

US EPA ARCHIVE DOCUMENT

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V



Subject: SITREP # 73
Kalamazoo River/Enbridge Spill
Z5JS
Marshall, MI
Latitude: 42.2395273 Longitude: -84.9662018

To: Lt. Paul Baker, Kalamazoo County Sheriff's Office
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 Mike McKenzie, City of Battle Creek
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Date: 10/31/2010

Reporting Period: 0700 hours 10/28/2010 to 0700 hours 10/31/2010

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 28, 2010, at 0700 to November 1, 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 all the up-gradient source areas.
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. Complete the implementation of long-term booming configuration.
2. Continue work in all active Operations & Maintenance (O&M) sites.
3. Ensure effective transition to project management / Multi Agency Committee (MAC) November 1.
4. Continue systematic Decon/demobilization of project resources.

2 Current Activities

2.1 Operations Section

2.1.1 Narrative

This operational phase of the response consists of: 1) Long Term Operations and Maintenance (O&M); 2) Drinking and Groundwater Studies; and 3) Decontamination.

2.1.2 Long Term Operations and Maintenance (O&M)

- Hydro vacuuming at MP9.5 LDB, MP11.00 R1, and MP11.50 R1
- Equipment staging for flushing burrow holes at MP15.00 L1.
- Continued dewatering and clean-up operations at Island A.
- Recommended seven locations for EPA and Enbridge inspection.
- Cleared four locations.
- EPA inspected O&M at 92 locations and relayed observations and recommendations to Enbridge.
- The O&M process is documented in Table 1 and Figures 1-3.

