

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 #29
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
F/LT Bonnie Kanicki-Wilson, Michigan State Police, Emergency Mgt.
Greg Danneffel, MDNRE
Mike McKenzie, City of Battle Creek
Leon Zupan, Enbridge
Susan Hedman, U.S. EPA Regional Administrator
Rebecca Humphries, MDNRE
Jim Sygo, MDNRE
Connie Gibson, Calhoun County Sheriffs Office
Cheryl Vosburg, City of Marshall
David Chung, U.S. EPA
Jason El-Zein, U.S. EPA
Duty Officer, NRC
Michael Chezik, U.S. Department of Interior
Linda Nachowicz, U.S. EPA
OSLTF USCG, USCG
Jill Slaght, 7th District of Michigan
Ken Brock, 7th District of Michigan
Bruce Vanotteren, MDNRE
Brian Pierzina, PHMSA Central Region
Thomas Hemminger, USCG Grand Haven
Ronna Beckmann, U.S. EPA
Scott Corbin, Allegan County EMA Director

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

Date: 08/23/10

Reporting Period: 1900 hours 08/22/10 to 1900 hours 08/23/10

1. Introduction

1.1 Background

1.1.1 Site History

Background Information

Site Number: Z5JS

D.O. Number:

Response Authority: OPA

Response Lead: PRP

NPL Status: Non NPL

Mobilization Date: 7/26/2010

Demob Date:

CERCLIS ID:

ERNS No.:

FPN#: E10527

Contract Number:

Action Memo Date:

Response Type: Emergency

Incident Category: Removal Action

Operable Unit:

Start Date: 7/26/2010

Completion Date:

RCRIS ID:

State Notification:

Reimbursable Account

1.1.2 Incident Category

Emergency Response -- Pipeline Rupture

1.1.3 Site Description

A 30-inch pipeline ruptured, releasing crude oil (NRC report of 19,500 barrels) into a culvert leading to Talmadge Creek. Talmadge Creek is a tributary to the Kalamazoo River. The response site is along Talmadge Creek and the Kalamazoo River running from Marshall, Michigan, to downstream of Battle Creek, Michigan. The Kalamazoo River is bordered by marshland and developed properties for the approximate 30-mile stretch of the response site.

1.1.4 Preliminary Removal Assessment/Removal Site Inspection Results

Approximately 30 miles of the Kalamazoo River have been impacted. The Kalamazoo River experienced flooding before and after the spill. The river levels later fell and stranded oil in some backwaters, wetlands and floodplains. Talmadge Creek was boomed off at the confluence to the Kalamazoo River. Containment and absorbent boom were deployed along the Kalamazoo River and Talmadge Creek. Containment and absorbent boom also were deployed in Morrow Lake.

1.1.5 Enforcement Activities, Identity of Potentially Responsible Parties

Enbridge is the RP.

On July 27, 2010, EPA issued an Administrative Order under section 311(c) of the Clean Water Act to Enbridge. Enbridge has submitted and EPA has approved the following deliverables required by the Order including but not limited to: *Operational Health and Safety Plan*; *Pipeline Repair Workplan*; *Sampling and Analysis Plan*; *Quality Assurance*

Project Plan; Oil Containment and Recovery Plan; Source Area Remediation Plan; Remediation Plan for Downstream Impacted Areas; and Waste Treatment, Transportation, and Disposal Plan.

1.2 Incident Objectives and Command Emphasis

Incident Objectives

- 1) Ensure health and safety of the public and response & recovery personnel.
- 2) Maintain the isolation of Talmadge Creek and Kalamazoo River from the source area.
- 3) Contain and recover oil and contaminated vegetation in Talmadge Creek and Kalamazoo River.
- 4) Maintain effective unified communications with cooperating & assisting agencies and the public.
- 5) Perform remediation & restoration of all affected public & private areas of river & river systems.
- 6) Provide protection of environmentally and culturally sensitive areas including wildlife and historic properties.
- 7) Protect threatened and endangered species & continue to recover & rehabilitate injured wildlife.
- 8) Maintain Joint Information Center function.
- 9) Continue to collect, coordinate, manage and communicate environmental and public health data.
- 10) Obtain input from multi-agency Science Team to help establish protocols to guide cleanup of environmentally impacted areas.

Command Emphasis

- 1) Establish a separate Task Force to re-evaluate and enhance subsurface oil monitoring in the Kalamazoo River and at Morrow Lake, including a bottom survey and development of capture and management options.
- 2) Concentrate resources for river, shore, and floodplain cleanup and sheen management in Division C, with emphasis on increased overall work efficiencies.
- 3) SCAT update on entire river system.
- 4) Review SCAT recommendations with Science Team, with emphasis on Division C, to coordinate near-term cleanup efforts.
- 5) Implement operations metrics display in all situations and operations updates to UC.
- 6) Enbridge to maintain primary responsibility for planning cycle and IAP development:
 - Monitor effectiveness of IAP briefing and use by Operations; and
 - Continue transition of IAP development from EPA to Enbridge.

