U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Livingston Oil Spill - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: **POLREP #2**
Continuing Operations
Livingston Oil Spill
Livingston, TN
Latitude: 36.4315586 Longitude: -85.3329476

To: Matt Taylor, USEPA R4 ERRB
Jeff Patton, TDEC Oil&Gas

From: Matthew Huyser, On Scene Coordinator
Date: 7/12/2011
Reporting Period: 7/12/2011

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:	7/11/2011	**Start Date:**	7/11/2011
Demob Date:		**Completion Date:**	
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:	E11420	**Reimbursable Account #:**	

1.1.1 Incident Category
Emergency Response

1.1.2 Site Description
Oil production well and tank battery near agricultural and residential neighborhoods in Livingston, Overton County, Tennessee.

1.1.2.1 Location
Near 2135 Celina Highway, Livingston, Overton County, Tennessee. The release occurred within the right-of-way on the west side of Celina Highway.

1.1.2.2 Description of Threat
During the night of 7/10-7/11, a positive pressure line to an injection well burst at an Ohio Kentucky Oil Company well and tank battery. Several thousand gallons of brine water with crude oil was released to a roadside drainage ditch and traveled downstream between several residences. A majority of the oil was captured in vegetation along the initial 300 yards of the ditch/creek downstream of the release point. A majority of the brine water (unknown quantity of several thousand gallons) continued downstream to a sinkhole at approximately 1000 yards from the release point, which leaches into Little Eagle Creek (flows into Big Eagle Creek and then to Dale Hollow Lake).

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results
The release was discovered by a nearby resident at 0930hrs on 7/11 then reported by TEMA to the NRC by 1250hrs CST. Ohio Kentucky Oil Company responded during the afternoon of 7/11 to shut down the pump station and begin collecting spilled materials. Hay was used to dam portions of the ditch and a vacuum truck was used to collect brine and oil. TDEC responded to the event along with TEMA and Overton County EMA.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

OSC Huyser arrived on-site at 0700hrs on 7/12. Ohio Kentucky Oil Co. personnel arrived and began staging equipment between 0730 and 1000hrs, beginning excavation of the ditch near the release point by

1030hrs. Utility locators visited the site on 7/12 to mark the buried water supply line and natural gas supply line, within the right-of-way. Due to the close proximity of the water supply line to the first excavation zone, a load of topsoil was staged prior to excavation so that the water line could be immediately re-covered if a significant amount of soil was removed.

During excavation, a vac truck and water truck were staged near the property of 120 Tom Smith Lane to flush out the creek near that area. The creek behind homes at 2174 and 2182 Celena Highway was covered in heavy brush and clouded saline water was observed with some oil sheen at the surface and some oil-impacted vegetation. The creek behind the home at 120 Tom Smith Lane is fully exposed and contained the same clouded saline water with some oil sheen and oil-impacted vegetation. One load of wash water (2000 gal) was used to flush the creek immediately adjacent to the home at 120 Tom Smith Lane; and two loads of wash water (4000 gal) were later used to flush the creek behind homes at 2174 and 2182 Celina Highway. TDEC water quality personnel measured conductivity in pooled water prior to flushing at 4000-31,000 µs/cm (background typically near 100-300 µs/cm); conductivity after flushing was reduced to 500-5,000 µs/cm.

Excavation of the release point on the west side of Celina Highway was completed at 1430hrs. The area was backfilled, seeded, fertilized, and covered with straw. Excavated soils had been placed on black poly sheeting and will be covered to prevent rain infiltration until a roll-off or alternate container can be mobilized. The PRP has not yet determined how impacted and excavated soils will be stored and/or where they will be staged pending disposal. EPA has advised up to this point that the soils should be removed from their present location and staged for disposal no later than 7/14/2011.

