

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Alcoa Oil Spill - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region V

**Subject:** POLREP #4  
Progress POLREP  
Alcoa Oil Spill  
Z5K9  
Lafayette, IN  
Latitude: 40.4033776 Longitude: -86.8613812

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**From:** Shelly Lam, On-Scene Coordinator

**Date:** 1/18/2011

**Reporting Period:** January 18, 2011

1. Introduction

1.1 Background

|                            |           |                                |                |
|----------------------------|-----------|--------------------------------|----------------|
| <b>Site Number:</b>        | Z5K9      | <b>Contract Number:</b>        |                |
| <b>D.O. Number:</b>        |           | <b>Action Memo Date:</b>       |                |
| <b>Response Authority:</b> | OPA       | <b>Response Type:</b>          | Emergency      |
| <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>  | 1/14/2011 | <b>Start Date:</b>             | 1/14/2011      |
| <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>               | E11507    | <b>Reimbursable Account #:</b> |                |

1.1.1 Incident Category

Active production facility - oil spill

1.1.2 Site Description

1.1.2.1 Location

Alcoa is a producer of primary aluminum, fabricated aluminum, and alumina, located at 3131 Main Street in Lafayette, Tippecanoe County, Indiana. Site coordinates are 40.4033776 north latitude and 86.8613812 west longitude. The Site is a 172-acre facility located in an industrial and commercial area in Lafayette.

1.1.2.2 Description of Threat

On January 14, 2011, Alcoa reported to the National Response Center (NRC # 964751) a discharge of approximately 1,600 gallons of oily press water from their facility in Lafayette, Indiana. The discharge was due to a pipe failure and hose malfunction. Oil/water mixture discharged to the storm sewer and then flowed for approximately one mile to an outfall on Elliott Ditch. Elliott Ditch is a perennial stream that

discharges into Wea Creek before flowing to the Wabash River.

### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Environmental Protection Agency (EPA) On-Scene Coordinator (OSC) Shelly Lam and Indiana Department of Environmental Management (IDEM) OSC Greg Carter responded to the spill on January 14th. Both OSCs observed oil flowing from the outfall into Elliott Ditch. Oil flowed approximately one mile downstream to the 18th Street Bridge, where it has been contained and recovered.

Twenty-two residences on private drinking water wells were identified within 200 feet of the impacted section of the ditch. The residents have been notified of the spill and are being provided temporary drinking water by Alcoa. Additionally, samples were collected from the wells at 14 residences on January 16, 2011. One additional residential well is scheduled for sampling on January 18th. Several unsuccessful attempts have been made to contact the remaining residents.

Prior ecological assessments conducted by the EPA identified six endangered species in Elliott Ditch and Wea Creek. These species include the fanshell, ring pink, rough pigtoe, pyramid pigtoe, rabbitsfoot, and bluebreast darter. EPA has notified the State Trustee and Department of the Interior.

Alcoa entered into a Consent Decree in 2002 with the EPA regarding historical releases of polychlorinated biphenyls (PCB). The consent decree required investigations of Elliott Ditch and Wea Creek. PCBs were detected in surface water, sediment, and fish tissue samples. The presence of elevated levels of PCBs in fish tissues prompted a Fish Advisory for these waterways.

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

The Alcoa facility reported a spill of approximately 1,600 gallons of oily press water on January 14, 2011. The discharge was due to a pipe failure and hose malfunction. Oil/water mixture discharged to the storm sewer and then flowed for approximately one mile to an outfall on Elliott Ditch. Elliott Ditch is a perennial stream that discharges into Wea Creek before flowing to the Wabash River. EPA and IDEM observed oil flowing from the outfall into Elliott Ditch. The oil was emulsified and appeared milky white in color.

#### 2.1.2 Response Actions to Date

On-site recovery and cleaning operations of the storm sewer and treatment system continued. Clear water is being discharged from the facility to the outfall on Elliott Ditch. On-site operations will continue through the night with EPA's Superfund Technical Assessment and Response Team (START) contractor conducting oversight.

Alcoa continued recovery operations on at the outfall on Elliott Ditch and at the 18th Street Bridge containment area. As of 1700 hours, it was estimated that 174,500 gallons of oil and water had been recovered from on-site and off-site operations. As of 0700 hours on January 19th, recovery operations will be discontinued as long as discharge water remains clear and no additional oil is encountered in the ditch.

Samples were collected from five additional residential wells on January 18th. To date, 21 residential wells have been sampled. The samples are being analyzed for volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB) and Oil/Grease parameters and the data will be compared to the Maximum Contaminant Levels (MCL).

Alcoa continued to provide bottled drinking water to residents on private wells along Elliott Ditch. Alcoa has contracted Treat America to deliver water to residents.

START continued oversight of recovery operations and conducted monitoring and assessment at downstream locations. Oil was not observed past the 18th Street Bridge.

EPA is reviewing Alcoa's sampling and analysis plan for the creek.

Analytical results for 15 residential well samples were received on January 18th. The results are being reviewed prior to being released to the residents.

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

On January 14, 2011, OSC Lam issued a Notice of Federal Interest to Alcoa representatives. Alcoa agreed to take voluntary action to contain the spill and conduct cleanup. Alcoa entered into a Consent Decree in 2002 with EPA to conduct investigations along Elliott Ditch and Wea Creek related to historical PCB releases.

