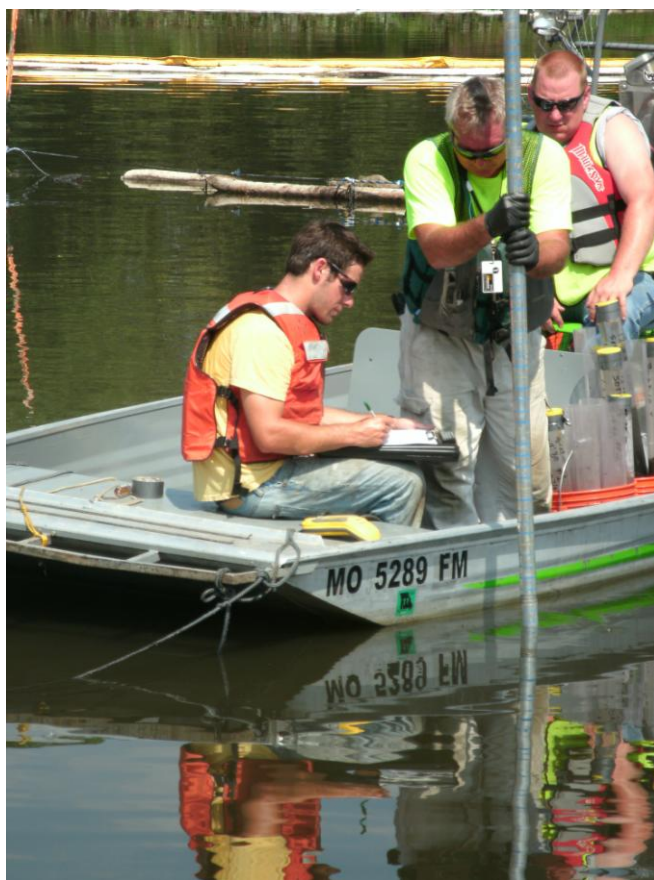


US EPA ARCHIVE DOCUMENT

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region V



**Subject:** SITREP #36  
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.  
Michael Masterson, MDNRE  
Kathy Schley, 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:** 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:** 08/30/10

**Reporting Period:** 1900 hours 08/29/10 to 1900 hours 08/30/10

## 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**

The following incident objectives and command emphasis are taken from the IAP for the Operational Period August 29, 2010, 0700 to August 31, 2010, 0700.

### **Incident Objectives**

- 1) Ensure health and safety of the public and response and 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 and assisting agencies and the public.
- 5) Perform remediation and restoration of all affected public and private areas of river and river systems.
- 6) Provide protection of environmentally and culturally sensitive areas including wildlife and historic properties.
- 7) Protect threatened and endangered species and continue to recover and 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) Continue to evaluate and enhance submerged oil monitoring in the Kalamazoo River and at Morrow Lake, including assessment, mapping and development of near and long-term capture and management options.
- 2) SCAT update on entire river system.
- 3) Prepare for final assessment and evaluation of release area.
- 4) Continue to monitor effectiveness of IAP briefing and use by Operations.

### 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 29 to 1900 hours on August 30, 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 reported the following:**

- Negotiating with landfill to remain open next weekend for continuous hauling.
- Scraping impacted soil at Location A6 is nearly complete.
- Working on final cleaning between source area and Division Drive.
- Preparing for EPA walkthrough in Locations A4 through A6 on 08/31/10.

**EPA observed the following:**

- Dewatering operations and excavation of contaminated soil.
- Removal of standing oil from ponded water via vacuum truck.
- Wetland excavation operations at Location A6.
- Diminishment of activities consistent with the IAP.

**Division B****Enbridge reported the following:**

- Scraping nearly complete and “pump around” operational in Location B2.7.
- Maintenance of skimmer at Location B3.
- Stringing of suction and discharge piping in process for dewatering Location B5.
- Repositioning of booms as directed by Technical Services Division.
- Preparing for EPA walkthrough in Division B on 08/31/10.

**EPA observed the following:**

- Excavation operations and turbidity monitoring between Locations B2 and B5.
- Collection of oil at designated collection points.
- Transportation of contaminated soil to staging area.
- Completion of swamp mat placement from Division A to Location B5.
- Completion of excavation from I-69 to Location B5.
- Screening and excavation of soil hotspots.
- Installation of creek diversion system at Location B5.
- Continuing operation of creek diversion system at Location B2.7.

**USCG observed the following:**

- Sampling, soil removal, and boom maintenance between Location B4 and Location B5.

