

**United States Environmental Protection Agency**  
**Region IV**  
**POLLUTION REPORT**

**Date:** Tuesday, May 11, 2004

**From:** Art Smith

**To:** Gene Blair, KYDEP

**Subject:** Initial EPA Polrep

MAP Crude Oil Flare Discharge

11631 US Hwy 23, Catlettsburg, KY

<b>POLREP No.:</b>	1	<b>Site #:</b>	840
<b>Reporting Period:</b>	5/9/2004 to 5/12/2004	<b>D.O. #:</b>	
<b>Start Date:</b>	5/10/2004	<b>Response Authority:</b>	OPA
<b>Mob Date:</b>		<b>Response Type:</b>	Emergency
<b>Demob Date:</b>		<b>NPL Status:</b>	Non NPL
<b>Completion Date:</b>		<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>		<b>Contract #</b>	
<b>RCRIS ID #:</b>		<b>Reimbursable Account #</b>	Z4GD
<b>FPN#</b>	E04416		

#### **Site Description**

On May 9, 2004, Marathon Ashland Petroleum (MAP) reported a crude oil discharge from the Catlettsburg, KY refinery (NRC # 721147). Initial information indicated a discharge of 100 gallons of crude oil into the Big Sandy River, at a location approximately 3.5 miles upstream of the confluence with the Ohio River. The release occurred due to a power failure, which caused the crude oil to surcharge a flare unit. The crude oil was vaporized through the flare orifice, exiting a 100 ft. tall stack as a mist which traveled downwind in a northerly direction along the KY shoreline.

A followup investigation by MAP disclosed that the total quantity discharged exceeded 20,000 gallons, which is classified as a major inland oil spill. USCG Marine Safety Office Huntington (MSO Huntington) responded initially, along with the Kentucky Department for Environmental Protection (KYDEP). Upon determining that the incident originated onshore, EPA Region 4 relieved USCG and provided the On-Scene Coordinator (OSC) for this incident.

MSO Huntington prepared Polrep 1 and Polrep 2 and Final to document their involvement as the First Federal Official for this incident.

#### **Current Activities**

To date, MAP reports that over 11,000 gallons of crude oil has been recovered from on-water cleanup operations at the Light Oil Dock (L.O. Dock). Oil removal has slowed considerably, because all free oil has been recovered. The remaining quantity of crude oil has been spread along a heavily wooded shoreline extending over a 200 yard distance downwind of the flare unit.

Terminal operations are impacted significantly at the L.O. Dock as a result of the incident. MSO Huntington has modified previously imposed restrictions on vessel traffic to allow for 3 barge tow movements on the river. The OSC has determined that containment booming deployed at the L.O. Dock is sufficient to allow limited transfer operations at the present time. However, the L.O. Dock will not be returned to full service until on-water removal of oil product has been completed.

All information collected to date suggests that the oil spill was contained within the main stem of the Big Sandy River and extended no further than a 1 mile distance downstream of the point of entry into surface water. No evidence of oil discharged during this incident was observed along the West Virginia shoreline.

Sampling activities commenced on May 11, in order to evaluate the potential impact to water quality from dissolved petroleum constituents entering the Big Sandy River. A sample collected along the KY shoreline immediately downstream of the containment area indicated benzene at a concentration of 2.3 parts per billion (ppb). No evidence of benzene or other petroleum compounds was detected in samples collected further downstream of the L.O. Dock.

## **Planned Removal Actions**

The following activities are planned for the period from May 13-May 14:

1. Begin removal of debris from shoreline adjacent to MAP facility to evaluate for remaining presence of oil product threatening surface water.
2. Conduct trial flushing with a low-pressure water fog in impacted wooded shoreline areas to evaluate impact of oil discharge to surface water.
3. Continue daily sampling and analysis of water samples.

## **Next Steps**

Continue oil product removal activities at a rate sufficient to mitigate a substantial threat of an oil discharge into navigable water. This will allow for a transition of the management of the incident into a long-term monitoring and residual cleanup phase. At this point, EPA will transition lead agency responsibility to KYDEP.

## **Key Issues**

No significant environmental impacts have been observed to date, and are not anticipated. Similarly, no reported affects from the incident have been observed at the nearest downstream drinking water intake (Ashland, Ky, approximately 6 miles downstream from the spill site).

[response.epa.gov/mapcrudeflare](http://response.epa.gov/mapcrudeflare)