

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:
From: Ralph Dollhopf, On-Scene Coordinator
Stephen Wolfe, On-Scene Coordinator
Jeffrey Kimble, On-Scene Coordinator
Date: 7/31/2010
Reporting Period: 7/30/2010 1900 to 7/31/2010 1900

1. Introduction

1.1 Background

Site Number:	Z5JS	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	OPA	Response Type:	Emergency
Response Lead:	PRP	Incident Category:	Removal Assessment
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	7/26/2010	Start Date:	7/26/2010
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	E10527	Reimbursable Account #:	



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.

EPA personnel and contractors are totals	Enbridge	35	
	Enbridge Contractors	366	
	Enbridge numbers are for resources on the River only	EPA	32
	EPA Contractors	83	
	Night crew total	182	
	Grand Total Workers on River	647	
Major Resources			
	Vacuum Trucks	71	
	Skimmers	39	
	Tanker Trucks	17	
	Air Compressors	25	
	Light Plants	53	
	Trailers	25	
	Trash Pumps	6	
	Frac Tanks	77	
	Boats	39	
Length of Boom Deployed in River			
	Control point count	28	
	Containment Boom (ft)	29,575	
	Absorbent (ft)	21,515	
	Total boom deployed	51,090	
Length of Boom Available by River			
	Containment Boom (ft)	6,000	
	Absorbent (ft)		
Length of Boom Available in Yard			
	Containment Boom (ft)	2,520	
	Absorbent (ft)		
Total Recovery (oil & water)			
	Marshall (bbls)	29,029	

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 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 Agencies

Cooperating Agencies

Allegan County Emergency Management

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

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

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

No information available at this time.

7. Situational Reference Materials

No information available at this time.