**Submerged Oil Task Force (Divisions C, D, and E)**

The Submerged Oil Task Force took actions as follow:

- Sampled soil in between MP6.25 and MP9.75 in Division C.
- Continued qualitative assessment activities and mapping upstream and downstream of Ceresco Dam.
- Mobilized additional personnel to the site to enhance efficiency of scheduled activities.
- Set up core sampling and logging area at airport in anticipation of quantitative sampling start 09/01/10.



## **Division C**

### **Enbridge reported the following:**

- Removing vegetation as needed, emphasizing island cleanup activities.
- Maintaining boom as needed.
- Continuing sheen recovery operations.
- Removing vegetation as needed.
- Removing debris to disposal site.

### **EPA observed the following:**

- Between MP2.25 and MP6.0
  - Removal of vegetation on Islands A and E via mechanized crews.
  - Emanation of oil and sheen from Islands A and E.
  - Removal of oiled vegetation by ground crews using power tools.
- Between MP6.25 and MP9.75
  - Removal of oiled vegetation by ground crews.
  - Placement and replacement of absorbent pads and snare booms on islands and upland areas.
  - Termination of cleanup activities on island at MP9.0.
  - Commencement of cleanup activities on island at MP7.75.
  - Discontinuation of removal of un-oiled vegetation.
  - Assessment of newly discovered upland areas.
  - Continuing cleaning and booming operations at Ceresco Dam.
- Between MP10.0 and MP12.0
  - Removal of oiled vegetation along banks.
  - Replacement and removal of absorbent booms.
  - Assessment of upland oil areas.
  - Removal of oiled vegetation by ground crews.
  - Soil scraping operations in upland areas.
  - Maintenance of snare booms.
  - Replacement of absorbent boom with containment boom and collection of oil at island east of Location C5.
  - Presence of tar balls, oil, and sheen in Location C4 and Location C5.
- Between MP12.25 and MP15.75
  - Maintenance and decontamination of containment boom.
  - Assessment of upland oil areas
  - Removal of oiled vegetation in upland oil areas.
  - Soil scraping in upland oiled areas
  - Deployment of snare and containment booms.



**USCG observed the following:**

- Removal of vegetation below water line at Location C0.0.
- Collection and bagging of oiled vegetation downstream of Location C0.0
- Sheen coming from oiled boats.

**Division D****Enbridge reported the following:**

- Continuing boom maintenance as necessary.
- Utilizing crew at Location D5 to perform limited oiled vegetation cutting at MP 16.75 to MP 17.5 (boundary of Divisions C and D).
- Maintaining gabion baskets.
- Continuing to implement plan to consolidate all worker site staging areas into a single location in Division D and reallocating unutilized resources into Division C.

**EPA observed as follows:**

- Completing consolidation of locations in Division D to move resources to Division C.

EPA also videotaped maintenance of booms and gabion baskets.

**Division E****Enbridge reported the following:**

- Monitoring existing containment and absorbent booms.
- Consolidating workers into a single location in Division E and reallocating all unutilized resources into Division C.

**EPA observed the following:**

- Removal of oiled vegetation by skimmers and hotshot boats in Morrow Lake.
- Removal of oil from skimmers by vacuum trucks.

### **Technical Services Group**

#### **EPA took actions as follows:**

- Conducted over flight and inspected current booming strategies
- Began development of oil contaminated sediments removal methodology.

EPA observed the release and presence of sheen by sediments due to low water in Division D.

### **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 the following:**

- Initiating soil sampling to comply with MDNRE requirements.
- Ongoing screening to meet EPA objectives.
- Ongoing daily briefs and planning around SCAT issues.
- Staffing four SCAT teams.
- Oversight of river cleanup.

##### **EPA took actions as follows:**

- Conducted oversight for three of the five Enbridge air monitoring crews.

EPA observed no off-site shipping since landfills were closed on Sunday.

#### **DECON Branch**

##### **Enbridge reported the following:**

- Evaluating all existing decontamination operations.
- Construction of central decontamination area at Location C0.5.
- Frac tank cleaning at Frac Tank City.

EPA observed the following:

- Continuing cleaning of frac tanks.
- Construction of the central decontamination location at C0.5.

EPA approved the Enbridge Decontamination of Equipment and Personnel Work Plan.

### **Monitoring Branch**

Primary responsibility for sampling air sampling activities was turned over to Enbridge personnel on 08/28/10. The EPA mobile lab will remain on site to analyze tedlar bag samples collected by Enbridge. All other types of samples are analyzed off site.