1.3 Strategic Considerations

- 1) Implement characterization of submerged oil contamination in the Kalamazoo River System above Morrow Lake Dam.
- 2) Complete characterization of pooled oil in flood plain and upland areas in Division C and Division D.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The response site extends from the pipeline break to the dam at the end of Morrow Lake. Operationally, the response has been divided into two Oil Recovery and Cleanup Branches: East and West. These branches have been geographically divided into five Divisions, A through E, with Division A starting at the pipeline break and Division E ending at the western edge of Morrow Lake (see attached map). The East Branch includes Divisions A and B and the West Branch includes Divisions C, D and E. Division C is currently an area of command emphasis and has been further subdivided into four groups performing similar response activities in order to accelerate cleanup progress in that Division. Certain control points are denoted by division letter then control point number (i.e., C3 refers to control point three within Division C). Additionally the entire length of the site is now divided into one-quarter mile sections.

The Unified Command organizational charts (ICS 207 forms) are presented in Figures 1-4. The ICS 207 Forms describe in detail the work breakdown structure for the response action.

The following activities occurred during the reporting period from 1900 hours on August 22 to 1900 hours on August 23, 2010:

Division A

Division A has extended into the upstream portion of Division B (to the upstream side of location B2) since the operations required there are more similar to those in Division A than Division B.

Enbridge

Enbridge reported that it continued skimming oil as well as excavating, backfilling, and dewatering the oil containment within Division A. SCAT operations, soil scraping and clean up of hotspots (Location A6) continued within Division A. Enbridge reported they obtained approval from Barr Engineering to scrape with a long-reach excavator when the Hydrovac trucks were not working. Once scraping began, a considerable amount of oil was reported by Enbridge. Silt fence was repaired at Talmadge Creek.

EPA

EPA observed Enbridge ongoing backfilling operations. EPA observed Enbridge's continuing dewatering and excavation efforts. Excavation of hotspots continues. EPA reported hydrostatic testing of the pipe continues.

Division B**Enbridge**

Enbridge reported that it continued oil collection at boom containment sites and replaced contaminated boom as required. Crews worked on chipping and scraping of oiled bank vegetation and soil along Talmadge Creek. Enbridge reported based upon inspection of the marshy area upstream of I-69, the area is extremely contaminated with pure crude bubbling out of the ground.

EPA

EPA observed continued skimming operations. EPA observed that excavation under some portions of the swamp mats may be necessary. EPA and START continued collected turbidity data during bank excavation along Talmadge Creek. EPA observed noticeable improvement at the confluence of the Kalamazoo River. Silt fence placement was to approximately Location B4.5. Bank excavation west of I-69 progressed to Location B4.7.

Odor persisted in portions of Division B. Air samples were collected from several locations. Benzene was not reported in any of the samples submitted for analysis.

Submerged Oil Task Force

The newly formed Submerged Oil Task Force met to cover techniques to determine if submerged oil is present, and strategy to identify best sampling locations. Several methods were identified and were scheduled for field testing in the West Branch in the next operational period.

Division C**Enbridge**

Enbridge reported that it maintained boom and replaced absorbents, sweep and snare. Enbridge reported an influx of personnel and boats during day operations.

EPA

EPA observed Enbridge performing boom maintenance, vegetation removal, snare boom and pad replacement and shoreline and vegetation washing. EPA observed oil coming from the sediment as workers moved boom and recommended sediment sampling. EPA operations requested a SCAT assessment on the island at MP6.75. EPA observed sheen emanating from marsh area at Location C6 and notified Enbridge operations.

FOBs noted an air boat generating a wake between Location C5 and C6 which pushed sheen from the river into the adjoining swamp.

EPA advised chainsaw operations to wear chaps regardless of water depth. Additionally, EPA observed a number of boats at MP7.0 with heavy oil staining. EPA will contact Supervisors about decontamination of the boats. Heavy sheen was observed by EPA SCAT team starting at MP 7.0 and dissipating through MP 7.5 through MP 8.0.

Division D**Enbridge**

Enbridge reported that boom maintenance, vegetation removal, and skimming operations continued.

EPA

EPA observed boom maintenance activities and the collection of oiled debris and vegetation. Oil sheen was present throughout Division D with greater quantities in Location D0.5 to Location D3. A new X-TX sediment boom is being installed above Location D4.

Division E**Enbridge**

Enbridge reported vegetation and removing debris removal today. Enbridge set up decontamination for boats and will begin using E2 for boat launching. Enbridge reported deploying more silt fence in Location E4 and investigating Morrow Lake for sheen and tar balls.

EPA

EPA observed oil collection operations conducted in Division E. The air bubbler at E2 was not operational (ran out of gas). EPA observed maintenance of initial line of gabion boxes at Location E0.5 where a second line is being installed.

Branch Operations

In addition to the East and West Recovery Branches, EPA, USCG and Enbridge Operations have five Branches that conduct activities in all Divisions: DECON, Environmental Compliance and Oversight; Monitoring; Wildlife Environmental/Damage Assessment; and Air Ops.

Environmental Compliance and Oversight Branch

Enbridge reported they provided oversight for cleanup activities within Divisions A, B. Enbridge reported ongoing SCAT assessments in Divisions C, D, and E. Enbridge reported a majority of Division A reaching clean up goals.

