

US EPA ARCHIVE DOCUMENT

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



Subject: **SITREP # 63**
Kalamazoo River/Enbridge Spill
Z5JS
Marshall, MI
Latitude: 42.2395273 Longitude: -84.9662018

To: Lt. Paul Baker, Kalamazoo County Sheriff's Office
 James Rutherford, Calhoun County Public Health Department
 Durk Dunham, Calhoun County Emergency Management
 Brian Whitsett, Michigan State Police, Emergency Mgt.
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 Mike McKenzie, City of Battle Creek
 Leon Zupan, Enbridge
 Susan Hedman, U.S. EPA Regional Administrator
 Rebecca Humphries, MDNRE

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Date: 10/09/2010

Reporting Period: 0700 hours 10/07/2010 to 0700 hours 10/09/2010

1 Introduction

1.1 Background

1.1.1 Site History

Background Information

Site Number:	Z5JS	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	OPA	Response Type:	Emergency
Response Lead:	PRP	Incident Category:	Removal Action
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	

1.1.2 Preliminary Site Inspection and Response Activities

See SITREP #51 for a comprehensive description of preliminary operations.

1.2 Incident Objective and Command Emphasis

The following incident objectives and command emphasis are taken from the IAP for the Operational Period October 08, 2010, at 0700 to October 12, 2010, at 0700.

Incident Objectives

1. Ensure health and safety of the public and response and recovery personnel.

2. Ensure effective transition of regulatory oversight of the oil impacted areas from EPA to MDNRE jurisdiction as appropriate.
3. Maintain the isolation of the Kalamazoo River from up-gradient source area.
4. Contain and recover oil and contaminated vegetation in Talmadge Creek and Kalamazoo River.
5. Maintain effective unified communications with cooperating and assisting agencies and the public.
6. Perform remediation and restoration of all affected public and private areas of river and river systems.
7. Provide protection of environmentally and culturally sensitive areas including wildlife and historic properties.
8. Protect threatened and endangered species and continue to recover and rehabilitate injured wildlife.
9. Continue to collect, coordinate, manage, and communicate environmental and public health data including maintenance of Joint Information Center function.

Command Emphasis

1. Maintain systematic and adequate DECON/demobilization of project resources.
2. Continue recovery of submerged oil and sediment in the Kalamazoo River with prioritization of the Ceresco Dam and Millpond areas.
3. Complete necessary grade restoration and stabilization work along Talmadge Creek in accordance with the approved plans.
4. Continue implementation of transition to long-term operation and maintenance of containment and submerged oil recovery.
5. Continue messaging on project status and next steps for public awareness.

2 Current Activities

2.1 Operations Section

2.1.1 Narrative

This operational phase of the response consists of : 1) Talmadge Creek Restoration; 2) Submerged Oil Recovery; 3) Long Term operations and Maintenance (O&M); 4) Drinking and Groundwater Studies; and 5) Decontamination.

2.1.2 Talmadge Creek Restoration

- Restoration progress is outlined in Table 1 and is depicted in Figure 1 through Figure 5.

Table 1 - Division A and B Restoration Progress, Sections 1-10

Restoration Step		Percent Complete
1. Prepped		100%
2. Cleared		100%
3. Backfilled		100%
4. Restored		95%

