

US EPA ARCHIVE DOCUMENT

U.S. ENVIRONMENTAL PROTECTION AGENCY  
 POLLUTION/SITUATION REPORT  
 Kalamazoo River/Enbridge Spill - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 Region V

**Subject:** POLREP #6  
 Kalamazoo River/Enbridge Spill  
 Z5JS  
 Marshall, MI  
 Latitude: 42.2395273 Longitude: -84.9662018

**To:** David Chung, U.S. EPA  
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**From:** Ralph Dollhopf, On-Scene Coordinator  
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**Date:** 7/31/2010

**Reporting Period:** 7/30/2010 1900 to 7/31/2010 1900

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	Z5JS	<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 Assessment

<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	7/26/2010	<b>Start Date:</b>	7/26/2010
<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>	E10527	<b>Reimbursable Account #:</b>	



### 1.1.1 Incident Category

Emergency Response -- Pipeline Rupture

### 1.1.2 Site Description

A 30 inch pipeline ruptured releasing its contents (NRC report of 19,500 barrels) into a culvert leading to Talmadge Creek. Talmadge Creek leads to the Kalamazoo River. The site is along the River running from Marshall, Michigan to Battle Creek, Michigan. The River is bordered by marshland, residential properties, farm land, and commercial properties for the approximate 30 mile stretch of the affected river.

#### 1.1.2.1 Location

Spill location origin is in Marshall, Michigan on Talmadge Creek and extends 30 miles down the Kalamazoo River.

#### 1.1.2.2 Description of Threat

Western Canadian crude oil was released from the pipeline and has entered a navigable waterway.

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

Approximately 30 miles of the Kalamazoo River have been impacted. The Kalamazoo River level is higher than normal because of recent heavy rain in the area impacting boom deployment and site monitoring activities. The River levels are continuing to fall. Talmadge Creek has been boomed at the confluence to the Kalamazoo River and seem to be containing the oil still behind them. Boom has been placed in twenty two locations along the Kalamazoo River. Precautionary boom has also been deployed in Morrow Lake.

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

### 2.1.2 Response Actions to Date

Approximately 67,000 feet of boom and skimming equipment have been deployed at thirty two locations along Talmadge Creek and the Kalamazoo River. Recovered material is being temporarily stored in frac tanks on site. Tanker trucks are transporting the material to a facility owned by the RP with available storage in Griffith IN. To date, approximately 10,800 barrels of oil/water have been recovered and have been transported to an Enbridge facility in Griffith, IN. Approximately 33,000 barrels have been collected and are being stored in frac tanks for future transport. No sheen has been observed on Morrow Lake to date.

START, the 51st CST and Enbridge contractor CTEH are monitoring and sampling air quality along the river and throughout residential areas. Monitoring equipment includes UltraRAE, PPB RAE, Multi RAE, Draeger CMS Chip Reader, AreaRAE and Hapsite portable GC/MS.

Samples were collected for analysis from surface water, water column and private drinking wells along the length of the impacted areas of the Kalamazoo River and areas downstream of the Morrow Lake Dam. In addition, sediment samples were taken from Morrow Lake.

US Fish and Wildlife Service is working with the wildlife team to address wildlife impacts. A rehabilitation center for oiled wildlife has been established. A total of 47 geese, 4 ducks, 6 muskrats, 27 turtles, 2 swans, and 2 domestic geese have been recovered.

The USCG Atlantic Strike Team is on scene to provide assistance with RP and contractor oversight. Eight additional District 9 USCG staff are integrated into the response.

NTSB and USDOT-PHMSA are on site conducting an investigation of the pipeline incident and are working with the appropriate State, Local, and Federal agencies. Enbridge has been given permission from NTSB to excavate the pipeline break. Due to high water tables and wet conditions excavation collapses have hindered progress.

The voluntary evacuation issued by Calhoun County Health Department in consultation with Michigan Department of Community Health and Agency for Toxic Substances and Disease Registry remains effect for several residences located immediately downstream of the spill site along the Talmadge Creek up to the confluence with the Kalamazoo River. This voluntary evacuation was based on review of air monitoring results for benzene around oil collection areas. Sixty one residences were given notices. Twelve residences evacuated, twenty seven chose to stay and twenty two did not answer.

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

Enbridge is the RP.