Enbridge reported the following:

- 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.
- Air sampling program continues to focus around Baker Estates mobile home park, the Ceresco Dam, and the leak site.
- Collecting the following samples:

**Table 1. Samples collected 08/30/10**

<b>Sample Type</b>	<b>Number collected</b>
Surface Water	17
Vertical Water Column Samples	11
Private Well Samples	5
Sediment Samples	17
Sheen Samples	0
Other	0
Soil Samples	0

EPA took the following actions:

- Received splits of 16 samples collected by Enbridge and sent to EPA lab.
- Confirmed that results of first 10 samples from EPA and Enbridge labs were similar and all below 6 ppbv for benzene.
- Took duplicate air samples at 26 locations near residences and boom work areas. No benzene or other air contaminants were detected.

**Table 2. Samples Documented in SCRIBE as of 08/30/10**

Media	Sample Type	Number collected
Air	Summa Canister	0
Air	Tedlar Bags	0
Air	Monitoring Results	26
Surface Water	Grab	1
Sediment	Grab	0

Four SCAT teams reported the following:

- Assessment of marsh areas in C6 between MP13.0 and MP17.0.
- Assessment of completed shoreline cleaning activities in Division D.

### **Wildlife Damage Assessment Branch**

USFWS reported the following:

- Addressing oil-impacted wildlife. Bringing in more than 50 turtles.
- Assessing implementation of floodplain cleanup recommendations.
- Collecting ephemeral data for the NRDA, primary floodplain surveys of percentage of oiling of soils, herbaceous vegetation, shrubs, and trees.
- Evaluating potential new release sites for turtles.

Additionally, Wildlife reconnaissance crews found oiled snares caught on trees in Division D.

Wildlife Response Center has 311 animals in live care with 388 animals having been rehabilitated and released through this operational period.

### **Air Ops Branch**

Since August 23, 2010, both the EPA START Situation Unit FOB and Enbridge have been using the Enbridge funded helicopter for their daily over-flights. The EPA helicopter will be available, as needed, for IC and other federal needs.

Enbridge reported observing the following during six overflights:

- Pipeline integrity testing continues.
- Limited backfilling activities in Location B2.7.
- Scraping in portions of Division B.
- Accepting and stabilizing soil in staging areas in Division B.
- Boom deployments are effectively containing sheen in all Divisions.

- A slight sheen (less than previous day) and a large number of absorbent pads within boom area at confluence, but no visible mud line.
- Heavy boat and work crew activity continuing in Division C.
- Boom in place around all islands in Division C.
- Boom containing sheen trailing off Island D in Division C.
- Noticeable sheen present immediately upstream of Location C5; however, boom placement successfully containing sheen.
- Sheen remaining in oxbow at MP 21.50.
- Multiple wildlife traps in Division D.
- Slight broken sheen in delta to Morrow Lake.
- No visible sheen on Morrow Lake.
- Fewer boats on Morrow Lake and no sediment sampling.
- All aerators operating in Division E.
- Two sheen monitors on Morrow Lake at the same locations.

EPA observed the following during one overflight:

- Diminishing sheen at confluence.
- Significant sheen upstream of Ceresco Dam with effective containment and collection.
- An increasing amount of sheen in oxbow area at Location D4.25.
- Little to no activity or equipment in Division A.
- Scraping of soil in Location B2.7.
- Activity and significant sheen around peninsula upstream of Ceresco Dam.

### 2.1.2 Progress Metrics

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

#### Boom Report

**Table 3. Boom Report as of 08/28/2010 1900**

Number of Locations	36
Boom Deployed (feet)	138,411

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.

### Soil and Debris Waste Tracking

**Table 4. Soil and Debris Waste Tracking as of 08/30/10**

Waste Stream	Quantity Shipped (yd <sup>3</sup> )	Cumulative Quantity Shipped* (yd <sup>3</sup> )
Haz Soil <sup>a</sup>	0	15,344
Non Haz Soil <sup>b</sup>	0	4,419
Haz Debris	0	12,125
Non Haz Debris <sup>c</sup>	24	44

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

NA - Not provided by Enbridge

a. Haz (Benzene)-impacted soil is being sent to EnviroSAFE (Oregon, OH).

b. Non-hazardous 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 5. Oil/Water Collected by Location**

Location	Cumulative Total Collected (gallons) (8/30/10 0700)
Division A	4,654,290
Division B	3,023,475
Division C	771,500
Division D	117,825
Division E	49,950
Undetermined	134,200
<b>TOTAL</b>	<b>8,751,240</b>

