

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Lion Oil Magnolia Spill (FPN E13610) - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI

Subject: POLREP #7
Progress
Lion Oil Magnolia Spill (FPN E13610)
Magnolia, AR
Latitude: 33.2405560 Longitude: -93.1469440

To:
From: Mark Hayes, Environmental Engineer, OSC
Date: 3/26/2013
Reporting Period: 3/18/2013-3/26/2013

1. Introduction

1.1 Background

Site Number:		Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	OPA	Response Type:	Emergency
Response Lead:	PRP	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	3/9/2012	Start Date:	3/9/2013
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	13610	Reimbursable Account #:	

1.1.1 Incident Category

Oil Spill Response

1.1.2 Site Description

On March 9, 2013, the Responsible Party, Lion Oil Trading, and Transportation, Inc. (LOTT) notified the National Response Center of an estimated 1500 barrel oil spill near Magnolia, Arkansas. On March 14, LOTT modified the spill volume to be 5060 bbls. The responsible party reported that the spill occurred from a failure in their suction pump, which transports crude oil from the tank battery to an underground 12 inch transmission line that is monitored with a supervisory control and data acquisition (SCADA) system. The discharged oil filled a containment pond before flowing down gradient and impacting approximately 3 miles of Little Cornie Bayou. The initial estimate of 1 1/2 miles of creek did not account for natural topography of the area.

1.1.2.1 Location

Magnolia, Arkansas

1.1.2.2 Description of Threat

Estimated 5000 bbls of crude oil spill as follows:

- 1500 bbls of crude oil in Little Cornie Bayou
- 3500 bbls of crude oil at source location and in the containment pond

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

On 9 March 2013 LOTT deployed 8 vac trucks to recover crude oil within Little Cornie Bayou. LOTT also constructed 2 weir dams on Little Cornie Bayou down gradient from the oil spill source location. Additional

hard boom was deployed between the weir dam locations. Collection points for the vac trucks were established at each of the weir dam locations. Vac trucks were also used to remove crude oil from the temporary containment pond. LOTT established 24 hour operations and continued to recover oil using vac trucks at various locations on Little Cornie Bayou throughout the night. Two fracking (frac) tanks were deployed onsite and utilized as temporary holding areas for crude oil and freshwater collection. A 25,000 barrel tank located on the facility property is being utilized to store recovered crude oil and freshwater.

On the morning of 10 March 2013, LOTT reported that 1,840 bbls of crude oil was recovered. LOTT response personnel and contractor, TAS Environmental, continued oil spill recovery operations with a crew of approximately 20 personnel and 8 vac trucks. Vac truck recovery operations continued throughout the day at the containment pond and weir dam 1, but were slowed by rainfall in the area causing resources and personnel to be redirected to improve access roads. A breach also occurred in weir dam 1 due to heavy rainfall, but all discharged crude oil remained contained by hard boom and Weir Dam 2.

On the morning of 11 March 2013, LOTT reported that 3,880 bbls of crude oil was recovered to date. LOTT continued to conduct 24 hour oil recovery operations. During night operations crews continued recovery operations at the containment pond and locations along Little Cornie Bayou. Recovery operations overnight was slowed due to reduced oil flow from cold temperatures. Throughout the day LOTT response personnel and contractor, TAS Environmental, continued oil spill recovery operations with a crew of approximately 27 personnel and 9 vac trucks. Recovery operations continued at the containment pond and various locations along Little Cornie Bayou.

On the morning of 12 March 2013, LOTT reported that 4,220 bbls of crude oil was recovered to date. LOTT continued to conduct 24 hour oil recovery operations, however, overnight activities were limited to monitoring of oil containment at weir dam locations 1 and 2 in Little Cornie Bayou due to freezing/below freezing temperatures. Additional resources and personnel were mobilized onsite throughout the day. Resources included 90 personnel, 11 vac trucks, and miscellaneous additional equipment to conduct oil spill response activities. Additional crews initiated cleanup and recovery operations along the creek just down gradient of the containment pond. Additional absorbent booms and pads were deployed at weir dams 1 and 2. LOTT installed wood matting to allow for better access to weir dam 2 for oil recovery. Recovery operations continued at various locations along Little Cornie Bayou throughout the day.

LOTT contractors conducted air monitoring in and around work zones for LEL and VOCs on 12 and 13 March 2013. LOTT contractors also conducted perimeter mobile air monitoring. On 12 March 2013, one detection of 5.2 parts per million (ppm) for VOCs was reported in the work zone area down gradient of the containment pond. On 13 March 2013, one detection of 4.0 ppm for VOCs was also reported in the same area. No other detections for VOCs or LEL were reported. EPA also conducted mobile air monitoring around the perimeter of the site in the vicinity of residential homes for VOCs, H₂S, CO, O₂, and LEL on 10 through 13 March 2013. No readings above background levels were detected.

