

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #6
Progress
Lockport Illinois Buckeye Oil Spill

Lockport, IL
Latitude: 41.6354890 Longitude: -88.0487240

To:
From: James Mitchell, OSC
Date: 1/13/2011
Reporting Period: 1/13/2011 - 1/19/2011

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 and maximize free product 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 in the wetlands 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. A disposal cell has been constructed in the 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, repacking hazardous soils in to approved containers, decontamination of roll-offs, air monitoring activities etc...

START personnel have been tasked with documenting product recovery and removal activities at the Site. This includes keeping a log book and photographic documentation of all significant occurrences on the project. START will also perform oversight on the RP's sampling and air monitoring team. Analytical data provided by the RP will be reviewed, analyzed, and compared to split sampling performed by START.

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 the work zone area is now being performed by Westshore/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. Contact OSC Jim Mitchell for access to IAPs.

01/13/2011

An estimated 119,240 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 staged in the wetlands for installation 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 and prepared for 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. An IEPA representative has investigated the oil/water separator and has indicated that no additional permitting is required to run the unit as intended.

Product collection occurred in the French Drain system on the east side of the railroad tracks. Daily product collection will continue as long as removable levels of product are available.

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 is 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.

01/14/2011

An estimated 119,500 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. A portable vacuum unit has been staged in the wetlands for installation 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.

Product collection occurred in the French Drain system on the east side of the railroad tracks. Daily product collection will continue as long as removable levels of product are available.

Construction of the soil storage cell is ongoing following approval of the design by US EPA, US Fish and Wildlife, IEPA, and the property owner. It is expected that the soil cell will be completed by the end of the day and excavation will commence over the weekend.

Construction of the hazardous waste soil storage cell has been completed in the Citgo parking area on New Avenue. Dumping of the hazardous waste roll off bins in to a soil containment zone is ongoing following approval of the "roll off and decontamination plan".

01/17/2011

An estimated 119,500 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. A portable vacuum unit has been staged in the wetlands for installation 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.

The soil storage cell construction is complete and soil scraping has begun in the center section of the contaminated area. Approximately 0-12" of soil is scraped by excavators and then dumped in to the soil cell for mixing and drying. Soil will be excavated to the extent of contamination or to bedrock depending on which is encountered first.

Product collection occurred in the French Drain system on the east side of the railroad tracks. Daily product collection will continue as long as removable levels of product are available.

Construction of the hazardous waste soil storage cell has been completed in the Citgo parking area on New Avenue. Dumping of the hazardous waste roll off bins in to a soil containment zone is ongoing following approval of the "roll off and decontamination plan". As of 1700, 8 roll off bins of hazardous waste have been shipped off site for disposal.

01/18/2011

An estimated 119,500 gallons of oil/water mixture have been recovered from the drainage ditch and wetlands area. Currently recovery of oil/water mixture is on hold as the focus of recovery operation has switched to the excavation of contaminated wetlands.

Product recovery operations continued in a limited capacity in the areas west of the railroad and in the wetlands. A portable vacuum unit has been staged in the wetlands for installation 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. US EPA and START personnel inspected the perimeter of the containment area and observed no breaks in the containment.

Soil scraping continues in the center section of the contaminated area. Soil is scraped to bedrock by excavators and then dumped in to the soil cell for mixing and drying. Two excavators are working on the southwest extent of contamination and are working in a northeast direction.

Product collection occurred in the French Drain system on the east side of the railroad tracks. Daily product collection will continue as long as removable levels of product are available.

Removal of non-hazardous soil and transfer and removal of hazardous soil roll-off bins continues at the Citgo Parking Area.

01/19/2011

An estimated 119,500 gallons of oil/water mixture have been recovered from the drainage ditch and wetlands area. Currently recovery of oil/water mixture is on hold as the focus of recovery operation has switched to the excavation of contaminated wetlands.

Soil scraping continues in the center section of the contaminated area. Soil is scraped to bedrock by excavators and then dumped in to the soil cell for mixing and drying. Two long arm excavators are working on the southwest extent of contamination and are working in a northeast direction. Containment and absorbent boom have been installed strategically throughout the excavation to ensure that cleaned areas remain free of the crude product.

US EPA and START personnel inspected the perimeter of the containment area and observed no breaks in the containment.

Product collection occurred in the French Drain system on the east side of the railroad tracks. Daily product collection will continue as long as removable levels of product are available.

Removal of hazardous waste roll off bins continues at the Citgo Parking Area. It is anticipated that hazardous and non-hazardous soil will be shipped off Site by 01/20.

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		119,500 gal		Yes	
Soil		2,475 yd3			Staged/Shipped

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 upon completion of the excavation. Vacuum trucks, excavators, portable vacuum units, and an oil water separator will be utilized to pull product from areas in the wetlands as necessary.

Extrix biologists will be onsite daily to guide all excavation activities. Only soils saturated with oil will be removed. This strategy will be used for all Phase 2 soil removal activities to minimize impact to the wetland. Monitoring and removal of product from the French Drain system will continue as necessary.

Transfer of hazardous soil from non-DOT approved roll off bins in to DOT approved roll off bins is on going in the Citgo parking lot on New Avenue. Non hazardous and hazardous soil will be shipped off as appropriate. All material staged in the Citgo parking lot should be removed by the end of this week.

Additional characterization activities for the CN railroad property will begin in February of 2011. Additional characterization will include installation of monitoring wells and sampling with the use of a geoprobe.

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 in the Wetland. A revised plan will be submitted for approval.

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

Excavation of contaminated soils in the wetlands will continue through the week. Oily saturated soils scraped as necessary and moved to the soil containment cell for dewatering and staging. Soil in the cell will be mixed with wood chips and characterized for disposal.

It is anticipated that the non-hazardous and hazardous soil in the Citgo parking lot will be completely shipped off site by 01/20.

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.

2.2.2 Issues

01/13/2011

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.

01/14/2011

Product recovery operations have been hindered while arrangements are made for the excavation. The soil cell will be completed today with excavation beginning over the weekend.

01/17/2011

Snow flurries and rain have created icy conditions throughout the work site. Weather will continue to be an issue throughout the week with additional snow storms and temperatures below freezing towards the end of the week.

01/18/2011

The amount of soil in the soil storage cell will need to be monitored. Characterization turn around time and disposal activities of soil may hinder excavation in the wetlands. USEPA an review a sampling plan for characterizing soil in disposal cell.

01/19/2011

Temperatures will fall well below freezing on Thursday night and in to the weekend. Freezing temperatures will hinder excavation and product collection activities. Machinery will be run continuously to combat freezing and an ammend work/break schedule will be enacted by Westshore/Buckeye.

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.

2 excavators will be utilized in the southwest portion of the wetlands. The excavators will work east and then north before concentrating on the center of contamination.

It is anticipated that all hazardous and non-hazardous soils in the Citgo staging area will be shipped off site by 01/20.

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 – 1 (day ops)

RP and contractors – 30

5. Definition of Terms

DOT = Department of Transportation

HASP = Health and Safety Plan

IC = Incident Commander

IEPA = Illinois Environmental Protection Agency

OSC = On-Scene Coordinator

START = Superfund Technical Assessment and Response Team

USEPA = 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