

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Blacktail Creek Spill - Removal Polrep  
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region VIII

**Subject:** POLREP #1  
Assessment and Oversight  
Blacktail Creek Spill  
  
Marmon, ND  
Latitude: 48.3872474 Longitude: -103.6560305

**To:**  
**From:** Steven Way, On-Scene Coordinator  
**Date:** 1/26/2015  
**Reporting Period:** 1/8/2015-1/25/2015

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	<b>Contract Number:</b>
<b>D.O. Number:</b>	<b>Action Memo Date:</b>
<b>Response Authority:</b> OPA	<b>Response Type:</b> PRP Oversight
<b>Response Lead:</b> PRP	<b>Incident Category:</b> Removal Action
<b>NPL Status:</b> Non NPL	<b>Operable Unit:</b>
<b>Mobilization Date:</b> 1/23/2015	<b>Start Date:</b> 1/8/2015
<b>Demob Date:</b>	<b>Completion Date:</b>
<b>CERCLIS ID:</b>	<b>RCRIS ID:</b>
<b>ERNS No.:</b>	<b>State Notification:</b>
<b>FPN#:</b> E15805	<b>Reimbursable Account #:</b>

#### 1.1.1 Incident Category

Emergency Response – OPA Removal and CERCLA Removal Assessment

#### 1.1.2 Site Description

The response action underway by the RP follows a reported 70,000 barrel release of produced water including oil from a 4 inch pipeline that conveys produced water from 38 well pads to a disposal well. The release impacted a small creek (Blacktail Ck) a tributary to the Little Muddy River north of Williston, ND. Reportedly the potential line break was discovered on January 6, 2015, and the line was shut-down. No volume of discharge was reported in the original NRC report on January 7th.

Produced water (brine) recovery was initiated within days following the shutdown. Reportedly, as of 1/22/15, approximately 64,000 bbls of water (brine, oil and surface water) have been pumped and transported for disposal.

Oil is present on the surface water and additional containment and oil recovery measures are underway as of 1/23/15. It is uncertain as to what volume of oil may be present and discharging from the subsurface /alluvial system.

##### 1.1.2.1 Location

##### 1.1.2.2 Description of Threat

Impacts to surface water quality observed as far as the Little Muddy River near the confluence with the Missouri River.

#### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

- North Dakota Department of Health (ND DOH) water quality division personnel have been on-scene since the reported incident. Samples collection occurred throughout the operations by the state at multiple locations.
- EPA is on-scene evaluating the response actions as of 1/24/15 based on the ultimate estimate of approximately 3,000,000 gallons of produced water / oil discharge being reported on 1/22/15.
- Oil recovery operations are required at this time. There is an undetermined amount of oil in the

channel between the spill site and Highway 85.

- Water levels are low in Blacktail Creek, which is a small, very low gradient, meandering creek.
- EPA has sampled the surface water near the spill site, produced water from one oil production well set (Moline) and in the Little Muddy approximately 10 creek-miles below the spill.
- Exploratory test pits were completed 1/25 to determine if subsurface free-phase oil is migrating from the source area to Blacktail Creek. Investigations revealed that produced water / oil sheen exists on the groundwater feeding the creek. However, free-phase oil did not accumulate in the test pits. Groundwater tested with chloride test strips reportedly indicated high concentrations, i.e. greater than maximum range.

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

The RP continues to pump impacted creek water and remove it from the site for disposal. This includes oil present on the surface water. The chloride levels measured in the water have reduced to substantially lower levels but above background according to field measurements within the last several days.

Oil present on the surface water is relatively small quantities. There is free product, and it continues to drain from melting ice and the channel banks into flow in the creek.

#### 2.1.2 Response Actions to Date

The RP has mobilized several contractors with vacuum trucks, oil containment boom, and various heavy equipment.

- Water removal operations were being conducted at several locations along Blacktail Creek during the last 2 weeks. Depending on flow, the pumping operations may remove all available water at a pumping rate of approximately 300 gpm over many hours at any given point in the creek. Reportedly, up to 35 vacuum trucks have been transporting the creek water (brine, oil and surface water) off-site.
- Reportedly, as of 1/25/15 more than 100,000 barrels of produced water/creek water/oil mixture has been pumped from the surface water and sent for injection well disposal.
- Underflow dams are being constructed for the potential rise in water levels and to contain the continued drainage of produced water flowing in the channel.

#### 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

##### 2.2.1.1 Planned Response Activities

- The RP will continue to construct underflow / containment dams 1/26/15.
- Oil recovery operations continue through both total fluids pumping and, where possible, skimming.
- Additional samples from other production well sites on this system are planned.

##### 2.2.1.2 Next Steps

##### 2.2.2 Issues

- Chloride concentrations are below the levels that disposal wells will accept in many cases. However, the concentrations of chloride remain elevated compared to surface water.

### 2.3 Logistics Section

#### 2.3.1 Disposition of Wastes:

- Deep well injection for oil production waste water.

### 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**

Summit Midstream Partners LLC  
ND DOH  
EPA

### **3.2 Cooperating Agencies**

USFWS  
DOI  
USACE

## **4. Personnel On Site**

EPA OSC - 1  
START - 2  
USCG Pacific Strike Team - 2

## **5. Definition of Terms**

No information available at this time.

## **6. Additional sources of information**

No information available at this time.

## **7. Situational Reference Materials**

No information available at this time.