

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Stackyard Hollow - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: POLREP #16
Progress
Stackyard Hollow
Z3MD
Wheeling, WV
Latitude: 40.0772533 Longitude: -80.7054597

To:

From: Michael Towle/Debbie Lindsey, On-Scene Coordinators

Date: 5/2/2016

Reporting Period: 4/22/2016 through 4/30/2016

1. Introduction

1.1 Background

Site Number:	Z3MD	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	OPA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:		Operable Unit:	
Mobilization Date:	7/13/2015	Start Date:	1/14/2014
Demob Date:	7/16/2015	Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	WVDEP
FPN#:	E14302	Reimbursable Account #:	

1.1.1 Incident Category

This incident is an oil discharge into navigable waters of the United States from an abandoned oil production facility consisting of at least one well.

1.1.2 Site Description

The subject Site consists of a discharge of oil into a flowing perennial tributary of Wheeling Creek located in Ohio County, West Virginia. The tributary is mapped and known as Stackyard Run and exists (at the location of the discharge) within a box culvert constructed over the flowing water. Stackyard Run discharges to Wheeling Creek which is a tributary of the Ohio River in Wheeling, WV. A pipe was found running between the location of the well and Stackyard Run. Oil discharges from this pipe, from around this pipe, and directly through the stone wall of the box culvert into Stackyard Run. The source of the oil has been determined to be at least one abandoned and leaking oil well found underneath a nearby residential dwelling. The well is less than about 25 feet from the flowing water of Stackyard Run and at the end of the above-mentioned pipe. The well is a component of an on-shore production facility that may contain 5 wells and relating equipment according to documents (deeds and leases) reviewed by the OSC.

1.1.2.1 Location

The discharge point for the oil onto the flowing waters of Stackyard Run is located in a box culvert beneath a residential structure located along Joan Street, Wheeling, Ohio County, WV 26003.

1.1.2.2 Description of Threat

See prior POLREPs.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See prior POLREPs.

The OSC continues to conduct Assessment activities at this Site.

The OSC continues to define a substantial threat to the navigable waters. In addition, the Agency for Toxic Substances and Disease Registry (ATSDR) evaluated the situation and finds the incident to pose a public health hazard requiring continuing monitoring and relocation of the occupants of the structure. The City of

Wheeling Health Department has also made similar recommendations. The residents have been relocated by the owner of the property.

The owner of the building continues to assist EPA and WVDEP through maintenance of building ventilation and direct ventilation of the well to the outside. This activity continues to contribute to the present level of safety in the building and surrounding community.

The drilling activities in the well have advanced to a depth over 1085 feet indicating that the well is deeper than believed (although still consistent with nearby wells). The well is still producing oil and gas contributing to the threat of discharge.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Actions to remove debris and oil from the well and then to properly plug the well are underway. See prior POLREPs.

2.1.2 Response Actions to Date

See Prior POLREPs for activities through April 21, 2016. Removal of oil and debris from the well continues. Oil and gas continue to be encountered indicating that the EPA activity of Fall 2015 was not successful at preventing the discharge of oil and gas from the facility.

The owner of the building continues to assist EPA.

During this period, the brush plug encountered last week was finally cleared at a depth of about 950. A bridge was also encountered and drilled on 4/27/2016 at a depth of about 980 feet. A release of gas was noticed after the bridge was cleared. Afterwards the drill stem was easily dropped to a depth of about 1043 feet requiring the purchase of additional drilling rods.

On April 28, towards the end of operations for the week, drilling activities encountered another wooden bridge plug at a depth of 1085 feet.

Response personnel evaluated the available information about the well. Nearby wells were recorded or observed to be between 1000 and 1100 feet in depth to encounter "Big Injun" oil formation. According to an evaluation of other wells in the area, the oil formation "pay zone" is somewhere within a unit of rock which is up to 275 feet thick. As such, and considering all available information, operations may encounter the bottom of the well at about 1240 feet.

The AreaRAE system continues to identify detections of VOCs above the alarm level. Most of these detections continue to relate to instances during which the equipment was being fueled or when the engines were started or adjusted.

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

See Prior POLREPs.

WVDEP located records for the well (and 2 other nearby wells). The records indicated the well owner to be C.G. Broaddus and that the well was plugged. The plugging affidavit indicated that casing pipes were pulled from the well and the well was plugged in a manner prescribed by the State in 1949. The OSC originally believed that plugging did not occur due to the discovery of the 2 inch tubing and sucker rods in the well at about 35 feet. However, it has subsequently been determined that the well had indeed been plugged, but in a manner not documented on the plugging affidavit.

The OSC examined court records and consulted a civil investigator. There is no record of the whereabouts of C.G. Broaddus.

2.1.4 Progress Metrics

The table below reflects disposal from the Site through April 21, 2016

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
oil	solids	4 - 55-gallon drums			X
oil	oily liquids	4364 gallons			X
oil	oil solids	2 tons			X

2.2 Planning Section

2.2.1 Anticipated Activities

Continue drilling/milling activities. This activity will continue until a depth can be reached suitable to plug the leaking well and stop the flow of oil to the surface. At this time the expected depth is estimated to be

at/near 1240 feet.

2.2.1.1 Planned Response Activities

Continue drilling.

Continue air monitoring.

Continue removal of oil from Stackyard Run (note that the amount of oil now in Stackyard Run is significantly reduced since it is now being minimized by a column of fluid and gel in the well and also circulated from the well into the sealed box).

2.2.1.2 Next Steps

Continue drilling and removal of oil.

2.2.2 Issues

The EPA activities of 2015 did not enter the actual well. Instead, the drillers advanced alongside the outside of the actual well and installed cement initially into this new hole. Some cement however entered the actual well and had to be drilled out to allow for removal operations.

Drilling activities inside the building with the available rig are somewhat limiting; the length of the individual drill rods (about 5 feet) cause for a labor intensive operation.

The difficulty in drilling through the cement placed by EPA in 2015, the failed plug and obstruction (believed to be a tool used to set the top plug), and the type of plug used by the well owner (brush plug such as the tip of a pine tree) have caused unexpected delays. The prior POLREPs mistakenly indicated that funding was sufficient to complete the operations. This POLREP corrects the issue - funding was insufficient and additional funding was recently added.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

The WVDEP will serve as the Site Health and Safety Officer during all activities. The EPA OSC will assist.

2.5.2 Liaison Officer

EPA coordinated with various entities associated with the City of Wheeling and the owner of the property.

2.5.3 Information Officer

EPA and WVDEP will continue to coordinate with the property owner to address concerns from the neighboring residents. The OSC conducted a news interview on March 23rd, 2016. The OSC has addressed questions from the press and community.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

EPA
WVDEP
Ohio County Emergency Management Agency
City of Wheeling Fire Department
City of Wheeling Health Department
ATSDR

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

www.epaosc.org/stackyardhollow

7. Situational Reference Materials

No information available at this time.

