U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Lick Branch Mystery Oil Discharge - Removal Polrep
Initial Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: **POLREP #1**
Initial Polrep
Lick Branch Mystery Oil Discharge

Burkesville, KY
Latitude: 36.8203720 Longitude: -85.2606020

To:
From: Art Smith, On-Scene Coordinator
Date: 12/17/2015
Reporting Period: 11/29/2015 through 12/17/2015

1. Introduction

1.1 Background

Site Number:		**Contract Number:**	
D.O. Number:		**Action Memo Date:**	
Response Authority:	OPA	**Response Type:**	Emergency
Response Lead:	EPA	**Incident Category:**	Removal Assessment
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	12/7/2015	**Start Date:**	12/7/2015
Demob Date:		**Completion Date:**	
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:	E16411	**Reimbursable Account #:**	V4BH

1.1.1 Incident Category

Mystery oil spill

1.1.2 Site Description

1.1.2.1 Location

the coordinates for the spill location are N36.820370 W 85.260602

1.1.2.2 Description of Threat

substantial threat of a discharge of oil into navigable waters of the United States

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On 11/29/2015, a fisherman discovered an oil sheen on the Cumberland River and found it to be coming from the mouth of Lick Branch. On 12/02/2015, subsequent investigation by the Kentucky Department of Environmental Protection (KDEP) pinpointed the source to be a seep which enters Lick Branch at a point just upstream of its confluence with the Cumberland River at River Mile 434.6.

On 12/07/2015, the OSC performed a preliminary assessment and met with representatives of KDEP and the Kentucky Division of Oil and Gas. At that time, the OSC observed a patchy sheen intermittently discharging from the seep at the base of a tree into an unnamed tributary to Lick Branch. It appears as if the discharge is crude oil, as there are both active and abandoned oil production facilities along Lick Branch, and a faint crude oil odor was observed at the seep location. There was no evidence of crude oil in Lick Branch, and the water levels in both Lick Branch and the Cumberland River were elevated due to an increase in discharge at Wolf Creek Dam.

The Division of Oil and Gas representative pointed out several abandoned oil wells along Lick Branch in the vicinity of the seep. One well, located at N 36.819143 W 85.258541, is an open borehole where the well casing has been removed. There was a faint crude oil odor observed at this location, which is within 600' of the seep. This open borehole may be contributing to the oil discharge at the seep, but that could not be confirmed as of the date of the OSC's initial recon of the Site.

The OSC completed the preliminary assessment and confirmed the presence of a minor oil discharge, which constitutes a substantial threat of a discharge into the Cumberland River, a navigable water of the United States. At the time of the preliminary assessment, the water levels in Lick Branch were elevated to a degree which mitigated the discharge to the Cumberland River. The OSC considers that removal of the oil discharge into Lick Branch is infeasible at this time.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

The OSC completed a preliminary assessment of the oil discharge

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

The actual source of the discharge cannot be determined at this time. It is possible that either active or abandoned crude oil production facilities are contributing factors to the discharge. The OSC will continue to gather information on current and former operators of these facilities, and attempt to identify a PRP, as appropriate.

2.1.4 Progress Metrics

Waste Stream	***Medium***	***Quantity***	***Manifest #***	***Treatment***	***Disposal***

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

Both EPA and the KDEP are actively monitoring the oil discharge and will continue the investigation in an attempt to identify the source.

The OSC will request a Pollution Removal Funding Authorization (PRFA) from USCG-NPFC in the amount of $5,000 for KDEP to cover personnel costs associated with monitoring the oil discharge.

2.2.1.2 Next Steps

2.2.2 Issues

The oil discharge appears to be partially mitigated by rising water levels on the Cumberland River, which subsequently affects the flow from Lick Branch. Water levels on the Cumberland River and Lick Branch fluctuate due to discharge from a power generation plant at Wolf Creek Dam nearly 22 miles upstream of the Site.

The US Army Corps of Engineers (USACE) regulates the outflow from Wolf Creek Dam, and publishes this information at the website http://www.lrn-wc.usace.army.mil/. From 12/03/2015 through the OSC's assessment on 12/07/2015, peak outflows from Wolf Creek Dam were reported due to a rain event occurring at the end of November.

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

No information available at this time.

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.