EPA observed sampling of contaminated soil, air monitoring, surface water, and debris. SCAT information was collected in Division C. EPA collected 2 split samples from the Kalamazoo River from Division C and West of Morrow Lake. EPA reported about half of Division A meeting clean up goals.

DECON Branch

Enbridge

Enbridge submitted a decontamination plan and is responding to EPA comments regarding confined space entry.

EPA

EPA is awaiting decontamination plan revision from Enbridge.

Monitoring Branch

Enbridge

The air sampling program continues to collect 24-hour grab samples, summa mini-can samples, grab samples, and passive dosimeter samples in addition to the real-time air monitoring samples.

Enbridge reported that its air sampling program continued to focus around Baker Estates mobile home park, the Ceresco Dam, and the leak site.

Enbridge reported collecting the following samples:

Sample Type	Number collected*
Surface Water	15
Private Well Samples	2
Sediment Samples	0
Other	0
Soil Samples	0
Vertical Water Column Samples	12

*Reflects samples collected 08/23/10

EPA

EPA conducted continued air monitoring in all divisions. Tedlar bag air samples were collected in the 11 grid areas of Division B exposure units and in the five focus areas (Daycare Center, Baker Estates, Frac Tank Storage Area, Squaw Creek and Ceresco Dam). EPA conducted air monitoring in response to an odor complaint. EPA observed the Enbridge air monitoring crew in Divisions B and C. Tedlar bag sampling results were below 1 ppbv for benzene in response to the air monitoring results at Location B4.

EPA collected the following monitoring samples:

Media	Sample Type	Number collected*
Air	Summa Canister	0
Air	Tedlar Bags	16
Air	Monitoring Samples	256
Surface Water	Grab	0
Sediment	Grab	0

*Reflects samples documented in SCRIBE 08/23/10 19:00

During this operational period SCAT teams continued shoreline and over bank oiling analysis in sections between Location C3.25 to Location C4.0.

Wildlife Damage Assessment Branch

USFWS worked with the Wildlife Branch to address oil-impacted wildlife. The wildlife center continued to receive oiled animals collected along the Kalamazoo River. There are 223 animals in live care, the majority of which are Canada Geese and turtles. A total of 246 animals have been rehabilitated and released.

Air Ops Branch

Enbridge

Enbridge flew 8 over-flights yesterday. Enbridge reported observing sheen in a boom area at the confluence of Talmadge Creek and the Kalamazoo River. No sheen was noted downstream of the twin islands. Multiple wildlife traps were reported being set in Division D. No visible sheen was reported on Morrow Lake.

EPA

Starting August 23, 2010, both the EPA START SitRep contractor and Enbridge will use the Enbridge funded helicopter for their daily overflights. The EPA helicopter will be available, as needed, for IC and other federal needs. Observations are reported at the daily situational briefings.

2.1.2 Progress Metrics

All progress metrics in Section 2.1.2 are as reported by Enbridge unless otherwise indicated.

Boom Report

Number of Locations	41
Boom Deployed (feet)	166,302*

Note: Since the transition of EPA's contractor's to Enbridge at 1900 hrs on 08/12/10, all boom is now controlled by Enbridge.

*as of 8/23/10 07:00

Waste Tracking

Waste Stream	Quantity Shipped 8/23/2010	Cumulative Quantity Shipped*	Quantity On-Site Awaiting Disposal*
Soil ¹	568 yd ³	12,947 yd ³	14,725 yd ³
Debris ²	700 yd ³	9,025 yd ³	NA
Treated Water Non-Hazardous ³	88,000 gallons	2,370,100	NA
Untreated Water ⁴	129,300 gallons		
Oily Water (Griffith, IN)	183,102 gallons		

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

NA – Not provided by Enbridge

1. Benzene-impacted soil is being sent to Envirosafe.
2. Roll-off boxes containing waste sorbents, boom, pads, plastic, PPE, and oiled vegetation and biomass are being sent to Michigan Disposal.
3. Treated Water Non-hazardous is being sent to Liquid Industrial Waste Services, Inc. and to Dynecol and was previously sent to the Battle Creek POTW.
4. Untreated water (hazardous waste) is being sent to Dynecol.

Oily 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.

Oily Water Collected by Location	
Location	Cumulative Total Collected (gallons)
Division A	4,086,081
Division B	2,686,625
Division C	740,700
Division D	117,825
Division E	43,750
Undetermined	109,200
TOTAL	7,784,181

Oily Water Shipped Off-Site		
Oily Water Leaving Site	Destination	Cumulative Quantity Shipped (gallons)
Untreated Water (Haz Waste)	Dynecol, Detroit, MI	1,633,525
Treated Water (Non Haz)	Dynecol, Detroit, MI	87,700
Pre-treated Water	Battle Creek POTW	1,968,700
Treated Water (Non Haz)	Liquid Industrial Waste Services, Holland, MI	313,700
Oily Water	RP facility, Griffith IN	2,078,000
TOTAL		6,081,625

Oily Water Volume Summary (gallons)	
Oily Water Collected	7,784,181
Oily Water Shipped Off-site	6,081,625
OILY WATER REMAINING ON-SITE	1,702,556

Oil-Water Separation at Griffith IN Facility (gallons)	
Oil	640,000
Water	1,436,000*
TOTAL	2,078,000

*decrease from previous day total

2.2 Planning Section

The ENVL presented air, sediment, and surface water trends in a briefing to the UC and provided air sampling update at Command and General Staff meeting. ENLV participated in Health Unit meeting to discuss air results and submerged oil concerns. Additionally, the ENVL discussed subsurface sampling plan.