**Table 6. Oil-Water Separation as of 08/30/10**

Oil-Water Separation at Tank 1605, Enbridge Facility in Griffith, IN Facility (gallons)	
Oil	682,000
Water	1,462,000
<b>TOTAL</b>	<b>2,144,000</b>

**Table 7. Liquid Shipped Off-Site 08/30/10**

<b>Oil/Water Leaving Site</b>	<b>Destination</b>	<b>Daily Quantity Shipped (gallons)</b>	<b>Cumulative Quantity Shipped (gallons)</b>
Haz Water	Dynecol, Detroit, MI	19,500	1,932,983
Treated Non Haz Water <sup>a</sup>	Dynecol, Detroit, MI	0	143,400
Treated Non Haz Water <sup>b</sup>	Battle Creek POTW	0	1,968,700
Treated Non Haz Water <sup>c</sup>	Liquid Industrial Waste Services, Holland, MI	0	332,700
Treated Non Haz Water	Plummer, Kentwood, MI	198,000	814,500
Oil/Water	Tank 1605, Enbridge Facility, Griffith, IN	5,000	2,144,000
<b>TOTALS</b>		<b>222,500</b>	<b>7,336,283</b>

a. Treated Non Haz Water no longer sent to Dynecol, Detroit, MI

b. Treated Non Haz Water no longer sent to Battle Creek POTW

c. Treated Non Haz Water no longer sent to Liquid Industrial Waste Services, Holland, MI

**Table 8. Oil/Water Volume Summary (gallons)**

Oil/Water Collected <sup>a</sup>	8,751,240
Oil/Water Shipped Off-site <sup>b</sup>	7,336,283
<b>OIL/WATER REMAINING ON-SITE</b>	<b>1,414,957</b>

a. As of 08/30/10 0700

b. As of 08/29/10

## 2.2 Planning Section

The DMU continued processing surface water sampling data and importing preliminary and validated data into SCRIBE. EPA GIS continued the map processing, as requested.

Situation Unit FOBs observed the following:

- Crew supervisors responding to heat stress with on/off work cycles according to heat index.
- Locations B2 and B3
  - Restoration and remediation activities.



- Qualitative spoon sampling to confirm thorough excavation.
- A small amount of spilled fuel (from dewatering pumps) on ground surface in dewatered section of Talmadge Creek.
- Containment and absorbent booms upstream and downstream of bladder dams.
- Criss-crossing heavy equipment tracks on mowed lawn of private residence.
- Division C, MP 12.25
  - Black oil staining on tree trunks on adjacent descending bank.
  - No black residue on tree trunks in left descending bank where vegetation removal occurred.
  - No visible sheen on water surface.
- Location C2
  - Power washing of cement bulkheads on right descending bank downstream of Ceresco Dam.
  - Spray washing of bank vegetation on right descending bank downstream of Ceresco Dam.
- Location C0.5
  - Heavy truck traffic along farm lane leading to roll off boxes.
  - Crews wearing different levels of PPE but performing the same task.
  - Replacing yellow tyvek suits with white tyvek suits.
  - Crews abiding by guidelines to not cut below two inches to root system and take nothing with a trunk diameter greater than four inches.
  - Oil on bank in soil after vegetation removal.
  - Oily boat hulls creating small pockets of sheen.

### **2.2.1 Anticipated Activities for Next Reporting Period**

In the next operational period, Operations anticipates final clearance of Division A and stabilization of Division B in advance of clearance, as well as 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 Workgroup meeting today. EPA, CCPHD, CTEH, and Trace Analytical Lab staff met to work out issues relating to the EPA Lab to Enbridge Lab transition. Public Health reviewed air sampling and air monitoring data. There were no detections for benzene at or above the 6 ppbv action level.

### **2.3 Logistics Section**

EPA Logistics continued to work with Enbridge logistics staff to resolve problems with trailers at the new ICP. Enbridge continued to construct a new gravel lot for the overflow parking at the new ICP.

## 2.4 Finance Section

The current NPFC issued ceiling is \$16 million. Approximately 81.4% of the ceiling has been spent through August 29, 2010, with a burn rate of \$237,176 per day. These cost summaries reflect only EPA-funded expenditures for the incident.

