

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Lockport Illinois Buckeye Oil Spill - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #5
Progress
Lockport Illinois Buckeye Oil Spill

Lockport, IL
Latitude: 41.6354890 Longitude: -88.0487240

To:
From: James Mitchell, OSC
Date: 1/12/2011
Reporting Period: 01/06/2011 - 01/13/2011

1. Introduction

1.1 Background

Site Number:		Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:		Response Type:	Emergency
Response Lead:		Incident Category:	
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	12/14/2010	Start Date:	12/14/2010
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	E11505	Reimbursable Account #:	

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

1.1.2.1 Location

The site is located on New Avenue approximately 0.5 miles south of 135th Street in Lockport, Illinois. The site is bordered to the east by New Avenue, to the north and south by open wetland areas, and to the west by railroad tracks serviced by Amtrack, Metra, and freight companies.

1.1.2.2 Description of Threat

An estimated 500 barrels (21,000 gallons) of crude oil were released into a drainage ditch which flows in to a wetland area via a culvert. The spill occurred in an area near critical habitat for federally endangered species, including the Hine's Emerald Dragonfly and Leafy Prairie Clover.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Information on operations performed prior to this reporting period can be viewed in previous POLREPS.

Removal of free product in the wetland continued during this reporting period. Steam was used to melt ice to maximize recovery. Activities supporting the development of the disposal cell including deployment of concrete jersey barriers, swamp mats, visqueen and felt liner occurred this week. Approval for the location and use of the disposal cell to support excavation of contaminated soils and vegetation in the wetland was provided by Hansen Material Services (land owner) and the USEPA.

The French Drain System continues to recover oil along the ditch of the CN Railroad property. A sampling plan is being developed by Westshore/Buckeye to further characterize contamination along the embankment and below the

railroad tracks. Characterization will include installation of monitoring wells on the east and west side of the tracks and subsurface investigations with a geoprobe. Characterization activities are scheduled to begin in February. The sampling plan is being developed in conjunction with CN Railroad. Based on characterization results, a final remediation strategy will be developed and proposed to CN Railroad and the USEPA in March.

Non-hazardous soils staged in the Citgo parking lot on New Avenue began to be shipped to Prairie View Landfill for disposal. Disposal cell is being constructed in Citgo Parking lot to handle hazardous soils staged in roll-off containers. USEPA approved the Hazardous Waste Transportation and Disposal Plan for soils staged in the Citgo parking lot. The plan covers the disposal cell, development, repackaging hazardous soils into approved containers, decontamination of roll-offs, air monitoring activities etc.

Incident Action Plans (IAPs) are being prepared daily to define work activities. IAPs will be replaced by the Removal Work Plan after it has been approved by USEPA. The Phase 2 portion of the Work Plan covering excavation of contaminated soil, vegetation, and waste sampling and disposal activities in the Wetland area has been approved by USEPA. All onsite air monitoring in work zone areas is now being performed by West Shore/Buckeye personnel.

2.1.2 Response Actions to Date

A Daily Incident Action Plan (IAP) is developed to guide onsite work activities. IAPs can be viewed in the document section of this website for staff that have password access. IAPs are also up loaded to the Buckeyes share website for viewing. IAPs will soon be replaced by an approved Work Plan. Contact OSC Jim Mitchell for access to IAPs.

01/06/2011

An estimated 105,612 gallons of oil/water mixture have been recovered from the drainage ditch and wetlands area. Approximately, 1,350 yd³ of contaminated soil have been excavated from the site and stored in roll off boxes awaiting disposal.

Product recovery operations continue in the areas west of the railroad and in the wetlands area. Freezing temperatures have hindered the efficiency of product collection in the area and plans to begin excavation of contaminated soil have been made. One skimmer units is currently in operation in the western recovery trench. Containment and absorbent boom have been installed strategically throughout the trench to ensure that cleaned areas remain free of the crude product.

Construction has begun on a 100' x 100' soil containment berm on the northeast portion of the site. Concrete barriers will be installed along the perimeter pending approval of the location by the land owner.

US EPA and START will continue to monitor weather reports via the National Oceanic and Atmospheric Administration throughout the week.

01/07/2011

An estimated 110,218 gallons of oil/water mixture have been recovered from the drainage ditch and wetlands area. Approximately, 1,350 yd³ of contaminated soil have been excavated from the site and stored in roll off boxes awaiting disposal.

Product recovery operations continue in the areas west of the railroad and in the wetlands area. Freezing temperatures have hindered the efficiency of product collection in the area and plans to begin excavation of contaminated soil have been made. One skimmer units is currently in operation in the western recovery trench. Containment and absorbent boom have been installed strategically throughout the trench to ensure that cleaned areas remain free of the crude product.

Work crews continue to remove oiled vegetation from the heavily oiled areas in the wetlands. Additional mat roads will be installed to allow access to excavators.