#### 2.1.4 Progress Metrics

| <b><i>Waste Stream</i></b> | <b><i>Medium</i></b> | <b><i>Quantity</i></b> | <b><i>Manifest #</i></b> | <b><i>Treatment</i></b>              | <b><i>Disposal</i></b> |
|----------------------------|----------------------|------------------------|--------------------------|--------------------------------------|------------------------|
| Oil/water mixture          | Liquid               | 174,500 gallons        | Not applicable (NA)      | Returned to on-site treatment system | NA                     |
|                            |                      |                        |                          |                                      |                        |
|                            |                      |                        |                          |                                      |                        |

## 2.2 Planning Section

### 2.2.1 Anticipated Activities

#### 2.2.1.1 Planned Response Activities

During the next operational period, the following activities will be conducted:

- Discontinue recovery operations;
- Provide analytical results to residents;
- Conduct final downstream monitoring; and
- Demobilize personnel.

#### 2.2.1.2 Next Steps

EPA will host a meeting with the residents on Saturday, January 22nd. EPA is reviewing Alcoa's sampling and analysis plan for confirmation sampling on the ditch. Pending approval, surface water and sediment will be collected to verify that oil has been recovered. When the emergency component to the project is complete, EPA will refer oversight of residential well sampling to IDEM's Drinking Water Branch.

### 2.2.2 Issues

Alcoa had previously entered into a Consent Decree with EPA regarding historical releases of PCBs to Elliott Ditch. Additionally, endangered species were previously identified in Elliott Ditch and the downstream Wea Creek. The confirmation sampling plan will need to address these issues.

## 2.3 Logistics Section

NA

## 2.4 Finance Section

### 2.4.1 Narrative

OSC Lam requested \$25,000 from the Oil Spill Liability Trust Fund on January 14, 2011. OSC Thomas increased the funding to \$50,000 from the Oil Spill Liability Trust Fund on January 15, 2011. An additional \$25,000 was approved on January 18th, bring the total to \$75,000.

### Estimated Costs \*

|                         | Budgeted           | Total To Date      | Remaining          | % Remaining   |
|-------------------------|--------------------|--------------------|--------------------|---------------|
| <b>Extramural Costs</b> |                    |                    |                    |               |
| TAT/START               | \$40,000.00        | \$20,000.00        | \$20,000.00        | 50.00%        |
| USCG MSL                | \$5,000.00         | \$2,000.00         | \$3,000.00         | 60.00%        |
| <b>Intramural Costs</b> |                    |                    |                    |               |
| USEPA - Direct          | \$20,000.00        | \$5,000.00         | \$15,000.00        | 75.00%        |
| USEPA - InDirect        | \$10,000.00        | \$1,500.00         | \$8,500.00         | 85.00%        |
|                         |                    |                    |                    |               |
| <b>Total Site Costs</b> | <b>\$75,000.00</b> | <b>\$28,500.00</b> | <b>\$46,500.00</b> | <b>62.00%</b> |

\* 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

OSC Lam is acting as overall safety officer for the response. In addition, environmental safety and health representatives from Alcoa are on-site at each recovery location.

### 2.6 Liaison Officer

NA

## 2.7 Information Officer

### 2.7.1 Public Information Officer

On January 15, 2011, OSC Thomas and the Tippecanoe Health Department conducted a media availability session. OSC Lam and CIC Dave Novak provided a phone interview to the Lafayette Journal & Courier on

January 17th, and provided an update to the paper on January 18th. Links to related articles are posted at [www.epaosc.org/alcoaoilspill](http://www.epaosc.org/alcoaoilspill).

#### **2.7.2 Community Involvement Coordinator**

EPA Community Involvement Coordinator (CIC) Dave Novak is on-site. Once analytical results are received, EPA is planning to discuss the results with residents individually and in a formal group meeting.

### **3. Participating Entities**

#### **3.1 Unified Command**

NA

#### **3.2 Cooperating Agencies**

Agency for Toxic Substances and Disease Registry  
Department of Interior  
IDEM  
Indiana Department of Natural Resources  
Tippecanoe County Emergency Management Agency  
Tippecanoe County Health Department  
U.S. Fish & Wildlife

### **4. Personnel On Site**

1 EPA OSC  
1 EPA CIC  
1 EPA ERT  
3 START members  
14 Alcoa personnel  
10 Alcoa contractors

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

|       |                                                  |
|-------|--------------------------------------------------|
| ATSDR | Agency for Toxic Substances and Disease Registry |
| CIC   | Community Involvement Coordinator                |
| EPA   | Environmental Protection Agency                  |
| IDEM  | Indiana Department of Environmental Management   |
| MCL   | Maximum Contaminant Level                        |
| NA    | Not applicable                                   |
| NRC   | National Response Center                         |
| OSC   | On-Scene Coordinator                             |
| PCB   | Polychlorinated Biphenyls                        |
| PRP   | Potentially Responsible Party                    |
| START | Superfund Technical Assessment and Response Team |
| SVOC  | Semivolatile Organic Compounds                   |
| VOC   | Volatile Organic Compounds                       |

### **6. Additional sources of information**

#### **6.1 Internet location of additional information/report**

For additional information, refer to [www.epaosc.org/alcoaoilspill](http://www.epaosc.org/alcoaoilspill).

#### **6.2 Reporting Schedule**

The next POLREP will be submitted on January 19th.

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

NA