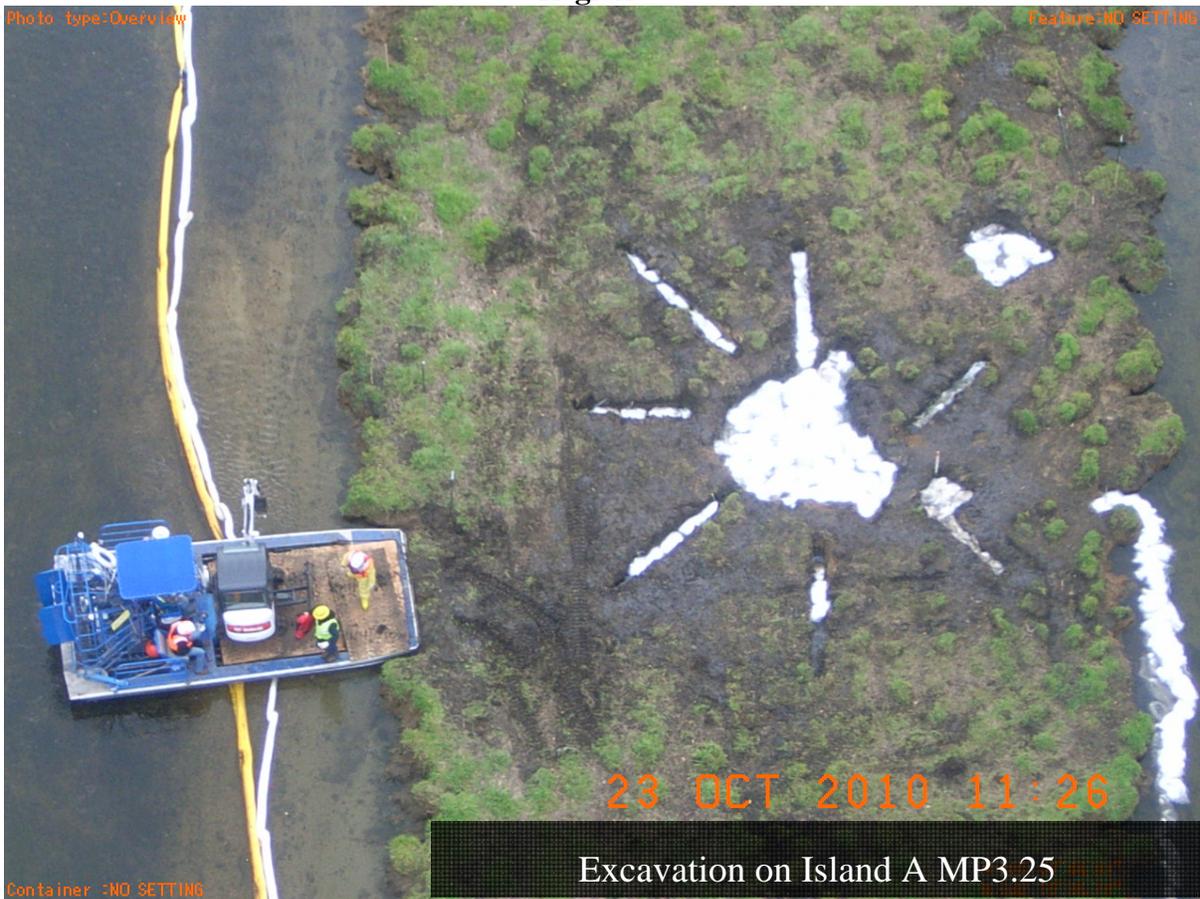


US EPA ARCHIVE DOCUMENT

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V



Subject: SITREP # 71
Kalamazoo River/Enbridge Spill
Z5JS
Marshall, MI
Latitude: 42.2395273 Longitude: -84.9662018

US EPA ARCHIVE DOCUMENT

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.
 Greg Danneffel, MDNRE
 Mike McKenzie, City of Battle Creek
 Susan Hedman, U.S. EPA Regional Administrator
 Rebecca Humphries, MDNRE

From: Ralph Dollhopf, U.S. EPA Incident Commander
 Stephen Wolfe, U.S. EPA On-Scene Coordinator
 Jeff Kimble, U.S. EPA Deputy Incident Commander
 Mark Durno, U.S. EPA Deputy Incident Commander