Construction has begun on a 100' x 100' soil containment berm on the northeast portion of the site. Concrete (Jersey)barriers have been installed along the perimeter of the cell location.

01/10/2011

An estimated 111,203 gallons of oil/water mixture have been recovered from the drainage ditch and wetlands area. Approximately, 1,350 yd³ of contaminated soil have been excavated from the site and stored in roll off boxes awaiting disposal.

Product recovery operations continued through the weekend and in to today in the areas west of the railroad and in the wetlands area. One skimmer units is currently in operation in the western recovery trench. A steam truck and hose have been utilized to combat freezing temperatures. Containment and absorbent boom have been installed strategically throughout the trench to ensure that cleaned areas remain free of the crude product.

Construction of the soil storage cell continues. Jersey barriers have been installed around the perimeter and Buckeye/Westshore is awaiting final approval of the design by the property owner.

A meeting was held with Westshore/Buckeye, US Fish and Wildlife, US EPA, START, Delta, Entrix, IEPA, and the property owner to discuss sampling results and trending. Westshore/Buckeye is drafting a proposal to step down surface water sampling perimeters and frequency - approval from US Fish and Wildlife and US EPA is pending.

01/11/2011

An estimated 111,510 gallons of oil/water mixture have been recovered from the drainage ditch and wetlands

area. Approximately, 1,350 yd³ of contaminated soil have been excavated from the site and stored in roll off boxes awaiting disposal.

Product recovery operations continued in a limited capacity in the areas west of the railroad and in the wetlands. One skimmer units was in operation in the western recovery trench through the morning, but recovery was suspended due to the snowstorms. Containment and absorbent boom have been installed strategically throughout the trench to ensure that cleaned areas remain free of the crude product.

Work crews continued decontamination of mats throughout the day. The plastic mats are pressure washed clean and the runoff water is collected in a vacuum truck to be removed from the Site.

Construction of the soil storage cell is currently on hold while a work plan id being drafted by Westshore/Buckeye. Jersey barriers have been installed around the perimeter and Buckeye/Westshore is awaiting final approval of the design by the property owner.

Backfilling operations were completed on the repaired oil pipeline.

01/12/2011

An estimated 115,730 gallons of oil/water mixture have been recovered from the drainage ditch and wetlands area. Approximately, 1,350 yd³ of contaminated soil have been excavated from the site and stored in roll off boxes awaiting disposal.

Product recovery operations continued in a limited capacity in the areas west of the railroad and in the wetlands. One skimmer units was in operation in the western recovery trench. A portable vacuum unit has been installed on the western edge of plume, which is intended to perform product recovery in areas where access is difficult. Containment and absorbent boom have been installed strategically throughout the trench to ensure that cleaned areas remain free of the crude product.

An oil/water separator has been staged in the wetlands. The oil/water separator will be utilized to recover heavy product from the water and then discharge back in to a containment cell with an underflow dam. IEPA has requested that the unit not be utilized until all proper permits be investigated. It is anticipated that the separator will be operational on 01/13/2011.

Product collection occurred in the French Drain system on the east side of the railroad tracks.

Work crews continued decontamination of mats throughout the day. The plastic mats are pressure washed clean and the runoff water is collected in a vacuum truck to be removed from the Site.

Construction of the soil storage cell is currently on hold while a work plan id being drafted by Westshore/Buckeye. Jersey barriers have been installed around the perimeter and Buckeye/Westshore is awaiting final approval of the design by the property owner.

Construction of the hazardous waste soil storage cell has begun in the Citgo parking area on New Avenue.

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

The RPs, West Shore Pipeline/Buckeye Pipeline, have responded to the incident and have contractors working to recover the crude oil.

A Consent Agreement Order for Compliance under section 311(c) of the Clean Water Act was signed by USEPA OSC, Buckeye, and Westshore Pipeline on Dec. 16, 2010.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Oil/Water		115,730 gal		Yes	
Soil		1,350 yd ³			Staged

2.2 Planning Section

2.2.1 Anticipated Activities

US EPA will continue to conduct oversight of the cleanup activities and operate as the lead agency.

Product recovery operations will continue in the area west of the railroad tracks for as long as weather conditions permit. Vacuum trucks, portable vacuum units, and an oil water separator will be utilized to pull product from areas in the wetlands as necessary.

Westshore/Buckeye will complete construct of the 100' x 100' soil storage cell in preparation of soil excavation activities on the Site.

Excavation of the contaminated soil is expected to begin over the weekend.

Monitoring and removal of product from the French Drain system will continue as necessary.

Cleanup contractors will continue to recover crude oil contamination. Review of the West Shore/Buckeye plans for addressing remaining contamination and discuss strategy with West Shore/Buckeye, IEPA, DOT, USFWS, and IDNR regarding remediation strategies in environmentally sensitive areas west of the railroad tracks.

