

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #10
Progress PolRep
BP Terminal Indianapolis
Z5K6
Indianapolis, IN
Latitude: 39.8027163 Longitude: -86.2160273

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From: Shelly Lam, On-Scene Coordinator

Date: 7/18/2012

Reporting Period: June 16 - July 15, 2012

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 has been conducting sampling, monitoring, and cleanup at the Site since 1988. Data collected by BP shows that BTEX, MTBE, and PAHs have been found across the Site and in Little Eagle Creek as free and dissolved-phase product.

BP's Semi-Annual Groundwater Report for the facility dated July 2010 documented that LNAPL continued to be detected in certain on-Site wells and dissolved phase compounds were as high as 23,900 micrograms per liter (ug/L) for benzene in monitoring well DHW-69; 58,200 ug/L for toluene in monitoring well DHW-72; 2,410 ug/L for ethylbenzene in DHW-55; 9,720 ug/L for xylenes in DHW-72; 262 ug/L for MTBE in DHW-54; and 1,150 ug/L for naphthalene in DHW-55. As of February 24, 2010, monitoring well DHW-96, adjacent to Little Eagle Creek, had a benzene concentration of 4,250 ug/L.

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 fine-tuning the pump and treat system;
- Collected monthly system samples;
- Conducted semi-monthly operation and maintenance (O&M) on the LNAPL recovery system, installed at DHW-110;
- Conducted semi-monthly manual LNAPL recovery and related breathing zone monitoring;
- In accordance with the work plan, completed the following activities:
 - Low-flow supplemental surface water characterization in Little Eagle Creek on June 27, 2012;
 - Supplemental soil characterization on June 18, 2012;
 - Supplemental groundwater characterization on June 22, 2012; and
- Completed quarterly groundwater monitoring.

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:

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)	10/5/2012	
- Supplemental soil characterization		6/18/2012
- Supplemental groundwater characterization		6/22/2012
- Supplemental surface water characterization (normal flow)		
- Supplemental surface water characterization (low flow)		6/27/2012
- Supplemental sediment characterization		6/27/2012
- Natural Resources Assessment		
- Sediment toxicity testing and analysis		
- Aquifer testing		
Investigation Report	12/4/2012	
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 the OSC;
- Conduct Little Eagle Creek monthly surface water sampling;
- Repair transfer pump and and continue to optimize pump and treat system; and
- Conduct aquifer testing as outlined in the approved Work Plan.

2.2.1.2 Next Steps

BP will continue addressing items in the Work Plan.

2.2.2 Issues

The post air-stripper transfer pump continued to shut down during normal system operation due to a motor overload fault. Previous inspections by licensed electricians have indicated that the pump motor is in good working condition and is not the cause of the pump failure. Based upon initial inspections of the pump upon failure, fouling from the air stripper was assessed as the likely cause of the overload condition. Partial disassembly of the pump allowed for cleaning, reassembly, and re-start of the system. However, the overload condition reoccurred on two occasions after pump repair with sub-optimal run times. A replacement pump has been ordered with an anticipated delivery of July 23, 2012. The existing pump will be removed and assessed by an authorized service technician to further assess the cause of the overload condition. If repairable, the existing pump will be repaired and maintained as a backup. Stantec is continuing repair work as of July 15, 2012, and will re-start the system for normal operations once repairs are complete.

Due to ongoing drought conditions in the central Indiana region and subsequent low-yield of groundwater from monitoring wells at the site, the purge and sample methodology was modified to facilitate sample collection during the 2nd Quarter 2012 event, with approval from EPA. A variance time delay form was emailed to the EPA OSC on July 10, 2012, to document the modifications.

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

2.4.1 Narrative

OSC Shelly Lam initially requested \$50,000 from the Oil Spill Liability Trust Fund (OSLTF). Federal Project Number (FPN) E11504 was assigned. On November 28, 2011, OSC Lam requested an additional \$50,000. OSLTF approved an additional \$50,000 in funding on June 27, 2012, bringing the total budget to \$150,000. Superfund Technical Assessment and Response Team (START) costs are current through July 13, 2012. EPA costs are current as of the end of fiscal year 2011.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
TAT/START	\$100,000.00	\$69,648.43	\$30,351.57	30.35%
Intramural Costs				
USEPA - Direct	\$50,000.00	\$11,708.40	\$38,291.60	76.58%
Total Site Costs				
	\$150,000.00	\$81,356.83	\$68,643.17	45.76%

* 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

During the reporting period, the EPA OSC was on-site for several days. Additionally, the START contractor was on-site conducting oversight of BP's activities.

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
OSLTF	Oil Spill Liability Trust Fund
OSC	On-Scene Coordinator
PAH	Polynuclear aromatic hydrocarbons
PolRep	Pollution Report
PRP	Potentially Responsible Party
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
RPD	Relative Percent Difference
START	Superfund Technical Assessment and Response Team
ug/L	micrograms per liter
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 August 15, 2012.

7. Situational Reference Materials

NA