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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: **POLREP #5**
Progress PolRep
BP Terminal Indianapolis

Indianapolis, IN
Latitude: 39.8027163 Longitude: -86.2160273

To:
From: Shelly Lam, On-Scene Coordinator
Date: 2/16/2012
Reporting Period: January 16 - February 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 treatment system;
- Started up the treatment system on January 18, 2012. During startup activities, the carbon vessels were determined to be the source of short system run times and high operating pressures. BP reconfigured carbon vessels to run three lead vessels in parallel (instead of one lead/lag series pair) to mitigate backpressure on the transfer pump downstream of the air stripper sump. This reconfiguration was determined to be successful based upon greater system run times and lower operating pressures across the system;
- On February 9, 2012, the treatment system compressor was discovered to have power loss. Compressor was uninstalled and transported to local mechanic for repairs;
- Collected monthly treatment system samples;
- Conducted aquifer testing January 25 through February 1, 2012;
- On January 31, 2012, BP submitted QAPP, SAP, and HASP revisions with wet signatures;
- Conducted semi-monthly operation and maintenance (O&M) of LNAPL recovery system installed at DHW-110;
- Conducted semi-monthly manual LNAPL recovery and related breathing zone monitoring;
- On February 5, 2012, BP responded to a discharge of petroleum-contaminated groundwater from the treatment system. The system was shut down, the site was secured, and recovery of discharged groundwater was conducted. BP is conducting a root-cause analysis (RCA) investigation and will provide the results to EPA under separate cover in an incident summary report which will be submitted to EPA on February 17, 2012;
- On February 6, 2012 BP notified EPA of a discharge of petroleum-contaminated water from the treatment system;
- On February 8, 2012, BP submitted a post-incident monitoring plan for the treatment system discharge, based upon February 7, 2012 discussions with EPA's On-Scene Coordinator (OSC). BP will continue to conduct post-incident sampling, including soil, groundwater, and surface water, as conditionally approved by EPA in the letter dated February 9, 2012. Un-validated analytical results will be shared with the OSC upon receipt;
- On February 10, 2012, BP requested an extension of the deadline for continuous system operation from February 12 to a later date, based upon the conclusions of a root-cause analysis of the treatment system failure;
- On February 10, 2012, EPA's Office of Regional Counsel, in consultation with the OSC, confirmed that the BP's deadline extension request was acceptable. BP will provide EPA a revised schedule and start-up deadline by February 17, 2012;
- On February 12, 2012, Stantec submitted Investigation Work Plan per paragraph V.31 of the Order; and
- On February 14, 2012, manual LNAPL recovery was conducted on DHW-110. Three gallons of LNAPL were recovered.

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
Health and Safety Plan (HASP)/Quality Assurance Project Plan (QAPP) Approval		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 Sampling Location Approval		
Monthly Creek Sampling		
On-Site Construction	12/14/2011	9/00/11
Construction Complete	2/12/2012	
Investigation Work Plan	2/12/2012	2/12/2012
Investigation Complete		
Investigation Report		
Investigation Report Approval		
Removal Work Plan		

Removal Work Plan Approval	
Removal	
Final Report, 60 days after removal is complete	
Quarterly Sampling Report	2/19/2012
Progress Reports, 15th of every month	2/15/2012

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
BP will:

- Continue to provide oversight and documentation support to OSC;
- Continue post-incident monitoring and analytical results reporting to OSC;
- Conduct Little Eagle Creek monthly surface water sampling;
- Continue to optimize pump and treat system in anticipation of re-start; and
- Repair of damaged carbon vessels.

2.2.1.2 Next Steps
BP will continue collecting surface water and groundwater samples until the treatment system is operational again.

2.2.2 Issues
See Response Actions to Date, Section 2.1.2.

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 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
The OSC was on-Site on February 7, 2012.

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
OSC	On-Scene Coordinator
PAH	Polynuclear aromatic hydrocarbons
PolRep	Pollution Report
PRP	Potentially Responsible Party
QAPP	Quality Assurance Project Plan
RCA	Root-Cause Analysis
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 March 15, 2012.

7. Situational Reference Materials

NA