

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Thursday, April 28, 2005

From: Art Smith

Subject: Initial Polrep

Fordsville Abandoned Oil Well

Fordsville, KY

Latitude: 37.6753000

Longitude: -86.6775000

POLREP No.: 1

Site #:

Reporting Period: 04/26/2005 to 04/27/2005

D.O. #:

Start Date: 4/26/2005

Response Authority: OPA

Mob Date: 4/26/2005

Response Type: Emergency

Demob Date:

NPL Status: Non NPL

Completion Date:

Incident Category: Removal Action

CERCLIS ID #:

Contract #

RCRIS ID #:

Reimbursable Account # Z4HJ

FPN# E05408

Site Description

On April 23, the Kentucky Department for Environmental Protection (KYDEP) responded to a report of an oil spill in Dry Branch (a/k/a Dry Fork Creek) near Fordsville, Ohio Co., KY (NRC #756642). Dry Branch is a tributary within the watershed of the Green River, a navigable water of the U.S. KYDEP responders observed crude oil in the creek caused by an abandoned production well. Sorbent boom was placed in the creek at multiple locations in an attempt to contain the oil spill. On April 25, KYDEP notified the EPA Region 4 Duty Officer and requested federal assistance, citing the inability to finance the required removal activities. OSC Smith was dispatched to respond and mitigate the oil discharge into surface water. Observations by the OSC onscene indicate that the release is a minor discharge as classified under the NCP, and that less than 100 gallons of oil has impacted surface water.

Current Activities

On April 25, EPA responded to the scene, and was briefed by the KYDEP responders on the incident. Because the threat to navigable waters had been established, the OSC also activated the following resources under his delegated emergency authorities:

- Emergency and Rapid Response Services (ERRS) contractor (CMC, Inc). for purposes of containment and cleanup of oil product.

- Superfund Technical Assistance and Response Team (START) contractor (Tetra Tech EMI, Inc.) for purposes of documenting the removal action, and to collect information on potentially Responsible Parties (RPs).

The source of the oil discharge is an abandoned crude oil production well. The well coordinates are N 37 degrees 40 minutes 31.30 seconds W 86 degrees 40 minutes 40.10 seconds. The facility is located about 1.5 miles off of Highway 1700, approximately 4 miles north of Fordsville. The well is situated about 150 feet west from Dry Branch Fork. The well is under pressure, and releases oil from the casing on an intermittent yet frequent basis. The OSC estimates that as much as 5-10 gallons per minute of an oil/water mixture basis is released to the environment. The OSC further concludes that this discharge has been ongoing for an extended period of time, based on the visual observations made at the scene. The oil has saturated the ground surrounding the well to a point where it is transported via shallow groundwater to Dry Branch. Surface water and the shoreline have been impacted for a distance of greater than 2,000 ft. downstream of the entry point into Dry Branch. The effects of the discharge appears to be limited to Dry Branch at this time.

Activities undertaken by EPA to this point include:

- construction of an underflow dam downstream of the affected reach of Dry Branch to mitigate further impacts.

- construction of an interceptor trench perpendicular to the subsurface flow of oil near the leak site in an attempt to mitigate the discharge into surface water.

- construction and improvement of existing dirt roads to facilitate transportation of heavy equipment through hilly and muddy terrain.

Planned Removal Actions

Planned removal actions for the near term are to monitor the effectiveness of removal actions necessary to stabilize the discharge of oil to Dry Branch. At this time, oil continues to seep from the creekbed into surface water, but is contained by the underflow dam downstream of the entry point.

Next Steps

The Kentucky Department of Mines & Minerals, Oil & Gas Division has awarded a contract for the immediate plugging of the problem well. This activity is scheduled to begin on April 28 (weather permitting; see note below), and is expected to take 2 days to complete. At that time, the source of the discharge will be secured, and EPA's activities will transition into cleanup of the affected areas that pose a threat of a further discharge to surface water.

Key Issues

- Inclement weather has affected removal operations to a significant degree. Predictions for an additional heavy rain threat and severe weather potential over the next 2 days are likely to further affect the cleanup, and may possibly require a suspension of work activity.
- This well is located in the Peckenpaugh Hollow Oil Field, where EPA conducted well plugging activities several years ago, under a previously issued Federal Project Number (FPN). Over time, it is likely that other abandoned wells in this field will leak due to the pressure created by plugging the abandoned well described in this Polrep.

response.epa.gov/fordsvilleabandonedwell