2.2.1 Anticipated Activities for Next Reporting Period

In the next operational period, Operations anticipates performing the same or similar activities as in the previous operational period, with a focus on activities in Division C.

2.2.2 Issues

There was no Public Health Unit reviewed August 22 air results. Tedlar bags submitted for analysis showed no detections for benzene.

2.3 Logistics Section

EPA Logistics provided full support for the ICP relocation.

2.4 Finance Section

The current NPFC issued ceiling is \$13 million. Approximately 90.9% of the ceiling has been spent through August 22, 2010, with a burn rate of \$316,602 per day. These cost summaries reflect only EPA-funded expenditures for the incident.

FPN E10527 - Enbridge Pipeline Oil Spill
As of: 8/22/2010

ERRS Contractors	Est. Expended	Est Burn Rate (Lastest Daily)
EQM (EPS50802)	T057 \$1,289,893	\$1,500
	T060 166,500	18,500
LATA (EPS50804)	1,451,396	0
ER LLC (EPS50905)	723,669	0
ERRS Contractors	\$3,631,458	\$20,000
START Contractor		
WESTON (EPS50604)	3,237,020	110,835
Response Contractor Sub-Totals	\$6,868,478	\$130,835
EPA Funded Costs:		
Total EPA Costs	2,246,953	106,238
Pollution Removal Funding		
Agreements:		
US FWS	271,320	8,560
Total Other Agencies	\$1,234,032	\$40,284
Sub-Totals	\$10,349,463	\$277,356
Indirect Cost (14.15%)	1,464,449	39,246
Total Est. Oil Spill Cost	\$11,813,912	\$316,602
Oil Spill Ceiling authorized by USCG	\$13,000,000	
Oil Spill Ceiling Available Balance	\$1,186,088	

2.5 Safety Officer

Three minor first aid injuries were reported for Enbridge staff. No other incidents were reported.

2.6 Liaison Officer

The LNO facilitated discussion between Deputy IC and Environmental Programs Coordinator of Battle Creek regarding tar flakes in the water column of the Kalamazoo River and crude oil in the sediments of the Kalamazoo River.

2.7 Information Officer

PIO/Community Involvement staff is working on issues surrounding the posting of sampling data on the EPA and Enbridge web pages. PIO staff coordinated end of the week visits by photographers from Enbridge and EPA Region 5.

EPA PIO staff, along with Calhoun County Health occupied a table at the Calhoun County Fair, distributing Enbridge Oil Spill information via FAQ fact sheets and EPA giveaway items. Various individuals showed their interest in the EPA's efforts. The overall response was positive.

JIC staff operated the media inquiry line and performed media monitoring.

Media Inquiry Line (888-363-8632)

Calls received during reporting period: One

A call regarding the hunting near Morrow Dam was forwarded to the Michigan DNR.

Enbridge reported the following call volume and community center visits:

Oil Spill Public Information Hotline (800-306-6837)

Calls received during reporting period: 32

Community Center Visits: 22

Visits by location during reporting period:

Battle Creek	12
Marshall	10

Enbridge reported that it received no inquiries from its www.response.enbridgeUS.com website.

2.8 Response Actions to Date

Recovery of oil and contaminated soil and debris continues. Containment boom, sorbent boom, skimming equipment, vacuum trucks and other equipment has been used to support oil collection and removal along Talmadge Creek and the Kalamazoo River. Contaminated soils are being excavated from Divisions A and B. Replacement of the damaged pipeline and stabilization of the excavation are progressing. Contaminated shoreline vegetation along the creek and river is being cleaned or removed to control sheen. Recovered materials are being handled on-site and prepared for off-site transport. Tanker trucks are transporting the recovered oil to a facility owned by the RP with available storage in Griffith, Indiana. Oil-contaminated soils and other materials are being transported off-site for disposal.

EPA, ERT, START and RP contractors, with the support of the ERT Mobile Lab and Michigan National Guard Civil Support Team, have monitored and sampled air quality along the river and throughout multiple residential areas. A heavy emphasis was placed on specific monitoring for benzene as it is a recognized contaminant of concern for this response.

Water samples were collected for analysis from surface water, river and lake water columns, as well as private drinking wells along the length of the impacted areas of the Kalamazoo River. Water samples were also collected downstream of the Morrow Lake Dam. Validated analytical sampling results are now being posted to the public incident website (<http://www.epa.gov/enbridgespill/data/datawater.html>).

Enbridge removed the affected area of pipe, followed the cut out/repair plan, and completed a pipe investigation (50 feet upstream and downstream of the cut points) on August 7, 2010. The affected length of pipe has been repaired but is not yet operational.

