

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
BP Terminal Indianapolis - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #21
Progress PolRep
BP Terminal Indianapolis
Z5K6
Indianapolis, IN
Latitude: 39.8027163 Longitude: -86.2160273

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Date: 5/20/2013

Reporting Period: April 16 - May 15, 2013

1. Introduction

1.1 Background

Site Number:	Z5K6	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	OPA	Response Type:	PRP Oversight
Response Lead:	PRP	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:		Start Date:	11/14/2011
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	E11504	Reimbursable Account #:	

1.1.1 Incident Category

Manufacturing/processing/maintenance - oil and gas storage

1.1.2 Site Description

The BP Indianapolis Terminal (the site) has operated as a petroleum storage and distribution facility since 1941. The site consists of an administrative building, service garage, petroleum distribution rack, miscellaneous warehouse and pumping station sheds, oil/water separator, underground storage tanks (UST) and aboveground storage tanks (AST), which contain gasoline, diesel, ethanol, furnace oil, and heating oil. AST capacity ranges from 672,000 to 3,360,000 gallons, with a total capacity exceeding 18,000,000 gallons.

1.1.2.1 Location

The site is a 41-acre bulk terminal located at 2500 North Tibbs Avenue in Indianapolis, Marion County, Indiana, 46222. Site coordinates are 39.8027163 latitude and 86.2160273 longitude. The site is bordered by commercial property to the north; shopping plaza to the northeast; Ferguson Industrial Plastics Division and a fire station to the east; undeveloped property to the south; and Little Eagle Creek to the west.

1.1.2.2 Description of Threat

Environmental investigations conducted by BP and its consultants documented that there are petroleum-related groundwater impacts from benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tertiary butyl ether (MTBE), naphthalene, ethanol, and polynuclear aromatic hydrocarbons (PAH) including benzo(a)anthracene, benzo(a)pyrene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene beneath the Site. Light Non-Aqueous Phase Liquid (LNAPL) has been found in a shallow aquifer beneath the Site and at seeps along Little Eagle Creek.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

BP submitted their Investigation Report on January 31, 2013. The report was intended to detail site conditions and fill identified data gaps. EPA concluded the following after reviewing the report, and asked that BP address deficiencies noted in the Comments letter, dated March 25, 2013, which is posted to www.epaosc.org/bpindyterminal.

1. There are high levels of benzene in groundwater monitoring wells directly adjacent to Little Eagle Creek. Data from June 2012 indicated that benzene was as high as 2,800 micrograms per liter (ug/L) in DHW-96 and 1,170 ug/L in OW-32. Both wells are located within feet of the creek banks.
2. LNAPL has been detected in measurable thickness at two different locations at the facility. The LNAPL plume associated with Tank 6 has been observed in DHW-84, less than 150 feet from the creek.
3. The current remediation system consists of a pump and treat system, interceptor trench, and extraction wells. The aquifer testing data presented in the report shows that several wells adjacent to the creek with high concentrations of benzene are outside the capture zone of the remediation system and/or the remediation system is not effectively preventing contaminant migration.
4. Benzene was detected in sediment samples from Little Eagle Creek, with one sediment sample above the Region 5 Ecological Screening Level at 143 micrograms per kilogram (ug/kg) and lower concentrations detected downstream.
5. Benzene has been detected in the surface water of Little Eagle Creek.
6. Benzene appears to be migrating from the facility into the sediments and surface water of Little Eagle Creek.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The site was previously in the Voluntary Remediation Program (VRP) of the Indiana Department of Environmental Management (IDEM). IDEM referred the site to the U.S. Environmental Protection Agency (EPA) on December 13, 2010. On November 14, 2011, EPA executed an Administrative Order by Consent (AOC) under Section 311 of the Clean Water Act. The AOC requires BP to implement removal measures to prevent migration of petroleum hydrocarbon impacted groundwater into Little Eagle Creek.

2.1.2 Response Actions to Date

BP conducted the following activities during the reporting period:

- Continued pump and treat system operation;
- Reconfigured pump and treat system to bypass air stripper and treated extracted groundwater with carbon only on April 16, 2013;
- Collected confirmation system samples on April 18, 22, 29 and May 6, 2013 to verify efficiency of new reconfiguration of the pump and treat system;
- Conducted semi-monthly O&M on the LNAPL recovery system installed at DHW-110 on April 29, 2013 and May 14, 2013;
- Conducted semi-monthly manual LNAPL recovery and related breathing zone monitoring on April 29, 2013 and May 14, 2013;
- Completed routine service for the LNAPL recovery system pump on 5/2/2013. The skimmer pump is currently operational;
- Completed monthly Little Eagle Creek sampling on May 14 2013; and
- Submitted the fourth quarter 2012 Quarterly Groundwater Monitoring Report and the February 2013 Little Eagle Creek monthly sampling report.

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

EPA executed Docket No. V-W-11 C-984, an AOC with BP on November 14, 2011.

2.1.4 Progress Metrics

Below is a schedule of items included in the AOC. BP requested a deadline extension for submittal of the Investigation Report.