On July 27, 2010, USEPA issued an Administrative Order under section 311(c) of the Clean Water Act to Enbridge. Enbridge is actively addressing all the deliverables of the Order including but not limited to; drafting an overall site work plan; health and safety plan; and sampling and analysis plan.

## 2.2 Planning Section

EPA conducted air monitoring near the hot zone at a morning Division A meeting. The levels of benzene measured using an UltraRAE outside the hot zone were up to 1.5 ppm and up to 18 ppm within the hot zone. Based on these findings, a meeting with OSHA, Coast Guard health and safety officials, ATSDR, EPA Safety Officer, and Enbridge field safety contact was conducted to express concerns about worker exposures and the decision criteria used to define the hot zone. As a followup, EPA OSCs, ATSDR staff, 2 OSHA inspectors went to the release point in Division A to conduct additional air monitoring activities. Measurements were collected for benzene, using UltraRAEs, and total VOCs, using ppb RAE 3000. The readings were much lower than detected in the morning when aggressive excavation activities were conducted. A meeting with Enbridge health and safety officer and lead IH, Coast Guard representatives, OSHA, Michigan OSHA, ATSDR, and EPA Safety Officer to discuss general health and safety issues, and plan for a

unified Health and Safety plan for the response.

EPA and Public Health agencies reviewed comments and the decision tree for air monitoring and response plan.

### 2.2.2 Issues

The Kalamazoo River level is higher than normal because of recent heavy rain in the area impacting boom deployment and site monitoring activities. The water levels are falling.

The RP has been informed that a Superfund site (PCB cleanup) is occurring on the Kalamazoo River Downstream of Morrow Lake (approximately 35 river miles downstream). The RP has been advised to make all efforts necessary to ensure the oil does not reach the Superfund Site. The City of Plainwell, Michigan has proposed a strategy involving boom diversion and oil collection as a contingency in the event oil impacts the Superfund Site.

## 2.3 Logistics Section

We are supporting twenty four hour operations.

IT work continued at the High School to set up the media center, should be completed today.

We found a need to put a firewall between school internet uplink and our system due to an unsuccessful hack attempt. Actions were taken to resolve this issue.

A request for 6 long distance radios was received yesterday and filled by the State of Michigan Emergency Management Division, as a loan, from their radio cache. Ten Radios arrived today and are ready for deployment.

Below is the response equipment deployed.

<b>EPA personnel and contractors are totals Enbridge numbers are for resources on the River only</b>	Enbridge	<b>35</b>
	Enbridge Contractors	<b>366</b>
	EPA	<b>32</b>
	EPA Contractors	<b>83</b>
	Night crew total	<b>182</b>
	Grand Total Workers on River	<b>647</b>
<b>Major Resources</b>	Vacuum Trucks	<b>71</b>
	Skimmers	<b>39</b>
	Tanker Trucks	<b>17</b>
	Air Compressors	<b>25</b>
	Light Plants	<b>53</b>
	Trailers	<b>25</b>
	Trash Pumps	<b>6</b>
	Frac Tanks	<b>77</b>
Boats	<b>39</b>	
	Control point count	<b>28</b>
	Containment Boom (ft)	<b>29,575</b>

<b>Length of Boom Deployed in River</b>	Absorbent (ft)	<b>21,515</b>
	Total boom deployed	<b>51,090</b>
<b>Length of Boom Available by River</b>	Containment Boom (ft)	<b>6,000</b>
	Absorbent (ft)	
<b>Length of Boom Available in Yard</b>	Containment Boom (ft)	<b>2,520</b>
	Absorbent (ft)	
<b>Total Recovery (oil &amp; water)</b>	Marshall (bbls)	<b>29,029</b>

## 2.4 Finance Section

### 2.4.1 Narrative

The Oil Spill Liability Trust Fund has been accessed for U.S. EPA expenditures. We have been authorized to expend 3.3 million dollars. At the current burn rate, we will need to request an increase in funding in three to four days.

Headquarters has worked with other Regions and as a result, Region 5 has expanded its budget authority to cover the spill for the near future. We are waiting for the USCG to authorize use of some or all of the funding.

US Fish and Wildlife, ATSDR and the USCG have received a PRFA for their activities.

The RP is currently financing the cleanup operations.