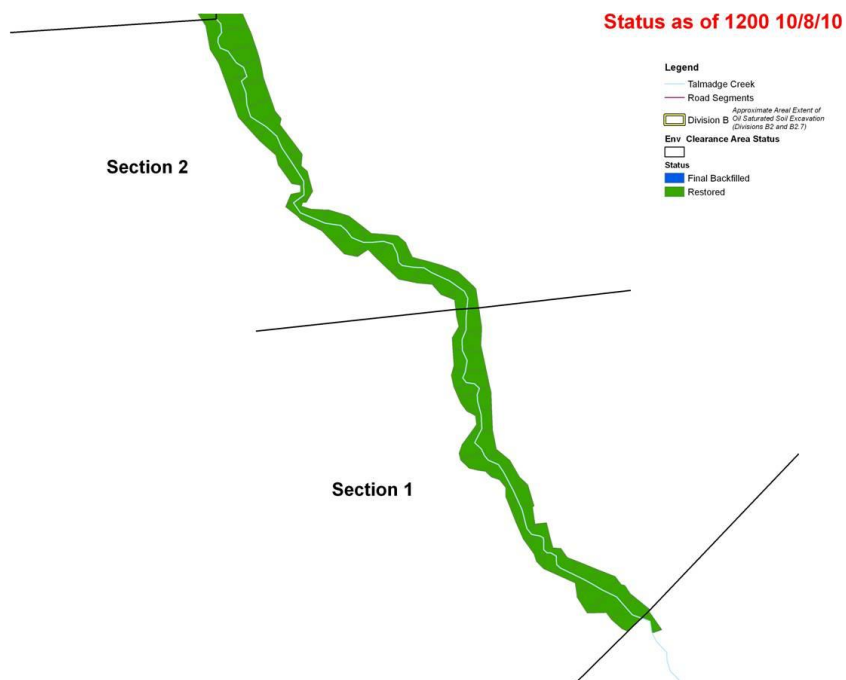


Figure 1 – Division A, Sections 1 and 2 (Location A4 to B2)



Figure 2 - Division B, Sections 3 and 4 (Location B2 to B2.5)



Figure 3 - Division B, Sections 5 and 6 (Location B2.5 to B4)

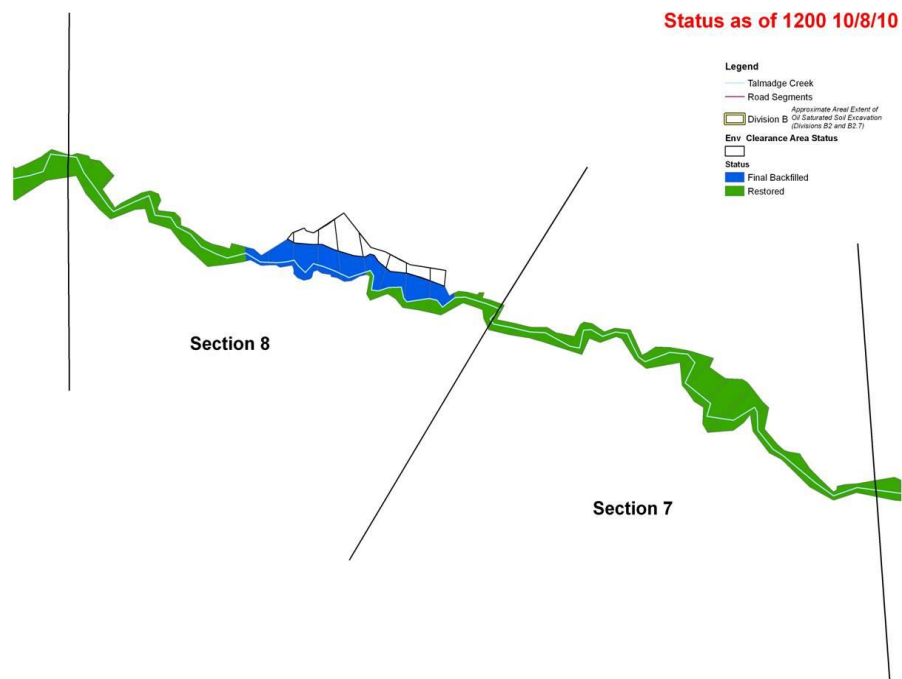


Figure 4 - Division B, Sections 7 and 8 (Locations B4 to B4.8)

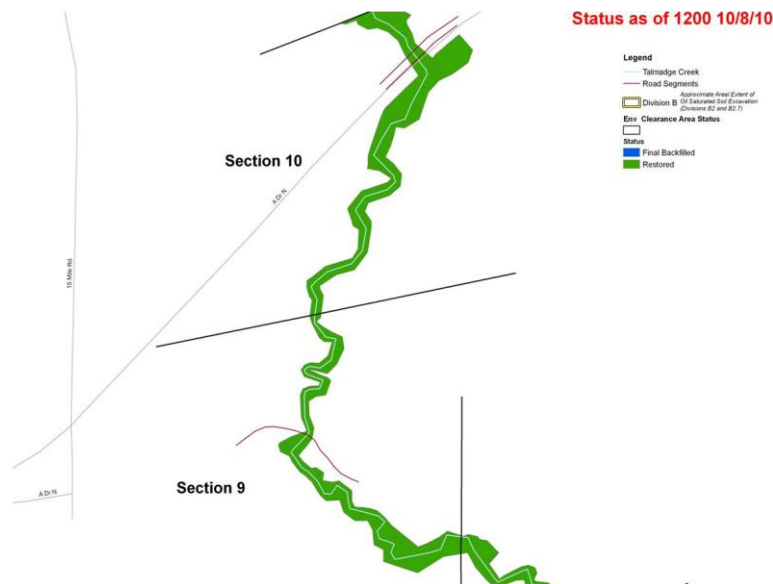


Figure 5 - Division B, Section 9 and 10 (Locations B4.9 to B5)