**Table 9.** FPN E10527 - Enbridge Pipeline Oil Spill  
As of: 8/29/2010

ERRS Contractors		Est. Expended	Est. Burn Rate
EQM (EPS50802)	T057	\$1,258,770	\$0
	T060	179,934	12,000
LATA (EPS50804)		1,451,396	0
ER LLC (EPS50905)		723,669	0
ERRS Contractors		\$3,613,768	\$12,000
START Contractor			
WESTON (EPS50604)		4,027,571	83,127
Response Contractor Sub-Totals		\$7,641,339	\$95,127
EPA Funded Costs:			
Total EPA Costs		2,797,999	86,225
Pollution Removal Funding Agreements:			
Total Other Agencies		\$968,672	\$26,424
Sub-Totals		\$11,408,011	\$207,776
Indirect Cost (14.15%)		1,614,234	29,400
Total Est. Oil Spill Cost		\$13,022,244	\$237,176

## 2.5 Safety Officer

### Enbridge reported the following:

- Collision of an EPA occupied air boat with an unoccupied John Boat with no injuries to personnel.
- Fourteen heat related issues resulting in removal from activity.
  - Ten first aid responses
  - Four transported to hospital via ambulance; three requiring IV treatment, none admitted.

\*\*All personnel suffering from heat related illnesses were removed from activity and were later reported feeling fine.

**EPA reported the following:**

- Interruption of all activities along Division C7.5 and 7.6 two times because of shots fired. No injuries were reported.

**2.6 Liaison Officer**

The LNO met with a local resident regarding apparent oil on the driveway at her property, which is located near a staging area, and her buyout concerns. The LNO referred the property owner to the Enbridge Marshall Community Relations Office.

**2.7 Information Officer**

No report filed.

**2.8 Response Actions to Date**

Response Actions to date may be found in Situation Reports 1 through 35.

### 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

Calhoun County Sheriff Department

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

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

#### 4.0 Personnel On Site

**Table 10. Personnel On Site 08/29/10**

Agency/Entity	Numbers Reported
EPA	48
START	44
Calhoun County Public Health Dept. (CCPH)	2
Calhoun County (CC) Sheriff	6
City of Battle Creek	3
Kalamazoo Sheriff	2
MDNRE	9
Michigan State Police (MSP)	1
NOAA - National Weather Service	2
NOAA- NRDA	2
USCG	8
USFWS	11
USFWS Contractors	2
Enbridge	13
Enbridge Contractors	1671
<b>Total</b>	<b>1824</b>

## 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
FOB	Field Observer
GLNPO	Great Lakes National Program Office
H <sub>2</sub> 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
Ppbv	Parts Per Billion Volume
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 <sup>3</sup>	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**

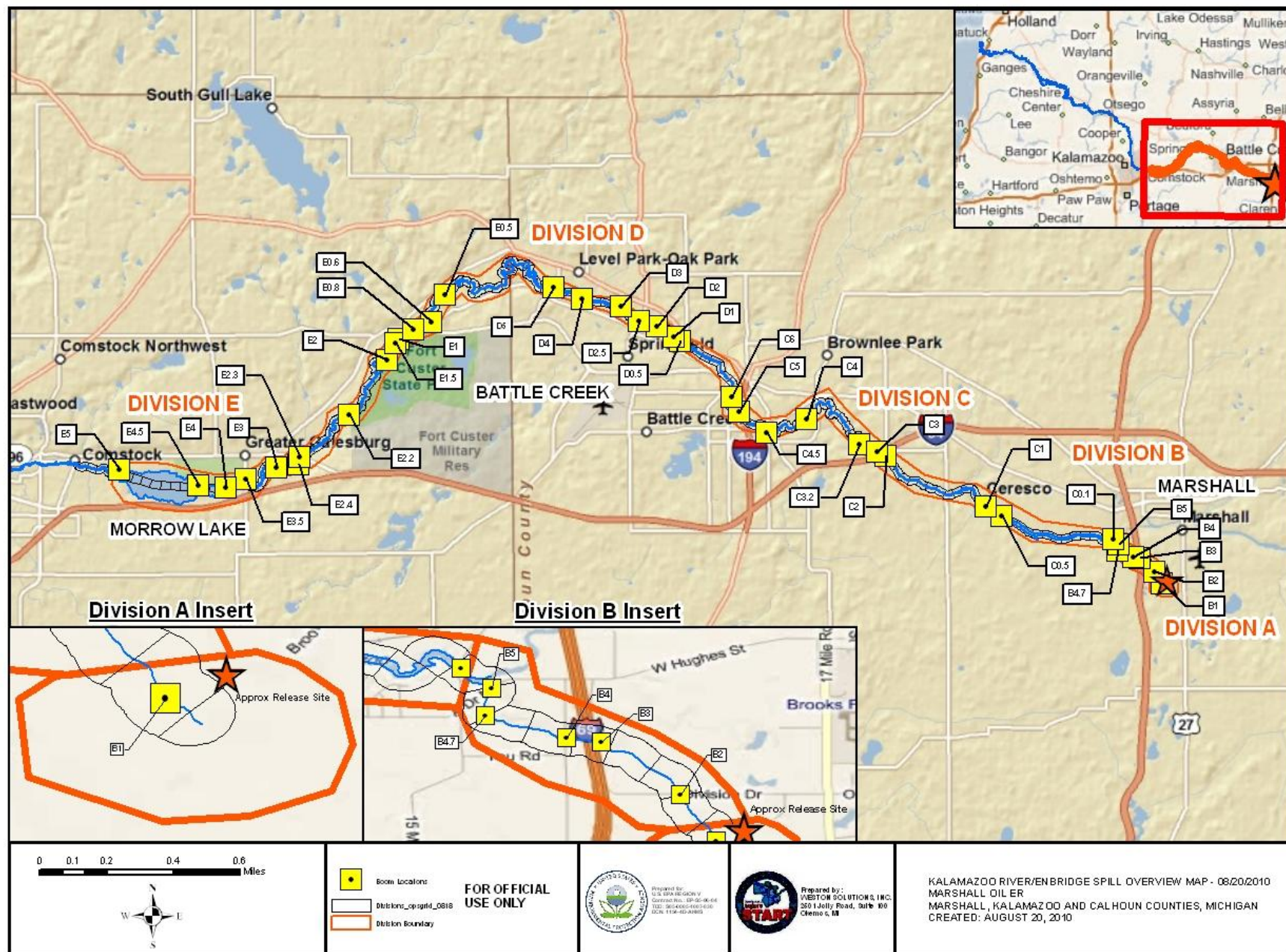
SITREPs have been created daily and will continue until the UC establishes a different reporting schedule, in conjunction with the planning cycle.

