

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
OneOK Propane Blowout - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI

Subject: POLREP #2
Final
OneOK Propane Blowout

Medford, OK
Latitude: 36.7768425 Longitude: -97.7541161

To:
From: Eric Delgado, OSC
Date: 3/3/2012
Reporting Period: 3/1/2012 - 3/3/2012

1. Introduction

1.1 Background

Site Number:	A6DX	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	
Response Lead:	PRP	Incident Category:	
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	3/1/2012	Start Date:	3/1/2012
Demob Date:	3/4/2012	Completion Date:	3/4/2012
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

A propane well blowout occurred at approximately 1900 on February 28, 2012 at the ONEOK facility near Medford, OK while ONEOK was in the process of decommissioning the well. The well fed to a salt cavern that is approximately 950 feet deep and was used to store propane until the mid 1990s. Propane and Brine water are being released from the well head. Up until the morning of March 2, there had been limited access to the well blowout location due wind conditions blowing from the south. The reason the blowout occurred is currently unknown and the company has hired Boots & Coots to assist in capping the well and stopping the release. There is also a Union Pacific Railway that is adjacent to US Highway 81 on the east side of the highway. On March 1 at 1737, FEMA R6 reported the incident the to the National Response Center (NRC #1004508). At approximately 1800 on March 1, 2012, EPA OSC Delgado and START were activated by the EPA Phone Duty Officer Chris Ruhl and began mobilizing to the scene.

1.1.2.1 Location

Medford, OK

1.1.2.2 Description of Threat

Propane Well Blowout. EPA is here to assess potential threat to facilities containing hazardous substances that may be impacted by fire or explosion.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA's role in the response was to initially determine if the threat of fire and explosion from the well blowout

would impact facilities containing hazardous substances in the evacuation zone. Once the threat analysis was complete, EPA determined that release did not pose a threat to the facilities in the evacuation zone. EPA then transitioned into an assisting agency role, providing resources to the LEPC and Responding State Agencies.

2.1.2 Response Actions to Date

Local officials of Medford, OK issued a voluntary evacuation advisory on February 29, 2012. LEPC has reported that approximately 15 – 20% of the town of Medford have evacuated including the prison, and the nursing home. Boots & Coots well control contractors are in the process of capping the well. OneOK is conducting health and safety air monitoring onsite for LEL approximately every hour at various locations depending on prevailing winds, and has also hired a contractor to assist in air monitoring and environmental impact assessment off site. EPA at the request of the LEPC and OCC established 5 air monitoring locations around the perimeter of the site ranging from 1 mile to 1.5 miles from the site. The locations were established based on prevailing winds, and the relationship of site to the town and nearest residences. Union Pacific's air monitoring contractor, CTEH is also conducting air monitoring along the railway and have agreed to share that data with EPA.

On March 1, Environmental Management, Inc (EMI), ONEOK's environmental contractor deployed boom at three locations on Medford Creek which is near the facility. At this time ONEOK also began constructing earthen berms around the site to contain the brine water runoff from the well. On March 2, EMI placed an additional boom location for a total of 4 boom locations. ODEQ and ONEOK's contractor Burns and McDonnell collected 6 split water samples on March 2 with EPA START contractors documenting and observing activities and EPA Water Enforcement personnel collecting water quality measurements from 6 locations on Medford Creek immediately downstream of the plant covering approximately 5.5 miles to the confluence of Pond Creek. Samples will be analyzed for Total Chlorides and Specific Conductance. Water quality measurements at the 6 sample locations ranged from 80,000 ppm nearest the plant to approximately 2,000 ppm at the confluence with Pond Creek, decreasingly steadily in each successive downstream location. Specific Conductivity ranged from approximately 118,000 uS/cm nearest the plant to approximately 3,700 uS/cm at the confluence with Pond Creek, decreasingly steadily in each successive downstream location. On March 3, OCC collected additional water samples along the creek.

ONEOK reported to ODEQ at 1200 on February 29 that the plant is shut down and the electricity has been cut off to the plant and the other pipelines feeding into the plant have been shut off. ONEOK reported there is a safety system in place at the plant which includes a flare system currently in operation which ONEOK has determined is safer to leave in operation as opposed to shutting off. ONEOK has been working on three avenues of attack they are pursuing which include pushing brine down the pipe that is not leaking, and mud down the leaking pipe, as well as filling up frac tanks with water to be able to provide water spray activities. An Iceball had formed on the leaking pipe which was removed on the evening of March 2. At that time on March 2, ONEOK discovered the mudline pushing mud into the well was not in the well. As of noon on March 3, equipment around the well had been cut away from the well to allow further access to the well, and line providing drilling mud to the well had been reconnected. At 1500 on March 3, ONEOK reported that the flow out of the well had temporarily ceased. At the 1930 operations briefing on March 3, ONEOK reported the well has been temporarily capped and 100 BBLs of drilling mud has been pumped into the well. ONEOK also reported that the earthen berms had been completed on the southeast and northeast portion of the site for brine water retention.

ONEOK also reported they are developing a plan to address the salt water contamination of Medford Creek under the direction of OCC. At 2100 on March 3, EPA suspended air monitoring activities and prepared to demobilize from the site.

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

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

ONEOK will also continue to address salt water contamination of Medford Creek under the direction of OCC.

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

2.2.2 Issues

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

OneOK

OCC

3.2 Cooperating Agencies

ODEQ

EPA

Grant County LEPC

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

<http://www.epaosc.org/OneOKpropane>

6.2 Reporting Schedule

7. Situational Reference Materials

No information available at this time.