A voluntary evacuation was issued by CCPH, in consultation with MDCH and ATSDR, for several residences located immediately downstream of the spill site along Talmadge Creek, up to its confluence with the Kalamazoo River. This voluntary evacuation was based on review of air monitoring results for benzene around oil collection areas. On August 16, 2010, CCPH lifted the recommended evacuation for the northwest portion of the voluntary evacuation zone after air monitoring and sampling results showed benzene levels below established action levels. On August 18, 2010, air sampling results for the remaining evacuation zone areas confirmed that benzene levels were below action levels allowing for re-occupancy. The Calhoun County Health Department worked on notifying residents.

Contingency Plans have been developed for several areas downstream of Morrow Lake, including Lake Michigan, in the case oil moves past the Morrow Lake Dam.

On August 17, 2010, EPA approved the following revised plans submitted by Enbridge: *Remediation Plan for Downstream Impacted Areas*, *Source Area Remediation Plan*, *Quality Assurance Project Plan* and *Sampling and Analysis Plan*. All plans submitted by Enbridge as required by the July 27, 2010, Administrative Order have now been approved.

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)

Cooperating and Assisting Agencies Cooperating Agencies

51st Civil Support Team Michigan
National Guard

ATSDR

Allegan County Emergency
Management

American Red Cross

Calhoun Conservation District

Calhoun County Commission

City of Kalamazoo

City of Marshall

Emmett Township

Federal Energy Regulatory Commission

Fredonia Township

Kalamazoo County Office of Emergency
Management

Kalamazoo River Watershed Council

Marshall Area Firefighters Ambulance
Authority

Marshall Police Department

Marshall Township Government and
Fire Department

Michigan Department of Agriculture

MDCH

MIOSHA

National Transportation Safety Board

Natural Resource Group

NOAA

Oakland County HAZMAT
OSHA

PHMSA

USCG

U.S. Department of the Interior/USGS

USFWS

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

Agency/Entity	Numbers Reported
EPA	52
START	71
Calhoun County Public Health Dept. (CCPH)	3
Calhoun County (CC) Sheriff	6
City of Battle Creek	3
Kalamazoo Sheriff	2
MDA	0
MDCH	0
MDNRE	13
Michigan State Police (MSP)	7
NOAA - National Weather Service	2
NOAA- NRDA	2
USCG	12
USDA	2
USFWS	12
USFWS Contractors	2
Enbridge	22
Enbridge Contractors	1305
Total	1516

5. Definition of Terms

ATSDR	Agency for Toxic Substances and Disease Registry
CCPH	Calhoun County Public Health
CIC	Community Involvement Coordinator
DMU	Data Management Unit
EMT	Emergency Medical Technician
ENVL	Environmental Unit Leader
EPA	Environmental Protection Agency
ERRS	Emergency and Rapid Response Services
ERT	Emergency Response Team
EU	Environmental Unit
GLNPO	Great Lakes National Program Office
H ₂ S	Hydrogen Sulfide
HASP	Health and Safety Plan
IAP	Incident Action Plan
IC	Incident Commander
ICP	Incident Command Post
IN	Indiana
JIC	Joint Information Center
LEL	Lower Explosive Limit
LNO	Liaison Officer
LSC	Logistics Section Chief
MDA	Michigan Department of Agriculture
MDCH	Michigan Department of Community Health
MDMB	Michigan Department of Management and Budget
MDNRE	Michigan Department of Natural Resources and Environment
MI	Michigan
MIOSHA	Michigan Occupational Safety and Health Administration
MP	Mile Post
NRC	National Response Center
NOAA	National Oceanic and Atmospheric Administration
NPFC	National Pollution Fund Center
OSHA	Occupational Safety and Health Administration
PHMSA	Pipeline and Hazardous Materials Administration
PIO	Public Information Officer
PPE	Personal Protective Equipment
ppm	Parts Per Million
POTW	Publicly Owned Treatment Works
QA/QC	Quality Assurance/Quality Control
RP	Responsible Party
SCAT	Shoreline Contamination Assessment Team
START	Superfund Technical Assessment and Response Team
T&D	Transfer and Disposal
UC	Unified Command
USDA	United States Department of Agriculture
USCG	United States Coast Guard
USDOT	United States Department of Transportation
U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
yd ³	Cubic Yards
VOCs	Volatile Organic Compounds

6.0 Source of Additional Information

6.1 Additional Information

For additional information please refer to <http://www.epa.gov/enbridgespill.html>. For sampling analysis data, please see <http://www.epa.gov/enbridgespill/data/datawater.html>.

6.2 Reporting Schedule

SITREPs have been created daily and will continue until the UC establishes a different reporting schedule, in conjunction with the planning cycle.

7.0 Situational Reference Materials

See attached Map, entitled “Kalamazoo River/Enbridge Spill Overview Map,” for more information.

See attached Unified Command Organizational Charts (ICS 207) entitled, “Enbridge Pipelines Response Unified Command”, “Planning Section”, “Operations”, and “Division C.”



