction

1.1 Background

Site Number:	A872	Contract Number:	
D.O. Number:		Action Memo Date:	7/24/2015
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	5/9/2016	Start Date:	5/10/2016
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	State referral
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Time-Critical Removal Action

1.1.2 Site Description

The Site is an inoperative wood treatment facility and sawmill. However, the proposed scope of this removal action is focused on portions of the property that contain unused and essentially abandoned wood treatment structures.

1.1.2.1 Location

The Site is located at 91 Hwy 31, Manderson, Wyoming, at: Latitude 44.2839069 / Longitude -107.9603291. The property surrounding the Site is primarily agricultural land. The Site sits on a bluff above the Bighorn River.

1.1.2.2 Description of Threat

EPA has considered all the factors described in 40 CFR §300.415(b)(2) of the NCP and determined that the following factors apply at the Site:

“(ii) Actual or potential contamination of drinking water supplies or sensitive ecosystems”

Documented levels of PCP in the surface and subsurface soils exceed Wyoming's promulgated groundwater protection standards. There is no data available to positively conclude that the shallow groundwater on the Site is completely isolated from the groundwater plane associated with the Bighorn River or from the drinking water aquifer utilized by the residents immediately to the south of the Site. Additionally, as noted in Attachment 3 and the START 4 report, the contaminated layers identified in soil boring numbers 3 and 4, at 24 and 29/38 feet below ground surface respectively, indicate a significant downward migration of PCP in less than a tenth of a mile of horizontal distance. If the EPA does not take a response action, all available data indicate potential contamination of deeper aquifer(s) used for drinking water by nearby residents. A summary table of notable PCP detections is provided as Attachment 3, with a more detailed narrative explaining the results available in the START 3 and START 4 reports in the administrative record for the Site.

“(vii) The availability of other appropriate federal or state response mechanisms to respond to the release”

As discussed in the Site Action Memorandum, there are no other federal or state mechanisms available to respond to this release.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The Wyoming Department of Environmental Quality (WDEQ) Hazardous Waste Division discovered suspected contamination at the Site during a routine inspection in 2011. Due to health issues of the current owner, subsequent inspections and other enforcement activities were delayed. The inspector notified the OSC of the suspected contamination in the spring of 2013, at which point the On-Scene Coordinator (OSC) started a removal Site evaluation.

The Site started operations in the 1920s as a small natural gas refinery, reportedly drying the gas by removing natural gas liquids and removing sulfur bearing compounds. Very little information is available at this time as to facility construction or gas throughput. In the 1950s, the facility was purchased by a wood treating company, which started treating posts using a pentachlorophenol (PCP)/diesel fuel mixture. This practice continued through the 1990s, and there is an extensive Resource Conservation and Recovery Act (RCRA) file on the facility.

A second event was conducted to assess contamination at depth in order to attempt to quantify the depth of contamination in areas where the previous assessment was unable to do so. This effort identified a thin contaminated strata approximately 30 feet below ground surface, indicating significant downward migration. Details of this sampling event are available in the START 4 Trip Report in the administrative record for the Site.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

Week of May 9th

ERRS mobilized a small crew to begin demolishing various concrete structures on May 9th, 2016, in order to begin excavation activities on May 16th. They also began Site setup - office trailer, power drops for the mobile lab, etc. START was on Site for two days on May 10th and 11th to establish the sampling/excavation grid and obtain samples from the first lift, which were analyzed in the lab in Denver prior to mobilization. OSC Sandoval was on Site for this period of time.

Week of May 16th

OSC Myers, along with the remainder of the ERRS crew and 3 START contractors, mobilized to the Site on May 16th. START set up the mobile lab that evening in preparation to begin receiving and analyzing samples to guide ERRS excavation efforts. START sampled excavated areas as each grid was completed (see attached grid map) to guide excavation and waste segregation activities in order to minimize the amount of soil requiring treatment.

ERRS continued to break out concrete and began excavation efforts during this time frame. As ERRS demolished the former refinery foundation (see the maps in the START 3 Sampling Activities Report), the crew discovered that six small equipment pads, visible on top of the foundation structure, were actually six very large, heavily reinforced concrete structures extending well below what was believed to be native grade. These structures were estimated to weigh approximately 100,000 pounds each, and may have to be moved if the excavation depth exceeds eight feet. Excavation efforts were slower than anticipated during this time period due to some challenges removing various concrete structures and sorting contaminated debris from clean debris. The majority of the first two excavation lifts of rows 2 through 7 in columns B, C, and D were completed during this week, and graphical depictions of the excavated lifts are available in the documents section of OSC webpage for the Site.

Week of May 23rd

Excavation lifts 3 and 4 were completed during this period. Excavated areas were generally in grid rows 2 through 7 in columns B and C. Cell E5 was also excavated down to the 2nd lift elevation.

