

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region V

**Subject:** POLREP #3  
Progress POLREP  
Alcoa Oil Spill  
  
Lafayette, IN  
Latitude: 40.4033776 Longitude: -86.8613812

**To:**  
**From:** Shelly Lam, On-Scene Coordinator  
**Date:** 1/17/2011  
**Reporting Period:** January 17, 2011

1. Introduction

1.1 Background

<b>Site Number:</b>	Pending	<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. Currently, no water is being discharged from the facility. Wastewater is being diverted into a 1.8 million-gallon catch basin. 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 1800 hours, it was estimated that 137,700 gallons of oil and water had been recovered from on-site and off-site operations.

To date, fourteen residential wells have been sampled. One additional well is scheduled for sampling on January 18th. Attempts will be made to continue to gain access to the remaining properties. 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. Thirty-eight additional cases of water were delivered during the reporting period. Alcoa has contracted Treat America to begin delivering water to residents starting January 18th.

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

Alcoa provided a draft Sampling and Analysis Plan for final confirmation sampling along the ditch. EPA will review the plan and provide comments.

#### 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>Waste Stream</b>	<b>Medium</b>	<b>Quantity</b>	<b>Manifest #</b>	<b>Treatment</b>	<b>Disposal</b>
Oil/water mixture	Liquid	137,700 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:

- Collect samples from the residences;
- Continue recovery at Elliott Ditch outfall;
- Maintain containment boom at 18th Street Bridge;
- Recover oil at 18th Street Bridge if oil is present there;
- Continue on-site cleaning and recovery operations;
- Provide residents with bottled drinking water;
- Provide analytical results to residents, if available; and

- Continue oversight and downstream monitoring.

#### **2.2.1.2 Next Steps**

When the emergency component to the project is complete, EPA will refer oversight of residential well sampling to IDEM.

#### **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**

No information available at this time.

### **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. Links to related articles are posted at [www.epaosc.org/alcoaoilspill](http://www.epaosc.org/alcoaoilspill). OSC Lam and CIC Dave Novak provided a phone interview to the Lafayette Journal & Courier on January 17th.

##### **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 meeting, which is yet to be established.

## **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

## **4. Personnel On Site**

1 EPA OSC  
1 EPA CIC  
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.epaossc.org/alcoaoilspill](http://www.epaossc.org/alcoaoilspill).

### **6.2 Reporting Schedule**

The next POLREP will be submitted on or before January 19th.

## **7. Situational Reference Materials**

NA