Date: 10/25/2010

Reporting Period: 0700 hours 10/23/2010 to 0700 hours 10/25/2010

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 24, 2010, at 0700 to October 28, 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. Continue recovery of submerged oil and sediment in the Kalamazoo River with prioritization of the Morrow Lake Delta area.
2. Complete the implementation of the long-term booming configuration
3. Continue work in all active O&M sites.
4. Confirm readiness for project management/MAC transition effective November 1.
5. Maintain systematic and adequate 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) Submerged Oil Recovery; 2) Long Term Operations and Maintenance (O&M); 3) Drinking and Groundwater Studies; and 4) Decontamination.

2.1.2 Submerged Oil Recovery

Submerged Oil Recovery Task Force (SOTF)

- Completed submerged oil recovery at B-4, Ceresco Dam and 3.14 hectares at the Morrow Lake Delta. Area B5 recommended for final inspection. Ceresco Dam and the Morrow Lake Delta areas are in the 48 hour stabilization period.
- The SOTF progress is outlined in Table 1.

Table 1 - Submerged Oil Task Force Progress

Submerged Oil Recovery Process	Percent Complete	Cumulative Sections Completed	
		10/24	10/23
Assessment	100%	20	20
Containment	100%	18	18
Work Plan	100%	18	18
Clean-up	100%	23	21
Inspection/Sign-Off	100%	23	20

Ceresco Dam Dredging Task Force

- Completed dredging at Area 5.63S.
- All dredging at Ceresco Dam is complete.
- Continued noise, air, and turbidity monitoring. No exceedances of air or noise levels were reported during this operational period.
- Demobilized amphibex from Ceresco Dam area.
- The dredging progress is depicted in Figure 1.



Figure 1 - Ceresco Dam Dredging Progress

2.1.3 Long Term Operations and Maintenance (O&M)

- Completed removal of old sediment basin at Location B5.
- Completed sediment removal at Location B4.9
- Completed recovery operations at Island A.
- Removed boom from Ceresco Dam.
- EPA inspected O&M at 36 locations and relayed observations and recommendations to Enbridge.
- The O&M process is documented in Table 2 and Figures 2-4.

Table 2 – O&M Maintenance and Monitoring Areas

O&M Process	Cumulative Sections Completed	
	10/24	10/23
Active	14	16
Monitoring	39	38
Cleared	2	3
Signed Off	35	34