2.1.3 Submerged Oil Recovery

Ceresco Dam Dredging Task Force

- 3,664,000 gallons of water processed.
- Capacity to treat water from the third dredge.
- 890 air monitoring events from October 7 to October 8. No benzene detects.
- 1,918 VOC readings taken from October 7 to October 8. Six detections reported.
- Noise and odor monitoring conducted and the noise level was consistently below 75dB, there were no detects for odor reported.

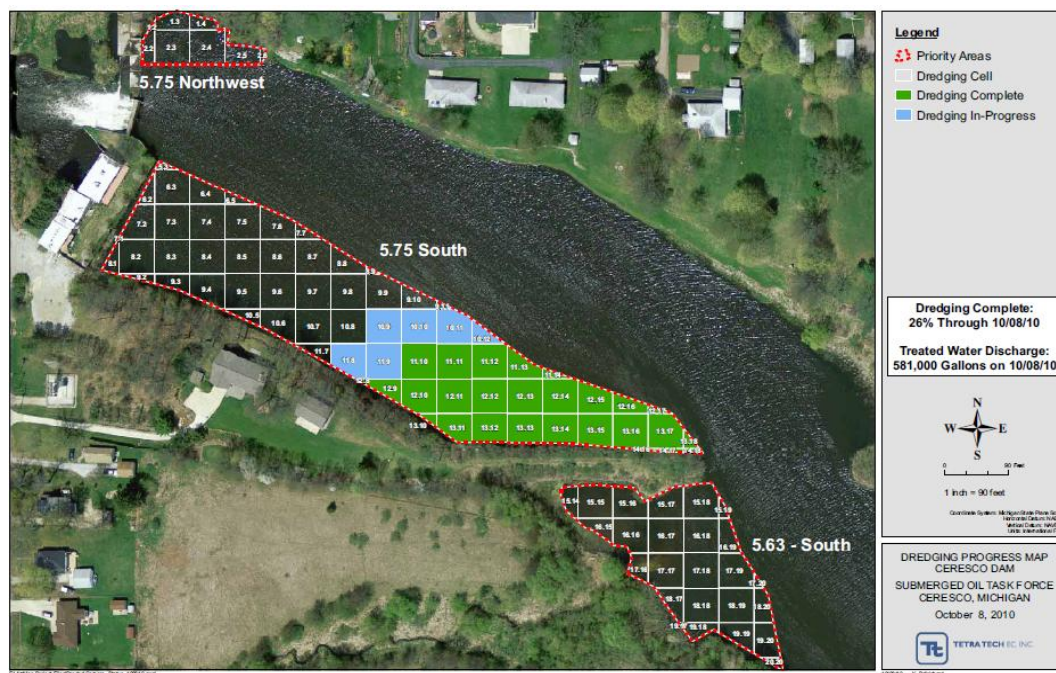


Figure 6 - Ceresco Dam Dredging Progress

2.1.4 Long Term Operations and Maintenance (O&M)

- Inspected 23 locations between MP5.75 and MP15.5. Inspected boom, pads, and other sorbent materials for proper placement, etc., along river locations and ponds.
- Conducted boom and collection point maintenance at locations throughout the response area.

Table 2 – O&M Maintenance and Monitoring Areas

Restoration Step	Number of Sites
1. Active Site	49
2. Monitoring	38
3. Cleared	11
4. Signed Off	5