Table 1 – O&M Maintenance and Monitoring Areas

O&M Process	Area Status
	10/30
Active	16
Monitoring	30
Cleared	5
Signed Off	39

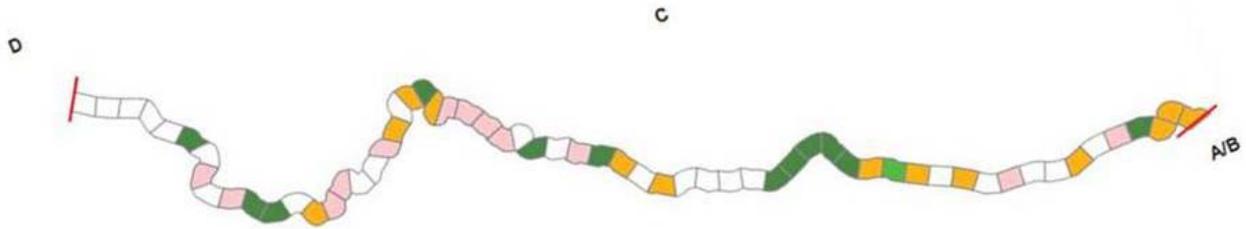


Figure 1 - Division C O&M Areas

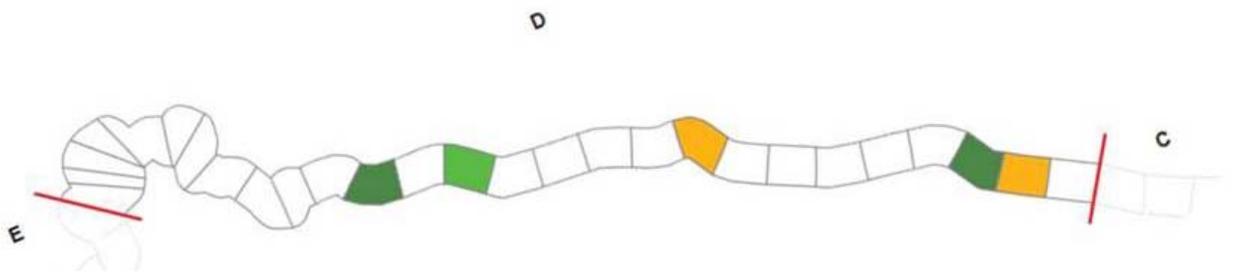


Figure 2 - Division D O&M Areas

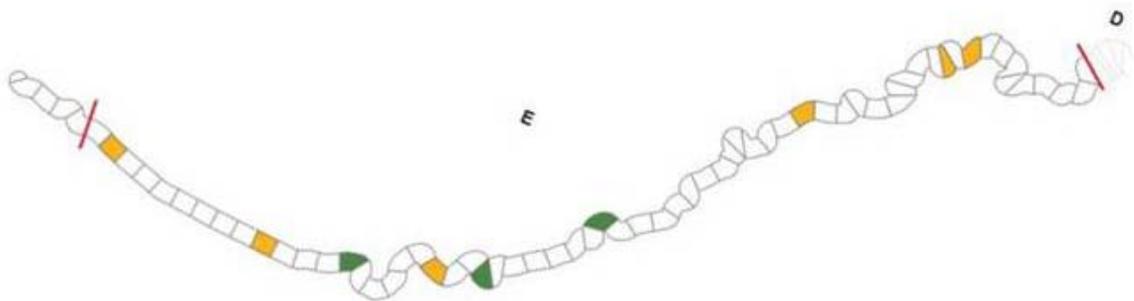


Figure 3 - Division E O&M Areas

2.1.3 Drinking and Groundwater Studies

- Hydrogeologic study report submitted for EPA review.

2.1.4 Decontamination

- Equipment and boom that was Deconned during this operational period is outlined in Table 2.

Table 2 - Equipment Decon Totals

	10/30	10/29	10/28
Frac Tanks	5	0	1
Vac Trucks-Tankers	1	2	1
Roll-Off Boxes	0	0	0
Yellow Iron - Light	1	1	0
Yellow Iron - Heavy	1	1	0
Marine Vessels	3	15	9
Vehicles	0	0	1
Daily Total	11	19	12
Boom (feet)	600	0	600

2.1.5 Additional Operations

Air Ops

- During this operational period, there were 2 overflights.
- Air Ops observed and documented operations and maintenance progress in all operational areas.
- Air Ops continued to investigate areas of interest and report on hot spots, oil mobilization, O&M, and Decon.

Environmental Compliance and Oversight

- Revised excavation work plan for MP4.25.
- Implemented riverbank soil erosion restoration at MP11.70.
- Implemented waste management area close-out plans.
- Continued waste management characterization, documentation, and coordination.

Monitoring Branch

- Conducted real-time air monitoring near excavation and Geotube operations and in community areas. No readings in excess of background levels were reported during this operational period.
- Samples reported by Enbridge are provided in Table 3.

Table 3 – Samples Collected By Enbridge

Sample Type	Number Collected
	10/28 - 10/30
Mini SUMMA *	27
Surface Water	24
Private Well Samples	43
Groundwater Samples	-
Sediment Samples	-
Ceresco Dewatering Samples	5
Soil Samples	-
Sheen Samples	-
Submerged Oil Task Force Samples	4
Other	21

* As observed by the EPA with data reported for one day previous to the period presented
 † Estimated value.

- Sampling and monitoring events conducted by EPA personnel during this operational period are reported in Table 4.

Table 4 – Sampling and Monitoring Events by EPA as Reported in Scribe

Sample Type	Number Collected
	10/28 – 10/30
Air Monitoring Results	26
SUMMA canisters	-
Sediment	-
Surface Water	-

Landowner Environmental Issues

Landowner environmental issues as of October 29, 2010 are represented in Table 5.

Table 5 – Landowner Environmental Issues

Issues to Date	Issues Undergoing Evaluation	Issues Considered Addressed
18	2	16

2.1.6 Progress Metrics

All progress metrics in Section 2.1.7 are as reported by Enbridge unless otherwise indicated.

Boom Report

Table 6 - Boom Report

	10/30
Number of Locations	17
Boom Deployed (feet)	58,223

Table 7 - Soil and Debris Shipped Off Site as of 10/29

Waste Stream*	Cumulative [†]
Haz Soil (yd ³) ^a	16,884
Non Haz Soil (yd ³) ^b	56,675
Haz Debris (yd ³) ^c	12,075
Non Haz Household Debris (ton)	85
Non Haz Impacted Debris (ton) ^c	1,332

* 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 8 - Oil water collected by location 10/30 0700

Location	Cumulative (gallons)**
Division A	5,317,689
Division B	4,804,956
Division C	1,428,054
Division D	114,832
Division E	47,408
Decon	522,818
Other Locations*	670,359
TOTAL	12,906,116

* Includes Frac, DECON, and Wildlife Center.