Enbridge Pipelines Response Unified Command

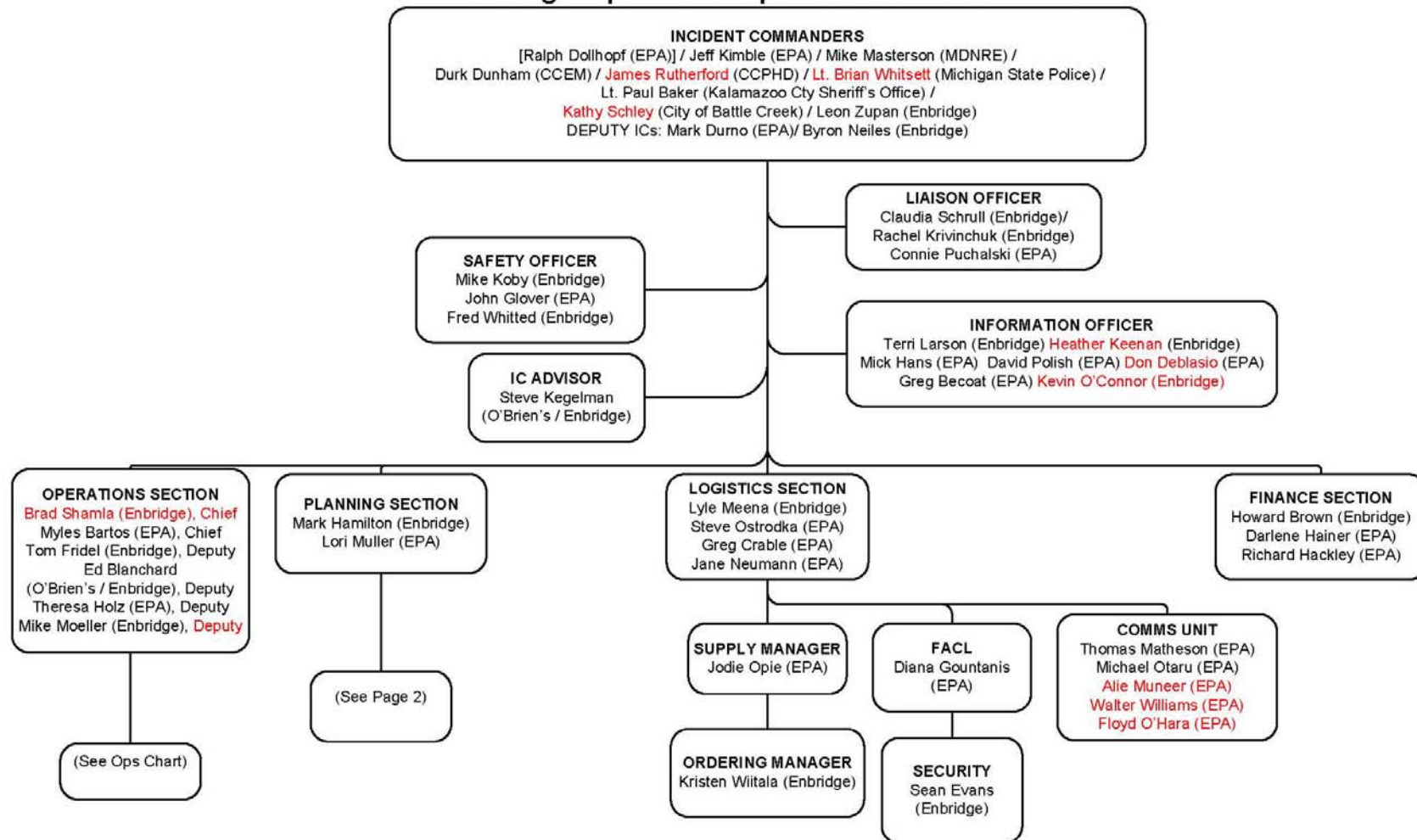


Figure 1 Unified Command



ICS 207