After the downstream flushing was completed, Ohio Kentucky Oil Co. relocated the pump and water trucks to begin flushing the creek at the west side of Celina Highway where oil was visually observed. Several large puddles of discolored water, which likely contain dispersed oil due to the dishwasher detergent that was utilized on 7/11, are still readily visible in this section of the creek. Oil stains and oil-impacted soils in this portion of the creek will be excavated mechanically and/or manually. Crews began excavating the surface soil from a 200 sqft area, at the property of 2160 Celina Highway, where oil had pooled in a flat patch of grass. Crews also began removal of oiled vegetation from the creek in the properties of 2144 to 2170 Celina Highway.

OSC Jardine arrived at approximately 1300hrs to relieve OSC Huyser, who then demobilized at 1730hrs.

2.1.2 Response Actions to Date

- Remove standing surface water
- Construct underflow dams to control runoff in case of heavy rain event(s)
- Begin excavation of visually contaminated soils
- Flush exposed areas in downstream residential yards
- Begin removal of oil-contaminated vegetation

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

OSC Huyser issued a Notice of Federal Interest letter to Ohio Kentucky Oil Co. The CEO and a VP with Ohio Kentucky Oil Co. will be visiting the site on 7/13 and will be bringing a copy of the SPCC plan for the tank battery. OSC Jardine will conduct an inspection of the tank battery at that time.

2.1.4 Progress Metrics

n/a

2.2 Planning Section

2.2.1 Anticipated Activities

Crews will continue to address visually stained areas within the creek with clean water washing/pumping, vegetation removal, and selective excavation.

2.2.1.1 Planned Response Activities

The followings response actions will be conducted as part of the response:

- Removal of oil contaminated soil and vegetation from drainage ditches and the creek;
- Assessment of water quality conditions and improvements downstream;
- Restoration of impacted areas as appropriate and necessary; and
- Disposal and/or treatment of response generated wastes (waste waters and contaminated soils)

2.2.1.2 Next Steps

See sections 2.2.1 and 2.2.1.1 above

2.2.2 Issues

Full excavation of the creek may not be necessary or advisable due to concerns that excessive disturbance of the soil and vegetation may cause a high risk exposure to erosion and property damage from large rain events. OSC Jardine will work with TDEC and Overton EMA to determine the best course of action in the

area.

2.3 Logistics Section

n/a

2.4 Finance Section

2.4.1 Narrative

A Federal Project Number has been opened (E11420) with the Oil Spill Liability Trust Fund in the amount of $10,000 to provide funding for federal oversight of this response.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
Intramural Costs				
USEPA - Direct	$10,000.00	$0.00	$10,000.00	100.00%
Total Site Costs	$10,000.00	$0.00	$10,000.00	100.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

n/a

2.6 Liaison Officer

TDOT was contacted regarding the excavation in the right-of-way and proper remediation procedures. TDOT visited the site and instructed the PRP on required measures that must be taken to ensure adequate erosion control and reestablishment of vegetation.

TDEC contacted their solid waste personnel to provide direction on waste disposal from the site. TDEC provided the name of a local landfill capable of accepting the waste and the PRP will seek further advice from TDEC regarding special waste disposal procedures.

2.7 Information Officer

n/a

2.7.1 Public Information Officer

n/a

2.7.2 Community Involvement Coordinator

Throughout the day on 7/12, OSC Huyser visited 7 residents who owned property along the spill pathway. The residents were informed of the cause and nature of the release, as well as the response efforts that were being undertaken. None of the residents objected verbally to the activities that were proposed for their portion of the creek.

3. Participating Entities

3.1 Unified Command

n/a

3.2 Cooperating Agencies

Tennessee Department of Environmental Conservation (TDEC)
Tennessee Emergency Management Agency (TEMA)
Overton County EMA

4. Personnel On Site

Ohio Kentucky Oil Co. (8)
EPA (2)
TDEC (3)
TEMA (1)
Overton Co. EMA (1)

5. Definition of Terms

n/a

6. Additional sources of information

6.1 Internet location of additional information/report

n/a

6.2 Reporting Schedule

n/a

7. Situational Reference Materials

n/a

POLREP #2 Last Updated 10/7/2011