## **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

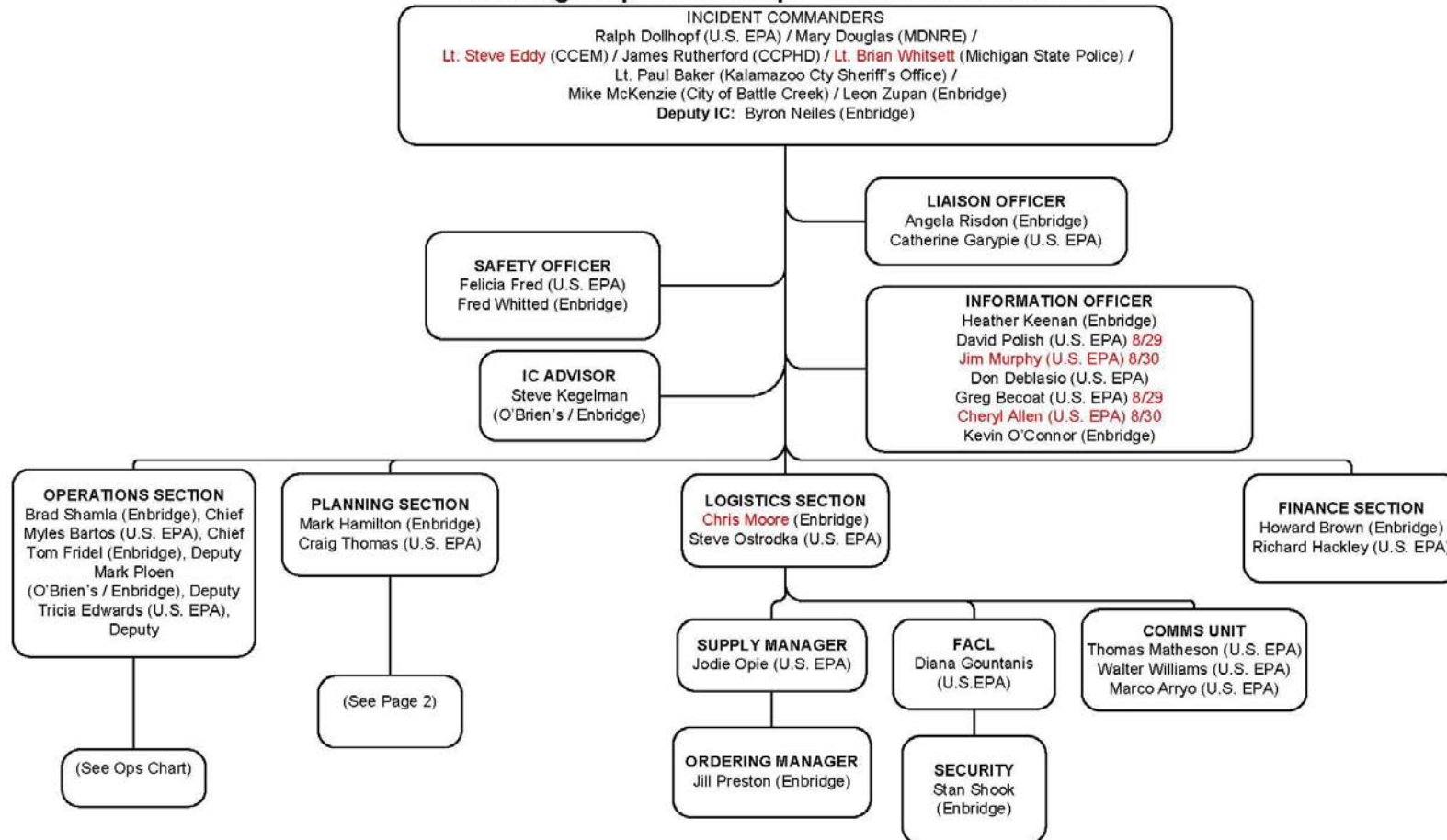