 8/23/2010
 OP 8/24 - 8/25

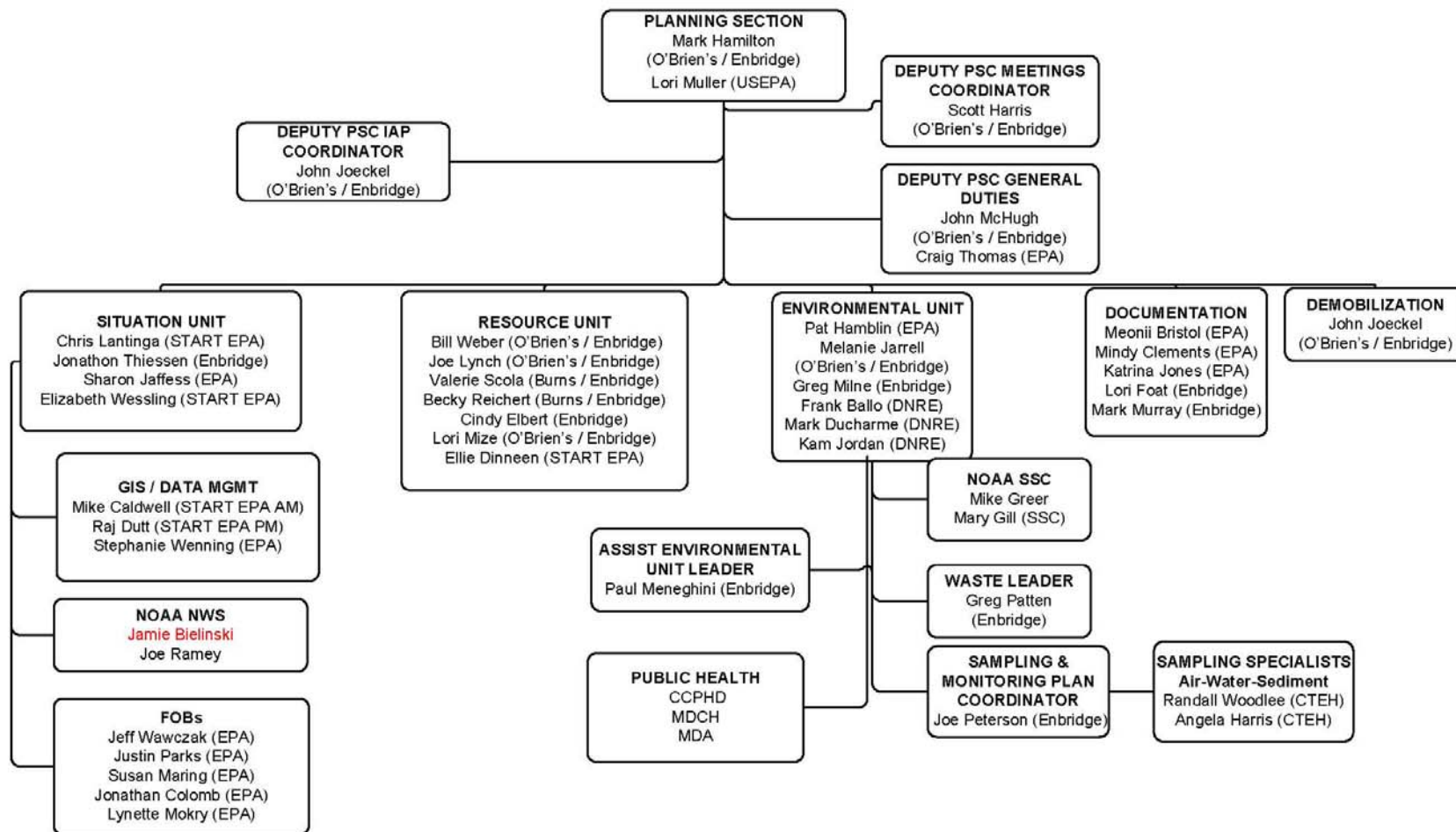


Figure 2 Planning Section



Operations