## 2.5 Safety Officer

US EPA, US EPA START contractors, US OSHA, and ATSDR representatives Investigated a report of high benzene concentrations at Division A. They found that Enbridge's existing controls were adequate to address OSHA guidelines for personal protective equipment. The Safety Officer investigated a case of a contractor employee smoking near one of the boom sites. He also reviewed Enbridge's HASP and began the process of integrating site HASPs.

## 2.6 Liaison Officer

The Liaison Officer was dispatched to work in the State Emergency Operations Center in Lansing.

## 2.7 Information Officer

### 2.7.1 Public Information Officer

A JIC was established with state and federal PIOs at the Command Post.

A toll free telephone number for media inquiries was established.

A press briefing was held at 3 p.m. EDT

Fact sheets were drafted for the public meeting.

Continued to answer media inquiries, although volume of calls had diminished.

## Community Involvement Coordinator

A community meeting and has been planned for Monday, August 2, at 7 pm.

### 3. Participating Entities

#### 3.1 Unified Command

Enbridge (Responsible Party)  
 US EPA  
 Michigan Department of Natural Resources and Environment  
 Michigan State Police Emergency Management Division  
 Calhoun County Public Health Department  
 Calhoun County Sheriff  
 Kalamazoo County Sheriff

#### 3.2 Cooperating and Assisting Agencies

##### Cooperating Agencies

Allegan County Emergency Managment  
American Red Cross  
Augusta Police Department  
B&B Fire Safety Emergency Response  
Calhoun Conservation District  
Calhoun County Commissioners  
Calhoun County Drain Commission  
Calhoun County Sheriff's Office  
Calhoun County Treasurers Office  
Calhoun Conservation District  
Calhoun Greenation District  
City of Battle Creek, Michigan  
City of Marshall, Michigan  
Federal Energy Regulatory Commission  
Fredonia Township Fire Department  
Huron Potawatomi  
Kalamazoo County Office of Emergency Management  
Kalamazoo Public Safety  
Kalamazoo Watershed Council  
Marshall Township Government and Fire Department  
Marshall Police Department  
Natural Resource Group  
National Transportation Safety Board  
Pipeline Hazardous Materials Safety Administration  
U.S. Department of Commerce, NOAA  
U.S. Department of Transportation  
U.S. Fish & Wildlife Service  
U.S. Department of Labor, OSHA

##### Congressional Presence

State Representative Jase Bolger  
State Representative Kate Segal  
State Representative Ken Kurtz  
State Representative Phil Browne  
State Representative Phyllis Browne

State Representative Bob Geuck  
State Representative Tanya Schuitmaker  
State Senator Mike Nofs  
U.S. Congressman Mark Schauer  
U.S. Senator Carl Levin  
U.S. Senator Stabenow

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#### 4. Personnel On Site

Enbridge	36
Enbridge Contractors	354
EPA	34
ERRS	85
START	28
Night crew total	247
Grand Total Workers on River	784

#### 5. Definition of Terms

NRC	National Response Center United States
USEPA	Environmental Protection Agency
ERRS	Emergency and Rapid Response Contractor
RP	Responsible Party
IN	Indiana Superfund Technical
START	Assessment and Response Team
CST	Civil Support Team  Center for Toxicology



CTEH	and Environmental Health Gas
GC/MS	Chromatograph/Mass Spectroscopy
USFWS	United States Fish and Wildlife Service
USCG	United States Coast Guard National
NTSB	Transportation Safety Board United States
USDOT	Department of Transportation Pipeline and
PHMSA	Hazardous Materials Administration Agency for Toxic
ATSDR	Substances and Disease Registry
CWA	Clean Water Act
OSC	On-scene Coordinator Occupational Safety
OSHA	and Health Administration Volatile Organic
VOCs	Compounds
FOB	Field Observers
PCB	Polychlorinated Biphenyls
GIS	Geographical Information System
FPN	Federal Project Number
OSLTP	Oil Spill Liability Trust Fund
HASP	Health and Safety Plan
LNO	Liaison Officer
JIC	Joint Information Center
PIO	Public Information Officer Community
CIC	Involvement Coordinator

MDNRE	Michigan Department of Natural Resources and Environment
MSPEMD	Michigan State Police Emergency Management Division
CCPH	Calhoun County Public Health
NOAA	National Oceanic and Atmospheric Administration
DOC	Department of Commerce
MI	Michigan

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

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

### **6.2 Reporting Schedule**

## **7. Situational Reference Materials**