On 13 March 2013, LOTT continued to conduct 24 hour oil recovery and cleanup operations. Oil recovery and cleanup operations continued at various locations along Little Cornie Bayou and areas down gradient of the containment pond throughout the day. Additional crews were also removing oil contaminated debris in Little Cornie Bayou up gradient of weir dam 1. Oil and water was pumped into frac tanks for separation at various locations throughout the site and will be transferred to the 25,000 gallon tank where the amount of oil recovered can be gauged. An updated amount of oil recovered to date will be provided on the next POLREP. LOTT completed the installation of wood matting near weir dam 2. Freshwater was discharged to the creek near the containment pond in an attempt to flush the oil downstream. Two turtles identified to be contaminated with oil were cleaned and relocated in a clean area of the creek. Resources during day operations included 90 personnel, 11 vac trucks, and miscellaneous equipment to conduct oil recovery and cleanup operations.

On 14 and 15 March 2013, LOTT continued to conduct 24 hour oil recovery operations along Cornie Bayou. On the morning of 15 March 2013, LOTT reported that 4,560 bbls of crude oil was recovered to date. LOTT conducted oil recovery and debris removal along various areas down gradient of the containment pond and Cornie Bayou throughout the day. Crews flushed areas in the creek immediately down gradient of the containment pond and in Cornie Bayou upstream of weir 1 and 2. Crews deployed additional boom in Cornie Bayou downstream of weir 2. LOTT also continued air monitoring throughout various work zones. The highest reading was reported to be 1.4 parts per million (ppm) for benzene in the immediate areas upstream of weir 2.

On 16 and 17 March 2013, LOTT continued to conduct 24 hour oil recovery operations along Cornie Bayou and the intermittent creek down gradient of the containment pond. Operations throughout both days consisted of oil recovery, debris removal, and flushing in areas along the creek down gradient of the containment pond and Cornie Bayou. Crews reinforced weir 1 and weir 2 by installing sand bags and additional soil. Crews also recovered oil near weir 2 and relocated installed hard boom upstream to create a buffer zone in case of a significant rainfall event. LOTT continued to excavate contaminated soil for disposal within and surrounding areas of the containment pond. LOTT reported that 104 personnel were working at the site to conduct debris removal and oil recovery operations.

On 17 March 2013, LOTT reported 4,475 bbls of crude oil was recovered to date. LOTT personnel informed EPA that the total number of oil recovered was reduced to reflect a more accurate volume amount.

On 18 through 26 March 2013 LOTT continued to conduct recovery operations along Cornie Bayou and the intermittent creek. LOTT crews continued working to meet their objective of removing all oil from the creek. LOTT reported that approximately 110 personnel were active at the site conducting oil recovery operations. Recovery operations consisted of crews flushing creek banks, utilizing skimmers with vac trucks, and debris recovery throughout the impacted areas along the intermittent creek and Cornie Bayou. The profile for waste generated onsite, including recovered debris, had been completed and approved by

ADEQ for disposal. Crews also added absorbent boom approximately every 100 to 150 yards downstream of Weir 2 down to Co Rd 34.

On 22 March 2013 LOTT conducted a field test of an adsorbent material called Cell-U-Sorb under the oversight of EPA and ADEQ. Cell-U-Sorb was applied to a small amount of free oil along Bayou Cornie immediately upstream of weir 2 and was removed from the creek utilizing skimming nets. LOTT initiated a test application of Cell-U-Sorb to determine its effectiveness for potential use.

On 23 and 24 March 2013 a rainfall event caused a breach of weir 1, however, there was no observed impact to weir 2 or at deployed hard booms near Co Rd 34. LOTT removed the entire construction of weir 1 on 25 March 2013.

On 24 March 2013 operations began to shift away from free oil recovery utilizing skimmers to predominantly conducting debris removal and flushing activities.

On 25 March 2013 LOTT reported that 4,598 barrels of crude oil was recovered to date.

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

-Continue recovery operations utilizing vac trucks, frac tanks, and skimmers at various locations throughout Little Cornie Bayou

-Continue cleanup and debris removal operations in various areas in Little Cornie Bayou and the creek immediately down gradient of the containment pond

-Continue flushing operations in Little Cornie Bayou and in areas down gradient of the containment pond

-Deploy hard and absorbent boom as needed

-Continued implementation of Incident Command System for organizational structure

-ADEQ providing oversight with assistance from EPA as needed.

2.2.1.2 Next Steps

-EPA demobilized on 27 March 2013 transitioning oversight activities to ADEQ with EPA assistance as necessary.

-ADEQ will be onsite on 28 March to conduct a thorough assessment of the creek.

-LOTT is working to complete the majority of the flushing and debris removal along the creek by 29 March 2013,

-LOTT corresponding with ADEQ on a boom maintenance program that may begin as early as 1 April 2013 depending on ADEQ approval.

2.2.2 Issues

-Significant rainfall event which slowed work activities on 23 and 24 March 2013.

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

LOTT is response lead with EPA and ADEQ providing oversight of operations

3.2 Cooperating Agencies

Arkansas Department of Environmental Quality (ADEQ)
Columbia County Office of Emergency Management (OEM)
U.S. Department of Transportation-Pipeline and Hazardous Materials Safety (PHMSA)

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

No information available at this time.

7. Situational Reference Materials

No information available at this time.

POLREP #7 Last Updated 3/29/2013