Figure 1 Unified Command



ICS 207  
 8/28/2010 1700  
 OP 8/29 - 8/31



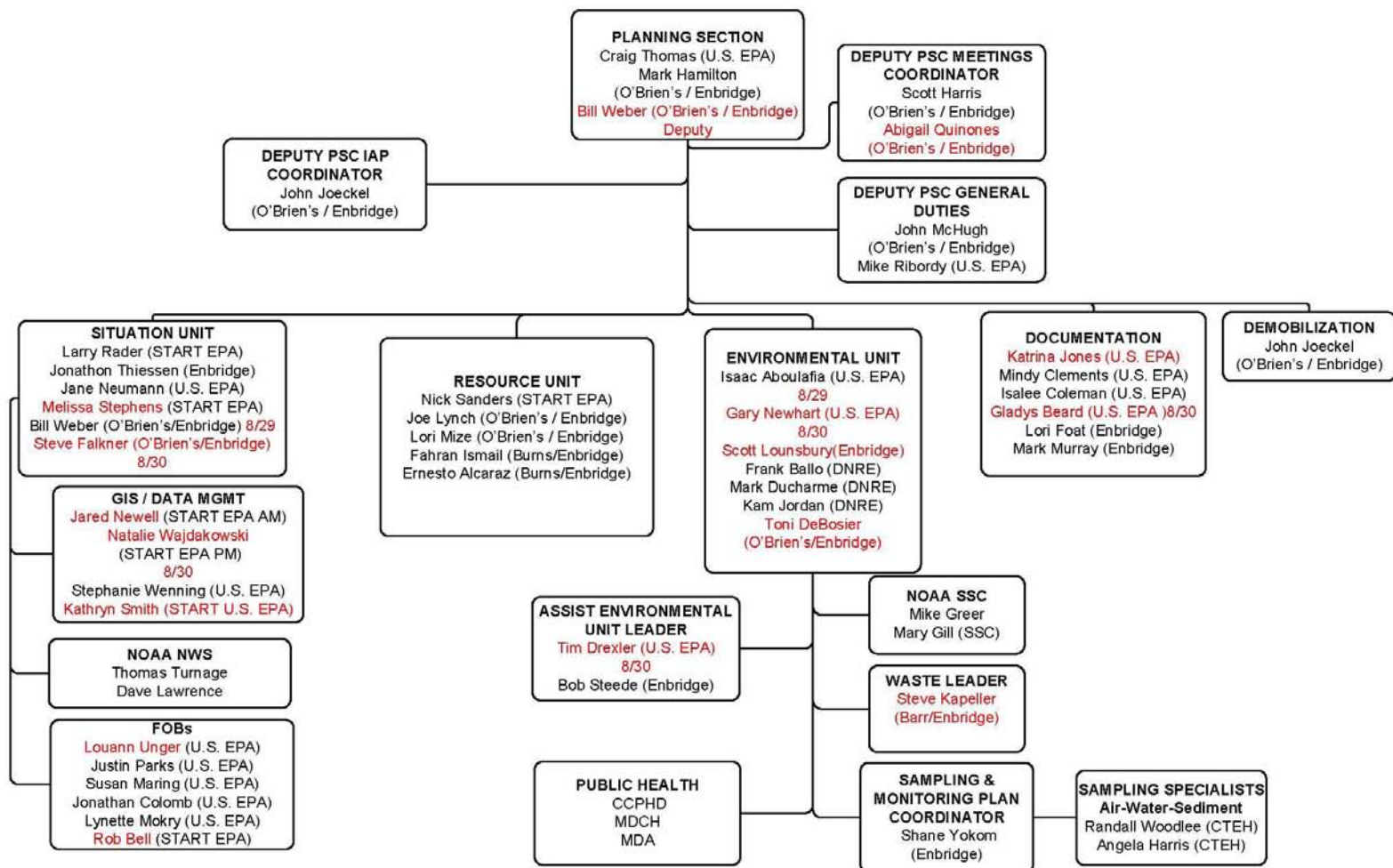