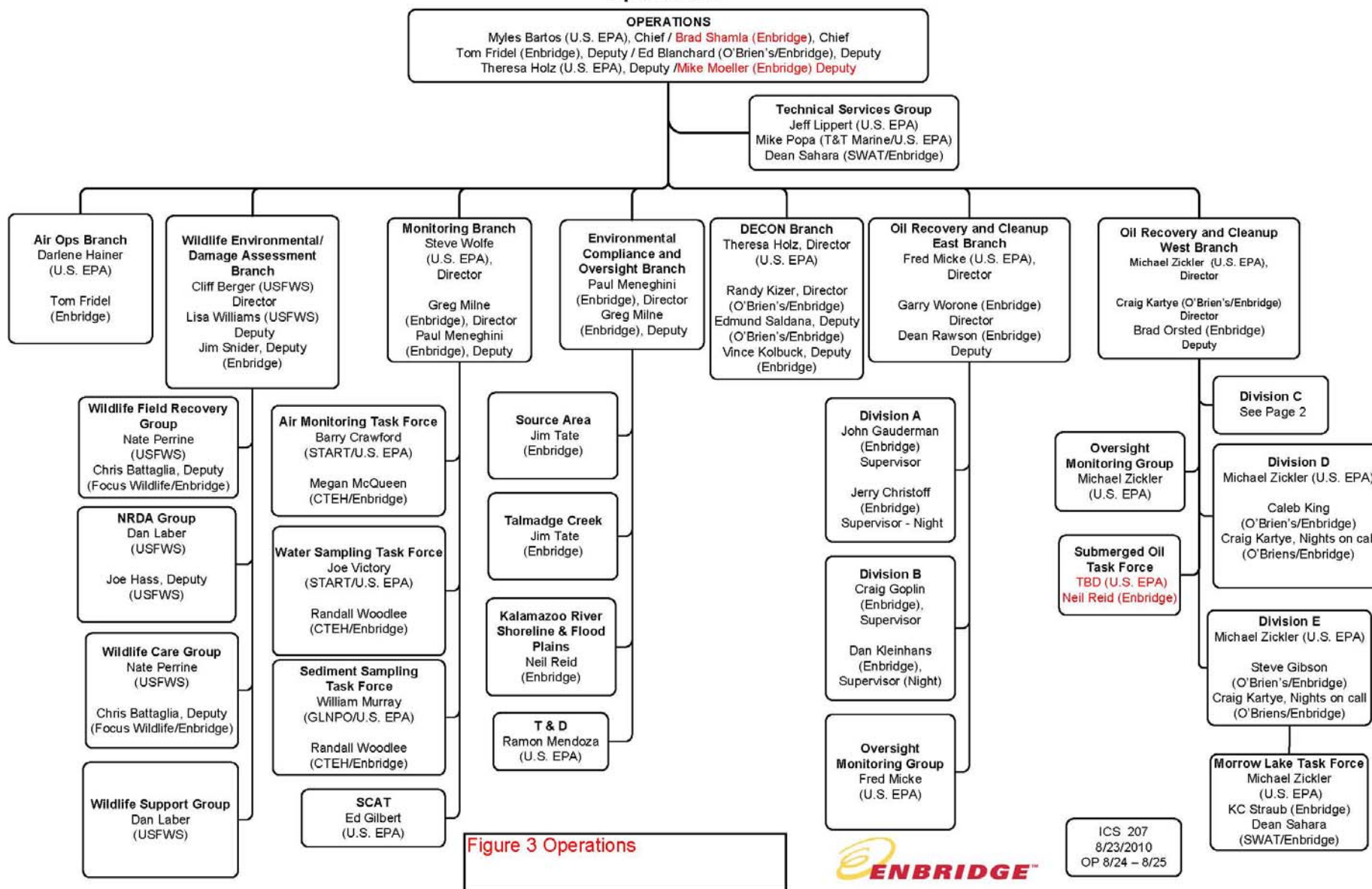


Figure 3 Operations



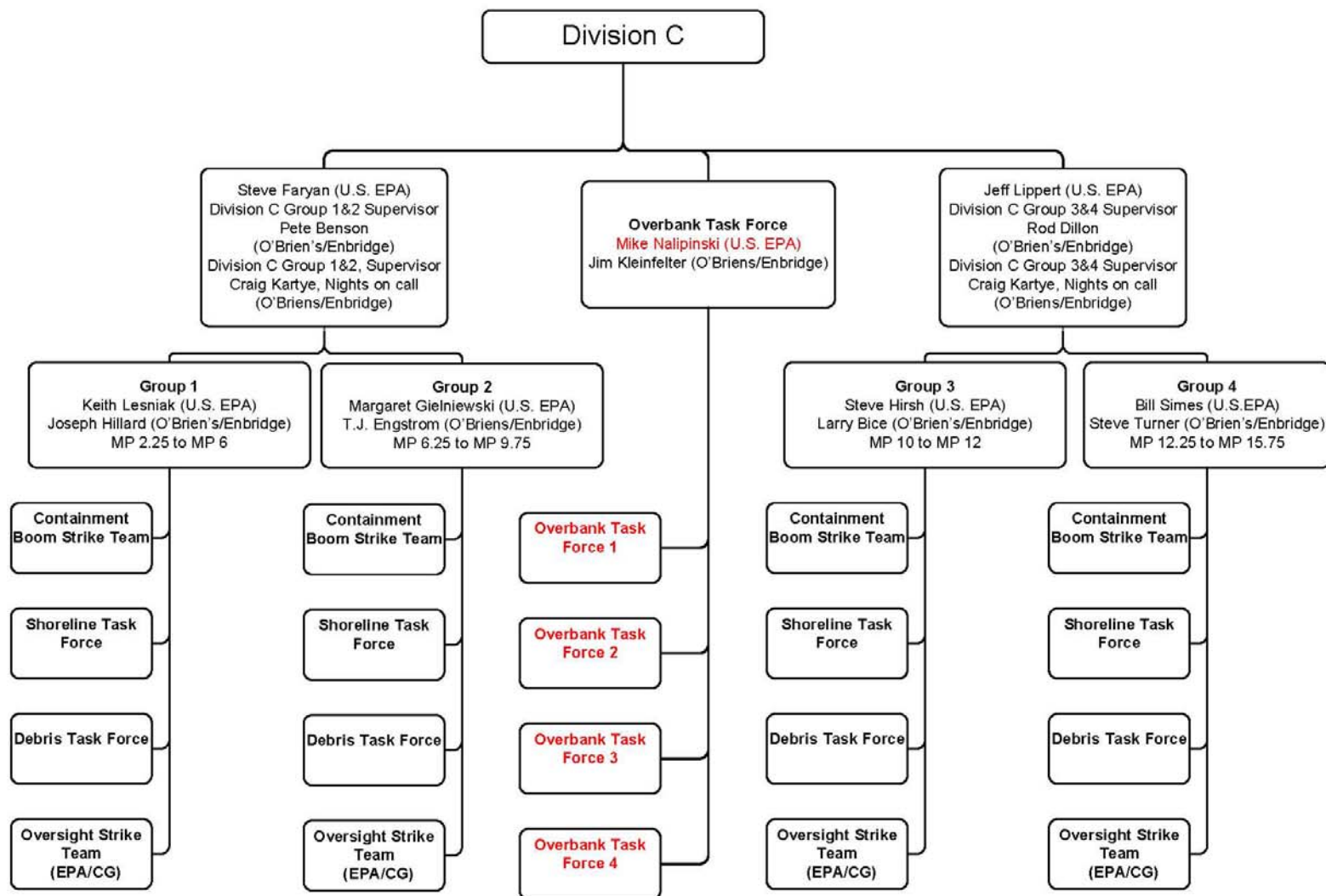


Figure 4 Division C