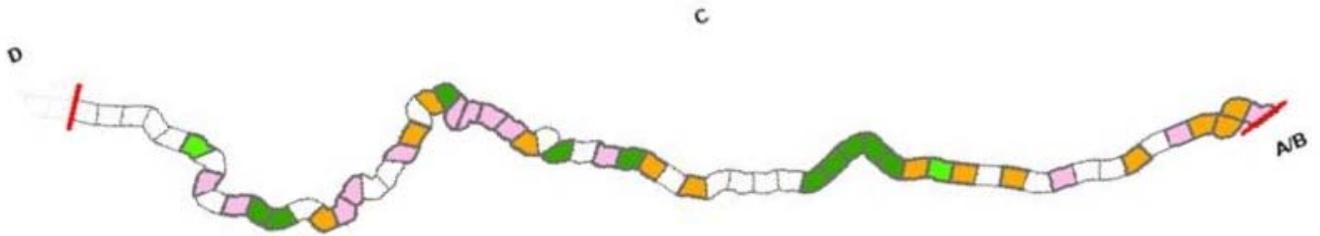


Figure 2 - Division C O&M Areas

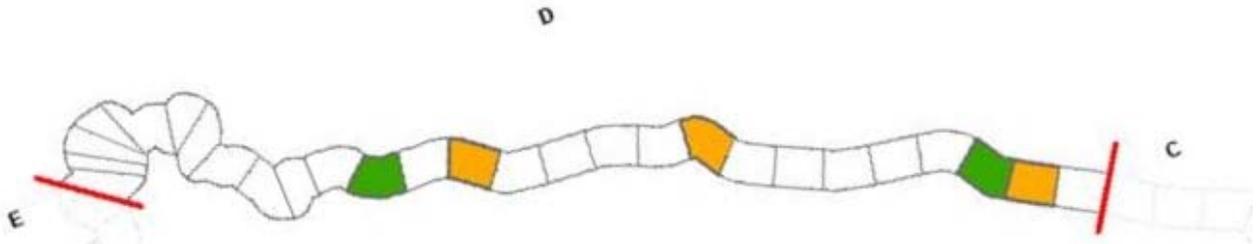


Figure 3 - Division D O&M Areas

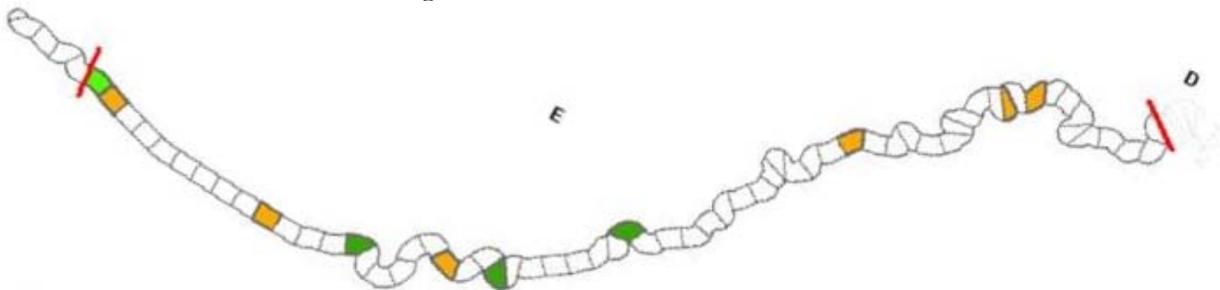


Figure 4 - Division E O&M Areas

2.1.4 Drinking and Groundwater Studies

- Collected final depth to water measurements at all locations in Target Areas 1 to 8. These measurements complete the groundwater field measurements.
- Continuing preparation of the final groundwater report.

2.1.5 Decontamination

- Equipment and boom that was Deconned during this operational period is outlined in Table 3.

Table 3 - Equipment Decon Totals

	10/24	10/23
Frac Tanks	5	3
Vac Trucks-Tankers	0	2
Roll-Off Boxes	0	0
Yellow Iron - Light	0	0
Yellow Iron - Heavy	0	0
Marine Vessels	4	3
Vehicles	0	3
Daily Total	9	11

Boom (feet)	1,500	2,000
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2.1.6 Additional Operations

Air Ops

- During this operational period, there were 2 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.

Environmental Compliance and Oversight

- Prepared waste management area close-out plans.
- Continued waste management characterization, documentation, and coordination.

Monitoring Branch

- Conducted real-time air monitoring near excavation and dredging 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 4.

Table 4 – Samples Collected By Enbridge

Sample Type	Number Collected	
	10/24	10/23
Mini SUMMA *	20	10
Surface Water	3	18
Private Well Samples	15	9
Groundwater Samples	-	-
Sediment Samples	-	9
Ceresco Dewatering Samples	-	3
Submerged Oil Task Force Samples	-	-
Soil Samples	-	-
Sheen Samples	-	-
Other	4	7

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

- Sampling and monitoring events conducted by EPA personnel during this operational period are reported in 5.

Table 5 – Sampling and Monitoring Events by EPA as Reported in Scribe

Sample Type	Number Collected	
	10/24	10/23
Air Monitoring Results	59	109
Tedlar Bags	-	-
SUMMA canisters	-	-
Sediment	-	-
Surface Water	-	-

Landowner Environmental Issues

Environmental issues from citizens have been raised throughout the response. These issues have been brought to the attention of the EPA directly, through MNDRE or through Enbridge. The EPA contacts the concerned citizen and evaluates the situation or concern. A log of the issue is maintained for each issue addressed. Citizen environmental issues are represented in Table 6.