Milestone	Date Due	Date Done
Effective Date (ED)	11/14/2011	11/14/2011
LNAPL Recovery, Quarterly Creek & MW Sampling	11/14/2011	11/14/2011
Contractor Notification	11/21/2011	11/21/2011
Project Coordinator Notification	11/21/2011	11/21/2011
HASP Submittal	12/6/2011	12/6/2011
QAPP Submittal	12/6/2011	12/6/2011
HASP/QAPP Approval (HQA)		1/5/2012
HASP/QAPP Revisions	1/13/2012	1/13/2012
LNAPL Recovery, Creek Sampling Locations Notification, Quarterly MW Sampling	1/27/2012	1/27/2012
Creek and Groundwater Sampling Locations Revisions	2/17/2012	2/21/2012
Creek Sampling Location Approval (CS)		2/21/2012
Monthly Creek Sampling	3/6/2012	3/6/2012
On-Site Construction	12/14/2011	8/30/2011
Construction Complete	3/19/2012	3/19/2012
Investigation Work Plan	2/12/2012	2/12/2012

Revised Work Plan	4/13/2012	4/13/2012
Investigation Complete (IC)		
- Supplemental soil characterization		6/18/2012
- Supplemental groundwater characterization		6/22/2012
- Supplemental surface water characterization (normal flow)		10/8/2012
- Supplemental surface water characterization (low flow)		6/27/2012
- Supplemental sediment characterization		6/27/2012
- Natural Resources Assessment		
- Sediment toxicity testing and analysis (benthic testing)		
- Aquifer testing		10/21/2012
Investigation Report	1/31/2013	1/31/2013
Investigation Report Approval (IRA)		
Removal Work Plan		
Removal Work Plan Approval (RWA)		
Removal		
Final Report, 60 days after removal is complete		

2.2 Planning Section

2.2.1 Anticipated Activities

The following sections discuss planned response activities and next steps.

2.2.1.1 Planned Response Activities

During the next reporting period, BP will:

- Continue to provide oversight and documentation support to EPA's On-Scene Coordinator (OSC);
- Conduct Little Eagle Creek monthly surface water sampling;
- Continue to operate the pump & treat system;
- Prepare quarterly Groundwater Monitoring Report;
- Prepare monthly surface water monitoring report; and
- Prepare response to EPA's comments on the Investigation Report.

2.2.1.2 Next Steps

BP will continue addressing items in the Work Plan.

2.2.2 Issues

Benzene was detected in the pump and treat system confirmatory samples collected from the process stream between the lead and lag carbon vessels on April 22, 24, 29 and May 6, 2013. These results suggested earlier than expected lead carbon breakthrough. Effluent sampling confirmed effective treatment to non-detect levels, but the pump and treat system was shut down on May 6, 2013 as a precautionary measure to investigate the cause of early breakthrough.

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

2.4.1 Narrative

Federal Project Number (FPN) E11504 is assigned to this project. As of March 15, 2013, the total approved ceiling is \$249,999. Costs are current as of May 20, 2013.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
U.S. Coast Guard	\$0.00	\$30,579.44	(\$30,579.44)	0.00%
TAT/START	\$140,000.00	\$105,000.00	\$35,000.00	25.00%
Intramural Costs				
USEPA - Direct	\$25,000.00	\$17,078.48	\$7,921.52	31.69%
USEPA - InDirect	\$50,000.00	\$32,699.87	\$17,300.13	34.60%
Total Site Costs	\$215,000.00	\$185,357.79	\$29,642.21	13.79%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in

this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

EPA has approved BP's Health and Safety Plan (HASP). BP will conduct all environmental work at the Site under the HASP.

2.6 Liaison Officer

NA

2.7 Information Officer

NA

2.7.1 Public Information Officer

NA

2.7.2 Community Involvement Coordinator

NA

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

IDEM

Marion County Public Health Department

4. Personnel On Site

EPA was not on-site during the reporting period.

5. Definition of Terms

AOC	Administrative Order by Consent
AST	Aboveground Storage Tank
BTEX	Benzene, toluene, ethylbenzene, xylenes
ED	Effective Date
EPA	Environmental Protection Agency
FPN	Federal Project Number
HASP	Health and Safety Plan
IDEM	Indiana Department of Environmental Management
LNAPL	Light Non-Aqueous Phase Liquid
MTBE	Methyl tertiary butyl ether
NA	Not Applicable
O&M	Operation and Maintenance
OSC	On-Scene Coordinator
PAH	Polynuclear aromatic hydrocarbons
PolRep	Pollution Report
PRP	Potentially Responsible Party
P&T	Pump and treat
QAPP	Quality Assurance Project Plan
START	Superfund Technical Assessment and Response Team
ug/L	micrograms per liter
ug/kg	micrograms per kilogram
UST	Underground Storage Tank
VRP	Voluntary Remediation Program

6. Additional sources of information

6.1 Internet location of additional information/report

Additional information can be found at www.epaosc.org/bpterminalindy.

6.2 Reporting Schedule

The OSC will submit the next Pollution Report (PolRep) on or about June 15, 2013.

7. Situational Reference Materials

NA