

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region V

**Subject:** POLREP #47  
Progress Polrep  
BP Terminal Indianapolis  
Z5K6  
Indianapolis, IN  
Latitude: 39.8027163 Longitude: -86.2160273

**To:** Matt Mankowski, U.S. EPA  
Carolyn Bohlen, U.S. EPA  
Bill Wagner, U.S. EPA  
Yolanda Bouchee-Cureton, U.S. EPA  
Doug Winder, U.S. EPA  
USCG PolRep Distribution, USCG  
John Maritote, U.S. EPA  
Patrick Ryan, USCG  
Mark Cochran, Cincinnati Finance Center  
Jaime Brown, ERS4

**From:** Paul Atkociunas, On-Scene Coordinator

**Date:** 8/20/2015

**Reporting Period:** July 15 to August 14, 2015

## 1. Introduction

### 1.1 Background

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

#### 1.1.1 Incident Category

Manufacturing/processing/maintenance - oil and gas storage

#### 1.1.2 Site Description

The BP Indianapolis Terminal (the site) began operating 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 degrees north latitude and 86.2160273 degrees west 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) and dissolved-phase contamination have 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

Refer to previous Pollution Reports (PolReps).

## 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

During the reporting period, BP conducted the following actions:

- Installed a new effluent flow meter in the groundwater extraction and treatment (GWET) system on July 15, 2015;
- Conducted the monthly Little Eagle Creek surface water sampling event on July 20, 2015;
- Received the results of groundwater samples collected at the GWET system for Fe, Mn, total hardness, dissolved Fe, dissolved Mn, TDS, TSS, temperature, DO and pH on July 23, 2015 and started preliminary analysis of same;
- Backwashed all six carbon tanks in the GWET system on August 7, 2015; and
- Changed to 25 micron bag filters (replacing the previously used 10 micron filters) on August 10, 2015 to increase operational time between bag filter replacements.

#### 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

On September 8, 2014, BP submitted a data package for the design of a Modified GWET system in accordance with the AOC. EPA provided comments and BP submitted a Revised Modified GWET system data package. On October 27, 2014, EPA approved the design in the Modified GWET Data Package, which is incorporated and fully enforceable under 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   |            | 8/19/2013  |
| - Sediment toxicity testing and analysis (benthic testing)                   |            | 8/19/2013  |
| - Aquifer testing  |            | 10/20/2012 |
| Investigation Report   | 1/28/2013  | 1/28/2013  |
| Investigation Report Approval (IRA)  |            | 1/21/2014  |
| Removal Work Plan  | 3/24/2014  | 3/24/2014  |
| Removal Work Plan Approval (RWA)   |            | 6/9/2014   |
| Removal  |            |            |
| Final Report   |            |            |

### 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;
- Perform the Little Eagle Creek monthly surface water sampling event, weather and stream levels permitting;
- Continue demonstration of effectiveness of upgraded system;
- Continue monthly LNAPL recovery and operation and maintenance (O&M) of the GWET and;
- Continue to evaluate the groundwater chemistry entering the GWET system to assist in improving operational time.

### 2.2.1.2 Next Steps

BP will proceed with the fulfilling the requirements of the AOC.

## 2.2 Issues

During the reporting period, the Pump and Treat system was operational for 52.1% of the time. The unscheduled down time is described below:

- A high-high alarm on the equalization tank caused the system to shut down on July 16, 22, 26, 29, 31 and August 5 2015. The high-high condition was caused by reduced flow due to particulate loading in the bag filters. The bag filters were replaced and the system resumed operation within one to two business days in each instance. The bag filter mesh size was increased on August 10, 2015 to increase the operational time between bag filter replacements.
- Severe weather caused a power outage at the system on July 17, 2015. The system was restarted within one business day.
- The system alarm call out function was found to be inoperable during system checks on August 7, 2015. The system was shut down until the call out function was repaired. Repairs were completed and the system was returned to operation on August 10, 2015.

## 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. On October 22, 2014, EPA submitted an OPA90 Removal Project Plan for the site to the USCG. On February 17, 2015, the ceiling for the Oil Spill Liability Trust Fund (OSLTF) costs for the project were increased from \$249,999 to \$310,000.

### Estimated Costs \*

|                         | Budgeted     | Total To Date | Remaining   | % Remaining |
|-------------------------|--------------|---------------|-------------|-------------|
| <b>Extramural Costs</b> |              |               |             |             |
| U.S. Coast Guard        | \$25,604.00  | \$25,604.00   | \$0.00      | 0.00%       |
| START - Weston          | \$146,500.00 | \$146,000.00  | \$500.00    | 0.34%       |
| START - Tetra Tech      | \$25,000.00  | \$13,500.00   | \$11,500.00 | 46.00%      |
| <b>Intramural Costs</b> |              |               |             |             |
| USEPA - Direct          | \$44,924.00  | \$39,250.00   | \$5,674.00  | 12.63%      |
| USEPA - InDirect        | \$34,575.00  | \$29,950.00   | \$4,625.00  | 13.38%      |
| <b>Total Site Costs</b> |              |               |             |             |
|                         | \$276,603.00 | \$254,304.00  | \$22,299.00 | 8.06%       |

\* 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

BP is conducting work associated with the AOC at the site under an approved Health and Safety Plan (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**

NA

### **5. Definition of Terms**

|        |  |
|--------|--|
| AOC    | Administrative Order by Consent                  |
| AST    | Aboveground Storage Tank                         |
| BTEX   | Benzene, toluene, ethylbenzene, xylenes          |
| EPA    | Environmental Protection Agency                  |
| FPN    | Federal Project Number                           |
| GWET   | Groundwater Extraction and Treatment System      |
| HASP   | Health and Safety Plan                           |
| IDEM   | Indiana Department of Environmental Management   |
| LEL    | Lower Explosive Limit                            |
| 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                    |
| START  | Superfund Technical Assessment and Response Team |
| 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](http://www.epaosc.org/bpterminalindy).

#### **6.2 Reporting Schedule**

The OSC will submit the next PolRep on or about September 16, 2015.

### **7. Situational Reference Materials**

NA

POLREP #47 Last Updated 8/20/2015