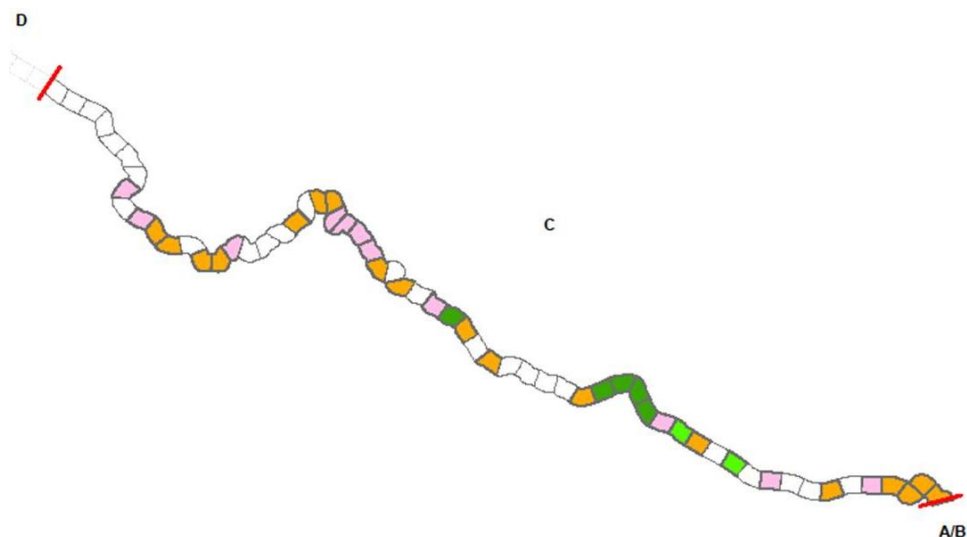


Figure 7 - Division C O&M Areas

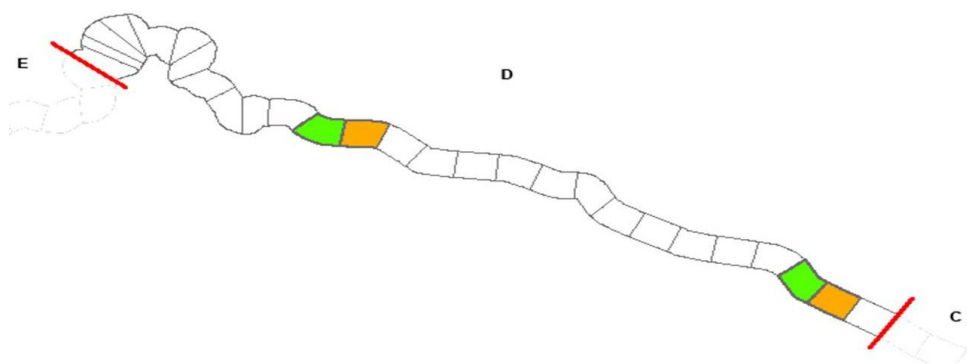


Figure 8 - Division D O&M Areas

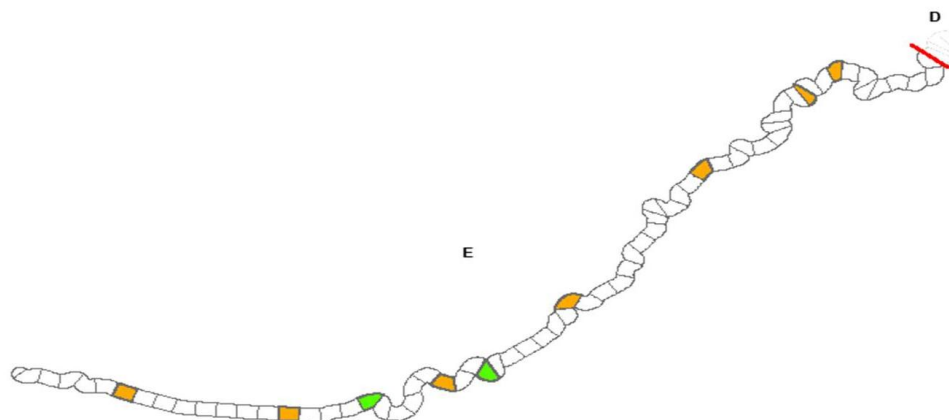


Figure 9 - Division E O&M Areas

2.1.5 Drinking and Groundwater Studies

- Installed deep, shallow drift, and drift wells at Areas 1, 2, 6, 7, and 8.
- Followed up on deviations from Hydrogeological Investigation workplan.
- Mobilized mini sonic rig and hand dug 5 feet below ground surface to clear utilities.

2.1.6 Decontamination

- Deconned 2 Frac Tanks, 14 Roll-offs, 3 marine vessels, 2590 feet of boom, and various tools Inspected the following areas: C0.5 shed; C0.5; C5; Frac Tank City; Staging Area A; and Staging Area B. no concerns identified.

