

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #7
Progress
Lockport Illinois Buckeye Oil Spill

Lockport, IL
Latitude: 41.6354890 Longitude: -88.0487240

To:
From: James Mitchell, OSC
Date: 1/20/2011
Reporting Period: 1/20/2011 - 1/26/2011

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.

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 were shipped to Prairie View Landfill for disposal. A disposal cell was 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. All hazardous soils were transferred from staging containers in to trucks for shipment to an EQ facility for disposal. All hazardous and non-hazardous soils which were staged in the Citgo parking lot have been shipped off site.

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 Bi-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.

01/20/2011

An estimated 125,500 gallons of oil/water mixture have been recovered from the drainage ditch and wetlands area. Westshore/Buckeye has shipped off approximately 76,200 gallons for treatment at a local refinery. 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. Contaminated soil is scraped to clean by excavators and then dumped in to the soil cell on Site 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 waste roll off bins continues in the Citgo parking lot. Westshore/Buckeye contractor Environmental Quality (EQ) completed the transfer and shipping of hazardous soil from the parking area to a disposal facility. Non hazardous roll off bins are currently being shipped off site for disposal. It is anticipated that the non hazardous soil roll off bins will be completed shipped by tomorrow (1/21).

01/21/2011

Soil scraping activities with the two long arm excavators have moved to the northern portion of the site. Contaminated soil is scraped down to clean and then being transported to the soil cell for mixing and drying. Additional containment and absorbent boom have been installed strategically throughout the excavation 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.

Removal of waste roll off bins is complete in the Citgo parking lot. EQ completed the transfer and shipping of hazardous soil from the parking area to a disposal facility. Non hazardous roll off bins have been shipped off site to Prairie View landfill for disposal.

01/22/2011

Westshore/Buckeye work crews have completed the initial filling of the soil cell with contaminated soils. Additional excavated soil is being staged on Site to dewater before being placed in to the soil cell. Site roads have been widened and reinforced to allow for larger transport trucks to access the soil cell for removal from the Site. Tree removal activities continue on the southern portion of the Site in preparation for excavation activities.

Absorbent and containment boom have been re-set outside the mat roads.

Clean up and demob activities at the CITGO transfer site have been completed. This area will continue to be used as a staging area for work vehicles and frac tanks for the remainder of the clean up efforts.

01/23/2011

No construction or excavation activity on the Site today. Pipe Liner is present to monitor Site throughout the day.

Westshore/Buckeye contractors (Antea Group) collected a round of surface water sample in accordance with the approved sampling plan.

01/24/2011

Contaminated soil in the soil cell was transferred out of the cell and in to covered and lined trucks for disposal at the EQ facility in Detroit , MI. In total, 7 truckloads (approximately 350 cubic yards) of contaminated soil were removed from the soil cell.

Soil scraping and excavation activities continued in the eastern portion of the wetlands. All scraped soil is temporarily being staged on site for dewatering while the soil cell is being emptied. Once the cell is emptied, the staged soils will be transferred to the cell for mixing and drying.

Tree removal activities began in the southeast portion of the Site to allow mat road access to the southern portion of the wetlands. The removed trees were processed in a wood chipper and the resulting chips are utilized for mixing and drying of the soil cell.

US EPA personnel observed several areas within the southwest edge of the plume where additional excavation/removal of free product and contaminated vegetaion/sediments was necessary. The Westshore/Buckeye contractor Entrix indicated that the contamination was thought to be surface contamination only. All visually oiled vegetation will be removed from the area.

USFWS personnel were present on Site to view progress and to be updated on the next phase of removal activities.

1/25/2011

Westshore/Buckeye submitted a the West Area Containment Cell Sampling Plan to US EPA and US FWS for review and approval. Following the incorporation of comments, the US EPA OSC approved the plan.

The loading and disposal of contaminated soil from the soil cell continued throughout the day. In total, 18 truckloads (approximately 450 cubic yards) of contaminated soil were removed from the soil cell. It is anticipated that the soil cell will be completely empty by the end of the day tomorrow (01/26).

Soil scraping and excavation activities continued in the eastern and southeastern portion of the wetlands. While the soil cell is being emptied, the excavated soil is continuing to be staged on site for dewatering. Large (6" - 8") chunks of ice were observed in the staged piles of soil.

EPA personnel inspected the perimeter of the plume and the absorbent and containment boom for any noticeable product movement. None was observed.

Decontamination of containment boom and composite mats with a cirtus based cleaner in the newly constructed decon area continued. Decontamination wastewater is currently being collected by a vacuum truck and transferred to frac tanks while awaiting disposal. Westshore/Buckeye estimates 200 feet of boom have been decontaminated by 1600 and is ready to deploy as necessary.

Buckeye has indicated that approximately 45,000 gallons of oil are present in the frac tanks currently. US EPA has requested a more exact volume of oil recovered so far.

01/26/2011

The loading and disposal of contaminated soil from the soil cell continued throughout the day. In total, 20 truckloads (approximately 500 cubic yards) of contaminated soil were removed from the soil cell. The soil cell was emptied by the end of the day and the transfer of soils staged on Site in to the cell will begin tomorrow (1/27).

US EPA personnel spoke with Westshore/Buckeye contractor Entrix regarding the excavation of sediment on the southeast portion of the site. EPA noted two specific areas of pooled oil and contaminated soil in the area. Entrix will conduct a follow up on the specific area.

Westshore/Buckeye work crews worked to remove oiled vegetation from the area discovered on 01/25. Hand tools were utilized to remove all visibly oiled vegetation for disposal. Soil scraping will be conducted in the area.

START personnel observed Antea Group workers conducting surface water sampling operations throughout the wetlands area. START verified Antea Group sampling techniques and verified samping frequency through the rest of the week.

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		125,500 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.

Excavation activities will continue throughout the rest of the week and in to the weekend. All excavated soil will be temporarily staged on Site for dewatering before being transferred to the soil cell for mixing and drying. The soil cell will be sampled for characterization in accordance with the approved disposal plan.

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.

Decon activities will continue as necessary.

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

Contaminated soils that are being staged on Site will be transferred in to the soil cell once it has been emptied. The soil cell will be sampled for characterization in accordance with the approved soil disposal plan.

Excavation of contaminated soils in the wetlands will continue to the SW and South of the contaminated area of the wetland. Such soils are being staged for dewatering and will not be placed into the soil containment cell until the cell is emptied.

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.

Decon of containment booms will continue as needed and wastewater collected for disposal.

Woodchipping activities will continue as necessary.

2.2.2 Issues

01/20/2011

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.

01/25/2011

EPA personnel noted visible contamination in the area southeast of the current excavation. Westshore/Buckeye contractor Entrix explained that the visible contamination is only in the surface sediment and vegetation. It was agreed between all parties that the oiled vegetation will be removed and the contaminated soil will be removed based on visual confirmation.

01/26/2011

6 - 8" ice chunks have been observed in the contaminated soil being staged on Site. The ice chunks have the potential to melt and leech product out of the soil and in to the sand that has been laid down as the base of the soil cell.

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.

Contaminated soil that is being staged on Site will be transferred to the soil cell for mixture and drying as soon as it has been emptied. The soil will be sampled for characterization in accordance with the approved soil disposal plan.

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