** Data revised to reflect actual amounts collected rather than estimates.

Table 9 - Oil water Separation 10/26

Enbridge Facility in Griffith, IN (gallons)	
Oil	766,288
Other Material	1,405,525
TOTAL	2,171,813

Table 10 - Oil/Water Remaining On-Site (Gallons)

Oil/Water Collected	12,906,116
Oil/Water Shipped Off-Site	12,810,916
OIL/WATER REMAINING ON-SITE	95,200

Table 11 - Liquid Shipped Off-site as of 10/26

Oil/Water leaving Site	Destination	Quantity Shipped
		Cumulative †
Haz Water	Dynecol, Detroit, MI	2,876,288
Oil/Water	Enbridge Facility, Griffith, IN	2,171,813
Treated Non Haz Water	Liquid Industrial Waste Services, Holland, MI	370,200
Treated Non Haz Water	Plummer, Kentwood, MI	4,944,740
Haz Water	Safety Kleen ^a	825
Treated Non Haz Water *	Dynecol, Detroit, MI	150,700
Treated Non Haz Water *	Battle Creek POTW	1,968,700
Totals		12,483,266

* 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

- Evaluating analytical data from groundwater and waste sampling.

2.3 Safety Reports

No major incidents or safety concerns were reported during this operational period. Safety inspections occurred throughout the operational area.

2.4 Liaison Officer

- Nothing to report.

2.5 Public Information Officers

- Received public inquires as outlined in Table 12. Community centers closed on October 26 due to weather considerations.

Table 12 – Public Inquiries Received by EPA and Enbridge

Location/Media	Inquiries Received		
	10/29	10/28	10/27
Battle Creek Community Center	8	1	4
Marshall Community Center	7	4	8
Oil Spill Public Information Hotline	7	17	14
Enbridge Response Website (www.response.enbridgeUS.com)	1	0	0
Total Public Inquiries	23	22	26

2.6 Finance Section

- The current NPFC issued ceiling is 24.6 Million. Approximately, 87.9% of the ceiling has been spent through October 29, 2010, with the latest burn rate of \$59,233 per day. These cost summaries reflect only EPA-funded expenditures for the incident. A summary of these expenses is presented in Table 13.

Table 13 - Financial Summary

		Expended (Cumulative) as of 10/29
ERRS Contractors		
EQM (EPS50802)	T057	\$ 1,250,065
	T060	\$ 204,905
LATA (EPS50804)		\$ 1,451,396
ER LLC (EPS50905)		\$ 723,669
Total ERRS Contractors		\$ 3,630,035
Lockheed Martin (EPW09031) - TAGA Support		
		\$ 150,000
T&T Bisso (EPA:HS800008 USCG:HSCG8410A800008)		
		\$ 1,255,000
START Contractor		
WESTON (EPS50604)		\$ 7,754,286
Response Contractor Sub-Totals		\$ 12,789,321
EPA Funded Costs:		
Total EPA Costs		\$ 4,429,871
Pollution Removal Funding Agreements:		
Total Other Agencies		\$ 1,422,869
Sub-Totals		\$ 18,642,061
Indirect Cost (16.00%)		\$ 2,982,730
Total Est. Oil Spill Cost		\$ 21,624,791
Oil Spill Ceiling authorized by USCG		\$ 24,600,000
Oil Spill Ceiling Available Balance		\$ 2,975,209

2.7 Response Actions to Date

- Response Actions to date may be found in SITREPs #1 through #72.

3 Participating Entities

3.1 Unified Command

U.S. EPA	Calhoun County Public Health Department
MDNRE	Calhoun County Emergency Management
Michigan State Police Emergency Management Division	Kalamazoo County Sheriff
City of Battle Creek	Enbridge (Responsible Party)

3.2 Cooperating and Assisting Agencies and Congressional Presence

For a list of cooperating and assisting agencies and the congressional presence, see SITREP #51.

4 Personnel On-Site

- Staffing numbers for the various entities and agencies active in the response are presented in Table 14.

Table 14 - Personnel On-Site

Agency/Entity	Number Reported		
	10/30	10/29	10/28
EPA	14	15	15
START	21	20	25
Calhoun County Public Health	1	1	1
Calhoun County (CC) EM	2	2	2
City of Battle Creek	2	2	2
Kalamazoo Sheriff	2	2	2
MDNRE	1	4	8
Michigan State Police EMD	1	1	1
NOAA - National Weather	1	2	3
USFWS	0	0	2
Enbridge ICP	26	26	29
Enbridge ICP Contractor	219	224	235
Enbridge	3	3	3
Enbridge Contractors	343	363	391
Total	636	665	719

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>.