Table 3 - Equipment Decon Totals

	8-Oct	7-Oct	6-Oct	5-Oct	4-Oct	3-Oct	2-Oct	1-Oct	30-Sep
Frac Tanks	2	3	1	3	1	2	2	3	3
Vac Trucks-Tankers	0	3	3	7	2	1	3	2	1
Roll Offs	14	11	3	0	0	0	0	0	2
Yellow Iron -Light	0	0	0	0	0	0	0	2	3
Yellow Iron - Heavy	0	0	0	0	0	4	2	6	8
Marine Vessels	3	0	0	6	3	6	9	7	6
Vehicles	0	0	0	1	2	2	0	0	4
Daily Total	19	17	7	17	8	15	16	20	27
Boom	2590	1950	4030	2795	0	1250	950	1470	1100

2.1.7 Additional Operations

Air Ops

- During this operational period, there were 4 overflights.
- Air Ops observed and documented cleanup progress in all operational areas.
- Air Ops continued to investigate areas of interest and report on hot spots, oil mobilization, O&M, and DECON.

Monitoring Branch

- Benzene and LEL detected during a monitoring event at Frac Tank City.
- Air monitoring conducted near oil collection sites, excavation operations, water treatment plant, and in community areas. No readings in excess of background reported.
- UltraRAE and MultiRAE monitoring and split samples from Division C collected.

Table 4 – Samples Collected as Reported by Enbridge

Sample Type	Number Collected 10/07	Number Collected 10/08
Air Monitoring Locations*	129	96
Surface Water	27	25
Private Well Samples	0	Not Reported
Groundwater Samples	0	0
Sediment Samples	14	9
Soil Samples	0	0
Sheen Samples	0	0
Other	0	0

* As reported by EPA

2.1.8 Progress Metrics

All progress metrics in Section 2.1.8 are as reported by Enbridge unless otherwise indicated.

Boom Report

Table 5 - Boom Report

Date	10/08	10/07
Number of Locations	19	19
Boom Deployed (feet)	120,949	122,169

Table 6 - Soil and Debris Waste Tracking

Waste Stream*	Quantity Shipped On 10/6	Quantity Shipped On 10/07	Cumulative Quantity Shipped [†]
Haz Soil (yd ³) ^a	0	0	15,344
Non Haz Soil (yd ³) ^b	1,107	981	39,819
Haz Debris (yd ³) ^c	0	0	12,075
Non Haz Debris (ton) ^c	0	5	1380

* Information for water (other than daily quantity shipped) is reported in other tables below. Quantity awaiting disposal is estimated.

† Due to the auditing of waste manifests, cumulative quantities may not reconcile with previous reports.

a. Haz soil (benzene impacted) is being transported to Envirosafe (Oregon, OH).

b. Non Haz soil is being sent to Westside Recycling (Three Rivers, MI) and EQ/Republic (Marshall, MI).

c. Roll-off boxes containing waste sorbents, boom, pads, plastic, PPE, and oiled vegetation and biomass are being sent to EQ facility (Michigan Disposal) in Wayne, MI and Republic (Marshall, MI).

Oil/Water Recovery Tracking:

Note: Some of the values in the tables below have been audited and reconciled by Enbridge and may not correlate with previously reported values.

Table 7 –Oil water collected by location 10/07/10 0700

Location	Cumulative Total Collected (gallons)
Division A	5,542,843
Division B	4,628,765
Division C	1,094,550
Division D	119,850
Division E	50,030
DECON	320,080
Other Locations*	264,583
TOTAL	12,020,701

* Includes Frac, DECON, and Wildlife Center.

Table 8 - Oil water Separation 10/08/10

Oil-Water - Enbridge Facility in Griffith, IN Facility (gallons)	
Oil	758,756
Other Material	1,400,050
TOTAL	2,158,806

Table 9 - Oil/Water Volume Summary (Gallons)

Oil/Water Collected	12,020,701
Oil/Water Shipped Off-site	10,840,214
OIL/WATER REMAINING ON-SITE	1,180,487

Table 10 – Liquid Shipped Off-site

Oil/Water leaving Site	Destination	Daily Quantity Shipped (Gallons)10/06	Daily Quantity Shipped (Gallons)10/07	Cumulative Quantity Shipped (Gallons)†
Haz Water	Dynecol, Detroit, MI	16,500	16,500	2,491,948
Oil/Water	Enbridge Facility, Griffith, IN	0	0	2,158,806
Treated Non Haz Water	Liquid Industrial Waste Services, Holland, MI	0	0	370,200
Treated Non Haz Water	Plummer, Kentwood, MI	50,000	80,000	3,715,535
Haz Water	Safety Kleen ^a	0	0	825
Treated Non Haz Water *	Dynecol, Detroit, MI	0	0	134,200
Treated Non Haz Water *	Battle Creek POTW	0	0	1,968,700
Totals		66,500	96,500	10,840,214

* Treated Non Haz Water no longer sent to this location.