A demolition company evaluated the large concrete structures mentioned previously, and offered a quote to demolish them. The quote was nearly double the IGCE, and would not have been completed before June 1st. As an experiment, one excavator was configured with the breaker attachment and one of the structures was broken into pieces manageable with equipment on Site. From this test, the crew found that they could break up the structures before the demolition company could be on Site. This did slow down excavation during the week, and will likely extend the excavation phase of the project by a week.

START began conducting personal and area air sampling as the crew encountered high levels of PCP in soils. Results from initial rounds of sampling are all non-detect.

Week of May 30th

OSC Sandoval was on Site for this period. Excavation lifts 5 through 8 were completed during this period. Removed source contamination through lift 11. Cells C4 through C7 required the deepest excavation. Removed all concrete structures mentioned above and around the pad structure. Began re-grading the entire treatment cell to lift 2. Screen arrived on Site late Thursday, which will be used to remove debris from the sawdust piles that will be used for the treatment cell mixture, as well as removing larger rocks and debris from the contaminated soil prior to treatment. Ran a second round of air monitoring samples for the perimeter and cabin in the excavator. All air sample results to date have been non-detect. Air sampling has been discontinued.

Week of June 6th

OSC Myers was on Site from June 6th through June 10th. The excavation was largely backfilled and compacted during this period, and a large majority of the excavated soils were amended with sawdust in preparation for treatment. A local irrigation firm was on Site to discuss potential irrigation solutions for the treatment phase this fall. The OSC and START demobilized for the weekend.

Week of June 13th

OSC Sandoval was on Site intermittently this week. START remobilized with a project team leader and chemist to support excavation activities in the southern area of the Site. Activities during this week generally consisted of backfilling/compacting the northern excavation, pressure washing and cutting up steel found in the excavation. Excavation of rows 8-11 began mid-week.

Week of June 20th

OSC Romero was on Site from June 20th through June 24th. Excavation and sampling continued throughout on grids A8, A10, A11, C8, B9, C9, and D9. Approximately one thousand cubic yards of contaminated soils were excavated and moved to the stockpile area for later bioremediation. Additional grids (AA7 - AA10) were created to track excavation under the secondary drip pad. This drip pad consisted of a metal frame and pad 1.5 - 2 feet above ground level and approximately 120 linear feet in length. The metal from the drip pad was pressure washed per 40 CFR 268.45 process for hazardous debris to remove any residual contamination, cut up, and will be recycled as processed scrap metal. All excavation was considered complete per the terms of the Action Memorandum as of COB Saturday, June 25, and the crew began preparing the treatment cell.

Week of June 27th

OSC Myers was on Site this week. All remaining excavated soil was spread into the treatment cell during this period. A map of the final cell boundaries is available on the OSC website. Crews also tilled the cell to mix and loosen the soil after being tracked on, applied the required nutrient mix, and applied approximately 1/2 to 3/4 rain equivalent inches of water to the cell. All EPA, START, and ERRS resources demobilized from the site on July 1st. See Planning Section for more details.

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

EPA is evaluating available enforcement options.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Excavated Contaminated Soil	soil	estimated 6597 cubic yards	N/A	biological degradation, pending	N/A
Contaminated Debris	concrete/steel	180 cubic yards	N/A	high temperature/pressure wash complete.	Steel-recycled. Concrete - on-site disposal

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

The successful treatment regime in the treatability study requires approximately 20% soil moisture, which will be difficult to impossible to maintain over the summer months. Accordingly, soil treatment is expected to resume after Labor Day if weather conditions allow. If the Site experiences a hot and dry fall, this may be delayed by several weeks.

2.2.1.2 Next Steps

Finalize irrigation system design (START/EPA) and procure required equipment (ERRS).

Locate and procure appropriate tilling equipment (ERRS).

2.2.2 Issues

Agricultural equipment is difficult to rent, as most agricultural equipment suppliers are small businesses that don't typically rent out equipment and that are leery of renting equipment to a hazardous waste cleanup. ERRS had extreme difficulty in getting appropriate equipment on Site for the initial tilling, ultimately requiring the use of the ripper on the bulldozer to till part of the cell.

2.3 Logistics Section

Not Applicable to this action.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

Not Applicable to this action.

2.5.2 Liaison Officer

Not Applicable to this action.

2.5.3 Information Officer

Nothing to report.

3. Participating Entities

3.1 Unified Command

Not Applicable to this action.

3.2 Cooperating Agencies

Not Applicable to this action.

4. Personnel On Site

EPA - 1

START -1

ERRS - 8

All personnel and resources have demobilized as of July 1st.

5. Definition of Terms

ERRS - Emergency Response and Remediation Services

OSC - Federal On-Scene Coordinator

START - Superfund Technical Assistance and Response Team

6. Additional sources of information

6.1 Internet location of additional information/report

Additional information, and information referenced in this report can be found at <https://www.epaosc.org/CowboyTimber>

6.2 Reporting Schedule

The next POLREP will be issued approximately one week post treatment startup.

7. Situational Reference Materials

No information available at this time.