

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
PDC Energy Oil Spill - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #1
Initial
PDC Energy Oil Spill
Z5NH
Beverly, OH
Latitude: 39.6159881 Longitude: -81.6669809

To:
From: Andrew Maguire, On-Scene Coordinator
Date: 5/6/2014
Reporting Period: 5/4/2014 - 5/6/2014

1. Introduction

1.1 Background

Site Number:	Z5NH	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	OPA	Response Type:	Emergency
Response Lead:	PRP	Incident Category:	
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	5/4/2014	Start Date:	5/4/2014
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	E14519	Reimbursable Account #:	

1.1.1 Incident Category

Emergency Response - OPA

1.1.2 Site Description

The site is a wet gas oil production well (Well Site Palmer 44-20) north of Beverly, Ohio. Wet gas is a mix of crude oil and condensate.

On Sunday May 4, 2014, PDC Energy reported a 100 barrel spill of drilling mud (75% synthetic oil blend) into an unnamed creek near Beverly, OH. In addition to the drilling mud, an unknown amount of wet gas was also released. The spill was a result of a mechanical failure of a well head during a horizontal drilling operation intended for hydraulic fracturing in the Utica Shale formation to extract wet gas. Upon discovery of the discharge, drilling operations were stopped and PDC Energy implemented their emergency response plan. The incident management specialist contractor, Wild Well Control (WWC), was notified of the situation and mobilized to the discharge site. WWC arrived on site within six hours of mobilization.

The oil production well pad is situated on a man-made earthen platform, with steep embankments to the north, east, and south. As a result of the well head failure, drilling fluid discharged out of the well boring and onto the surface of the drilling pad and down gradient into storm-water control drainage ditches adjacent to the north, east, & south perimeters of the well pad and to an unnamed creek downstream of the ditches. The unnamed creek flows for ¾ mile before leading to Cow Run Creek, and Cow Run Creek flows for a mile before leading to Olive Creek. Olive Creek then flows for a mile before meeting with the Muskingum River a tributary of the Ohio River.

A pocket of unexpected natural gas was encountered during the drilling leading to over-pressurization of the casing leading to the failure of the well head and release. Natural gas was also released causing an explosive atmosphere leading to dangerous working conditions and the evacuation of 7 residents from 3 homes adjacent to the site.

1.1.2.1 Location

1244 Center Bend Rd
Beverly, Morgan County, Ohio

1.1.2.2 Description of Threat

Oil has been released into an unnamed creek that is a tributary to the Muskingum River, a navigable waterway.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Currently the release has stopped and the oil is contained to the drilling pad, two sediment ponds immediately adjacent to the drilling pad, and a ½ mile stretch of an unnamed creek. The areas are heavily contaminated with the drilling mud, crude oil and condensate. PDC Energy has collected 330 barrels of oil/water mixture as of 12:00 pm 5/6/2014. PDC has contracted Clean Harbors, a USCG certified Oil Spill Response Organization (OSRO) to perform the physical cleanup of the contaminated ponds, channels, creeks and vegetation. EPA, Ohio EPA, PDC and Clean Harbors are developing a cleanup approach to begin immediately upon arrival of the Clean Harbors staff on 5/7/2014. Accessibility, topography, and benzene concentrations will impede response operations.

The natural gas release has diminished significantly, however, benzene concentrations on the pad have slowed the progress of fixing the well. PDC plans to begin fixing the well as soon as the benzene situation is managed properly, expected to be tomorrow (5/7/2014). The process of fixing the well involves introducing more drilling mud to suppress natural gas from releasing so the well head can be fixed. This will be monitored closely, containment and recovery equipment will be staged for a quick response should another release occur.

2.1.2 Response Actions to Date

Two containment dams have been constructed to keep oil contained. 339 barrels of oil/water mixture has been recovered so far. Sorbent booms and pads are in place and are changed out when saturated. 100 feet of containment boom is in place upstream of the farthest downstream containment dam.

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

A Notice of Federal Interest was issued to PDC Energy on 5/5/2014.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

Oil Recovery in creek, sediment ponds and drainage ditches
Air Monitoring on pad and off-site

2.2.1.1 Planned Response Activities

Develop strategies for recovery of oil and cleanup of impacted waterways and environment.
Air Monitoring
Recovery of borehole and well head repair.

2.2.1.2 Next Steps

Plan for long term remediation.

2.2.2 Issues

Accessibility to impacted creek and environment.
Concentrations of Benzene may impact recovery efforts.

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

No information available at this time.

3. Participating Entities

3.1 Unified Command

EPA, Ohio EPA, PDC Energy

3.2 Cooperating Agencies

4. Personnel On Site

1 - EPA OSC
2 - Tetra Tech START
1 - Ohio EPA OSC
50 - PDC Energy and contractors

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/PDCEnergyBeverly

6.2 Reporting Schedule

7. Situational Reference Materials

No information available at this time.