- † Cumulative quantities may not reconcile with previous reports (due to auditing).
a. New Age lab water and methanol mix generated by mobile laboratory.

2.2 Planning Section

Environmental Unit

- Reviewed drilling plans and drilling documentation

2.3 Safety Reports

- Cold weather plans are being developed.

2.4 Liaison Officer

- Engaged in ongoing coordination with cooperating and assisting agencies, the UC, Enbridge, and the PIO. Continues coordinating issues of local concern to property owners.

2.5 Public Information Officer

- Participated in CBS TV Channel 3 interview at Ceresco Dam.

Table 11 – Public Inquiries

	10/06	10/07
Battle Creek Community Center	3	8
Marshall Community Center	10	6
Oil Spill Public Information Hotline	23	18
Enbridge Response Website	1	3
Total Public Inquiries/Claims	37	35

2.6 Finance Section

The current NPFC issued ceiling is \$21.6 Million. Approximately, 92.2% of the ceiling (\$19,921,240) has been spent through October 8, 2010, with the latest burn rate of \$112,878 per day. These cost summaries reflect only EPA-funded expenditures for the incident.

		FPN E10527 - Enbridge Pipeline Oil Spill			
		As of:	10/8/2010		
ERRS Contractors			Est. Expended	Est Burn Rate (Latest Daily)	
EQM (EPS50802)	T057		\$1,250,065	\$0	
	T060		204,905	0	
LATA (EPS50804)			1,451,396	0	
ER LLC (EPS50905)			723,669	0	
Total ERRS Contractors			\$3,630,035	\$0	
Lockheed Martin (EPW09031) - TAGA Support			\$150,000	0	

T&T Bisso (EPA:HS800008)		1,255,000		0	
START Contractor					
WESTON (EPS50604)		6,810,016		58,569	
Response Contractor Sub-Totals		\$11,845,051		\$58,569	
EPA Funded Costs:					
Total EPA Costs		3,957,203		34,900	
Pollution Removal Funding Agreements:					
Total Other Agencies		\$1,371,229		\$3,840	
Sub-Totals		\$17,173,483		\$97,309	
Indirect Cost (16.00%)		2,747,757		15,569	
Total Est. Oil Spill Cost		\$19,921,240		\$112,878	
Oil Spill Ceiling authorized by USCG		\$21,600,000			
Oil Spill Ceiling Available Balance		\$1,678,760			
	Est. Percentage Spent	92.2%			

2.7 Response Actions to Date

- Response Actions to date may be found in Situation Reports #1 through #62.

3 Participating Entities

3.1 Unified Command

U.S. EPA
MDNRE
Michigan State Police Emergency
Management Division
City of Battle Creek

Calhoun County Public Health Department
Calhoun County Emergency Management
Kalamazoo County Sheriff
Enbridge (Responsible Party)

3.2 Cooperating and Assisting Agencies

ATSDR
Calhoun Conservation District
Calhoun County Commission
City of Kalamazoo
City of Marshall
Emmett Township
Fredonia Township
Kalamazoo County Office of Emergency
Management
Marshall Area Firefighters Ambulance
Authority

Marshall Police Department
Marshall Township Government and Fire
Department
Michigan Department of Agriculture
MDCH
NOAA
Oakland County HAZMAT/RRTN
PHMSA
USCG
U.S. Department of the Interior/USGS
USFW

3.3 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 Debbie Stabenow

4 Personnel On Site

Table 12 - Personnel On Site

Agency/Entity	Numbers Reported 10/7	Numbers Reported 10/8
EPA	30	31
START	40	38
Calhoun County Public Health	1	1
Calhoun County (CC) Sheriff	5	5
City of Battle Creek	3	3
Kalamazoo Sheriff	2	2
MDNRE	15	15*
Michigan State Police (MSP)	1	1
NOAA - National Weather	2	1
USFWS	2	1
Enbridge ICP	57	60
Enbridge ICP Contractor	280	310
Enbridge	11	8
Enbridge Contractors	742	629
Total	1180	1099

* Staffing numbers previously reported.

5 Source of Additional Information

5.1 Additional Information

For additional information, please refer to <http://www.epa.gov/enbridgespill>. For sampling analysis data, please see <http://response.enbridge.com/response/main.aspx?id=13168>.