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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: **POLREP #14**
Progress PolRep
BP Terminal Indianapolis

Indianapolis, IN
Latitude: 39.8027163 Longitude: -86.2160273

To:
From: Shelly Lam, On-Scene Coordinator
Date: 10/15/2012
Reporting Period: September 16 - October 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:

- Conducted carbon vessel inspection on the pump & treat system on September 25, 2012;
- Modified pump & treat system plumbing to facilitate self-contained carbon vessel backwash capabilities September 26-27, 2012;
- Continued pump and treat system fine tuning;
- Collected monthly system samples on October 2, 2012;
- Conducted semi-monthly operation & maintenance (O&M) on the light non-aqueous phase liquid (LNAPL) recovery system, installed at DHW-110;
- Conducted semi-monthly manual LNAPL recovery and related breathing zone monitoring;
- Conducted monthly surface water sampling in Little Eagle Creek on October 1 and 8, 2012 per the Revised Surface Water and Groundwater Sampling Plan dated February 21, 2012; and
- Shut down the pump & treat system on October 12, 2012 to begin collecting aquifer test antecedent data; and
- Submitted the second quarter 2012 groundwater monitoring report.

The groundwater samples collected in June and July 2012 had elevated benzene concentrations in samples collected from groundwater monitoring wells next to Little Eagle Creek. Monitoring wells DHW-064 and DHW-096 had benzene concentrations of 753 and 2,800 ug/L, respectively. Benzene was detected in surface water samples from Little Eagle Creek at a maximum concentration of 5 ug/L.

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)		
- 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		*Pending*
- Sediment toxicity testing and analysis		*Pending*
- Aquifer testing		*Pending*
Investigation Report		
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;
- Continue to optimize the pump & treat system;
- Perform carbon exchange on two vessels in the pump & 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

Two of the carbon vessels (vessels #1 and #3) experienced low flow volumes of process water, and were observed to build back-pressure more quickly than the other four carbon vessels. Upon inspection on September 25, 2012, the carbon visible through the vessel fill port appeared to be in good condition. No evidence of carbon crusting or fouling was observed. Field technicians again attempted to run process water through the vessels to troubleshoot the issues. As was the case in previous attempts, low flow volumes of process water and high back-pressure were observed on the two carbon vessels. Future actions willl include exchanging the carbon in these two vessels. In the meantime, process water is still treated by the air stripper and polished by the other four carbon vessels, which does not compromise the effectiveness of the treatment.

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

No information available at this time.

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, a START contractor was periodically 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 teriary 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
P&T	Pump and treat
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 November 15, 2012.

7. Situational Reference Materials

NA