Characterization activities will begin in February to understand nature and extent of oil contamination remaining below the railroad tracks. Characterization activities will include monitoring well installation and subsurface investigations with the use of a goeprobe. Results of subsurface investigation will lead to a proposed remedial approach by West Shore/Buckeye.

Air monitoring activities will continue to support overall worker protection.

Delta will continue to conduct daily surface water sampling and weekly soil sampling. Westshore/Buckeye is drafting a proposal to step down sampling parameters and frequency for sampling activities. Approval by US EPA and US Fish and Wildlife is pending.

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

Product recovery activities will continue in the area west of the railroad tracks utilizing recovery trenches and skimmer units as long as the weather permits. Product recovery will also be maintained on the east side of the tracks.

Westshore/Buckeye will complete the installation of a 100' x 100' soil storage cell on the north portion of the Site. The soil storage cell will be utilized during excavation of contaminated soil on the Site.

Excavation of contaminated soil will begin over the weekend.

Non-hazardous and hazardous soils staged in rolloff containers at the Citgo facility will begin to be shipped off for disposal.

2.2.2 Issues

01/06/2011

Freezing conditions continue to hinder product collection activities in the wetland area. Work crews are monitoring the skimmers and working to prevent freezing and work stoppages due to the cold.

01/07/2011

Snow and freezing rain is forecasted through the weekend. Special precautions and safety measures will be observed while dealing with freezing temperatures.

01/10/2011

Soil storage cell construction is pending approval by the property owner. Terms for land use and approval are being drafted by Westshore/Buckeye.

01/11/2011

Snow storms were present in the area and recovery work in the wetlands was halted during the morning. Recovery activities will remain limited until excavation begins.

01/12/2011

Construction of the soil storage cell is pending on the approval of the design by the property owner. It is anticipated that approval will be granted by the end of the day and construction of the cell will be completed by the end of the week.

The oil/water separator is staged and awaiting IEPA approval to begin operation.

2.3 Logistics Section

Monitoring of the plume's leading edge continues on the western portion of the site. Absorbent boom, containment boom, and hay bails have been installed to prevent the further spreading of product towards the edge of the containment area.

A 100' x 100' soil storage cell is being installed in the northern portion of the site in preparation for the excavation of contaminated soil from the wetlands.

Excavation is expected to begin during the week.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

START prepared a Site-Specific Health and Safety Plan (HASP) for emergency response activities at the site. On 12/22/2010, START issued a full HASP which supersedes the emergency HASP. The RP and their contractors are working under their own HASP.

OSHA inspected the site on 12/16 -17 with the Buckeye and no health and safety issues were noted.

New Avenue was reopened on 12/18/10. Buckeye hired contractors to meet federal requirements for construction areas.

Extreme cold weather (below 0F) conditions are a major safety factor and are being addressed on a day to day basis.

2.6 Liaison Officer

2.7 Information Officer

2.7.1 Public Information Officer

USEPA contact is Jayna Legg

2.7.2 Community Involvement Coordinator

USEPA contact is Don Deblasio

3. Participating Entities

3.1 Unified Command

Unified Command has been implemented at the site and U.S. EPA is the lead agency. The incident Commander (IC) is U.S. EPA OSC Jim Mitchell. The command post is located at 12920 Bell Road in Lemont, Illinois. Unified Command currently consists of U.S. EPA, IEPA, and Buckeye.

3.2 Cooperating Agencies

RPs – West Shore Pipeline and Buckeye Pipeline

RP Contractors

- CTEH (air monitoring)
- Delta (environmental)
- Future Environmental (cleanup)
- Veolia Environmental (cleanup)
- Midwest Mechanical (pipeline repair)
- Entrix (environmental – wetlands)

U.S. EPA START Contractor – Weston Solutions, Inc.

4. Personnel On Site

U.S. EPA – 2 (day ops)

START – 2 (day ops)

RP and contractors – 60

IEPA – 2

USFWS - 2

5. Definition of Terms

CTEH = Center for Toxicology and Environmental Health

DOT = Department of Transportation

HASP = Health and Safety Plan

IC = Incident Commander

IDNR = Illinois Department of Natural Resources

IEPA = Illinois Environmental Protection Agency

OSC = On-Scene Coordinator

PHSMA = Pipeline and Hazardous Materials Safety Administration

ppm = parts per million

RP = Responsible Party

START = Superfund Technical Assessment and Response Team

USACE = United States Army Corps of Engineers

U.S. EPA = United States Environmental Protection Agency

USFWS = United States Fish and Wildlife Services

yd³ = cubic yards

6. Additional sources of information

6.1 Internet location of additional information/report

6.2 Reporting Schedule

POLREPS will be provided every Wednesday throughout the duration of the response.

7. Situational Reference Materials

NRC Report #895256

NRC Report #962178

NRC Report #962179