Table 6 – Landowner Environmental Issues

Issues to Date	Issues Undergoing Evaluation	Issues Considered Addressed
14	1	13

2.1.7 Progress Metrics

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

Boom Report

Table 7 - Boom Report

	10/23	10/22
Number of Locations	19	19
Boom Deployed (feet)	98,664	99,084

Table 8 - Soil and Debris Shipped Off Site

Waste Stream*	Cumulative [†]	10/23	10/22
Haz Soil (yd ³) ^a	15,344	0	0
Non Haz Soil (yd ³) ^b	54,623	720	0
Haz Debris (yd ³) ^c	12,075	0	0
Non Haz Household Debris (ton)	81	1	4
Non Haz Impacted Debris (ton) ^c	1,332	0	0

* 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 9 - Oil water collected by location 10/24 0700

Location	Cumulative (gallons)
Division A	5,569,643
Division B	4,973,865
Division C	1,450,400
Division D	123,690
Division E	50,530
Decon	426,260
Other Locations [*]	440,083
TOTAL	13,034,471

* Includes Frac, DECON, and Wildlife Center.

Table 10 - Oil water Separation 10/23

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

Table 11 - Oil/Water Remaining On-Site (Gallons)

Oil/Water Collected	13,034,471
Oil/Water Shipped Off-Site	12,040,051
OIL/WATER REMAINING ON-SITE	994,420

Table 12 - Liquid Shipped Off-site

Oil/Water leaving Site	Destination	Quantity Shipped		
		Cumulative†	10/23	10/22
Haz Water	Dynecol, Detroit, MI	2,793,888	-	17,500
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	4,600,425	-	50,000
Haz Water	Safety Kleen ^a	825	-	-
Treated Non Haz Water *	Dynecol, Detroit, MI	134,200	-	-
Treated Non Haz Water *	Battle Creek POTW	1,968,700	-	-
Totals		12,040,051	0	67,500

* 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. This period marks day 12 without a safety incident.

2.4 Liaison Officer

- Nothing to report.

2.5 Public Information Officers

- Received public inquires as outlined in Table 13.

Table 13 – Public Inquiries Received by EPA and Enbridge

Location/Media	Inquiries Received	
	10/23	10/22
Battle Creek Community Center	1	1
Marshall Community Center	1	10
Oil Spill Public Information Hotline	2	8
Enbridge Response Website (www.response.enbridgeUS.com)	0	0
Total Public Inquiries	4	19

2.6 Finance Section

- The current NPFC issued ceiling is 24.6 Million. Approximately, 86.5% of the ceiling has been spent through October 23, 2010, with the latest burn rate of \$70,516 per day. These cost summaries reflect only EPA-funded expenditures for the incident. A summary of these expenses is presented in Table 14.

Table 14 - Financial Summary

ERRS Contractors	Expended (Cumulative)	Estimated Burn Rate	
		10/23	10/22
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:HSCG8410A800)	\$ 1,255,000	\$ -	\$ -
START Contractor			
WESTON (EPS50604)	\$ 7,545,313	\$ 36,710	\$ 44,129
Response Contractor Sub-Totals	\$12,580,348	\$ 36,710	\$ 44,129
EPA Funded Costs:			
Total EPA Costs	\$ 4,344,211	\$ 21,740	\$ 21,740
Pollution Removal Funding Agreements:			
Total Other Agencies	\$ 1,418,669	\$ 2,340	\$ 2,340
Sub-Totals	\$18,343,228	\$ 60,790	\$ 68,209
Indirect Cost (16.00%)	\$ 2,934,916	\$ 9,726	\$ 10,913
Total Est. Oil Spill Cost	\$21,278,144	\$ 70,516	\$ 79,122
Oil Spill Ceiling authorized by USCG	\$ 24,600,000		
Oil Spill Ceiling Available Balance	\$ 3,321,856		
	86.5%		

2.7 Response Actions to Date

- Response Actions to date may be found in SITREPs #1 through #70.

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 15.

Table 15 - Personnel On-Site

Agency/Entity	Number Reported	
	10/24	10/23
EPA	22	21
START	27	29
Calhoun County Public Health	1	1
Calhoun County (CC) EM	2	2
City of Battle Creek	2	2
Kalamazoo Sheriff	2	2
MDNRE	7	6
Michigan State Police EMD	1	1
NOAA - National Weather	1	2
USFWS	0	0
Enbridge ICP	25	30
Enbridge ICP Contractor	226	266
Enbridge	7	6
Enbridge Contractors	494	546
Total	817	914

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>.