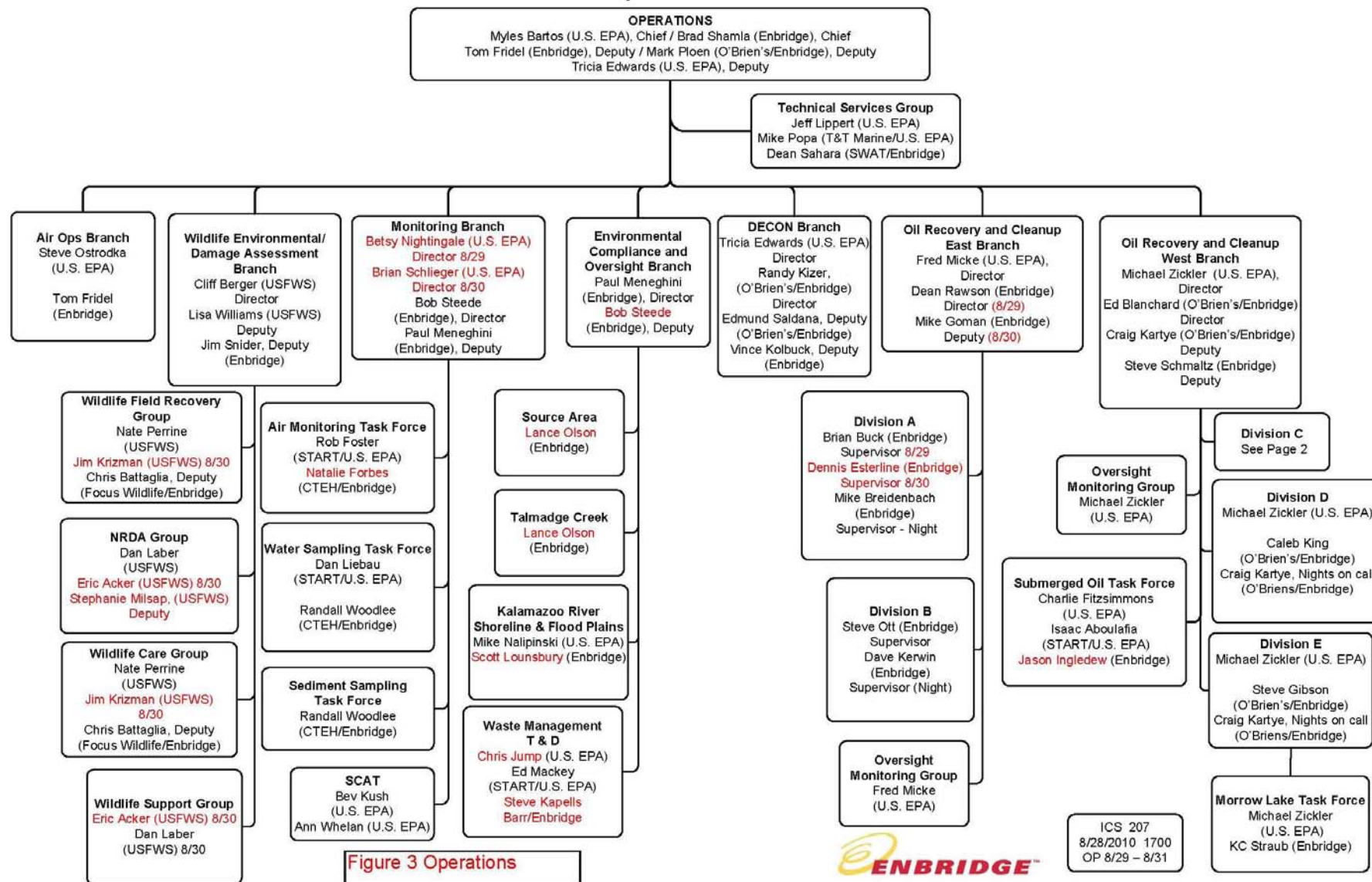


Figure 2 Planning



## Operations



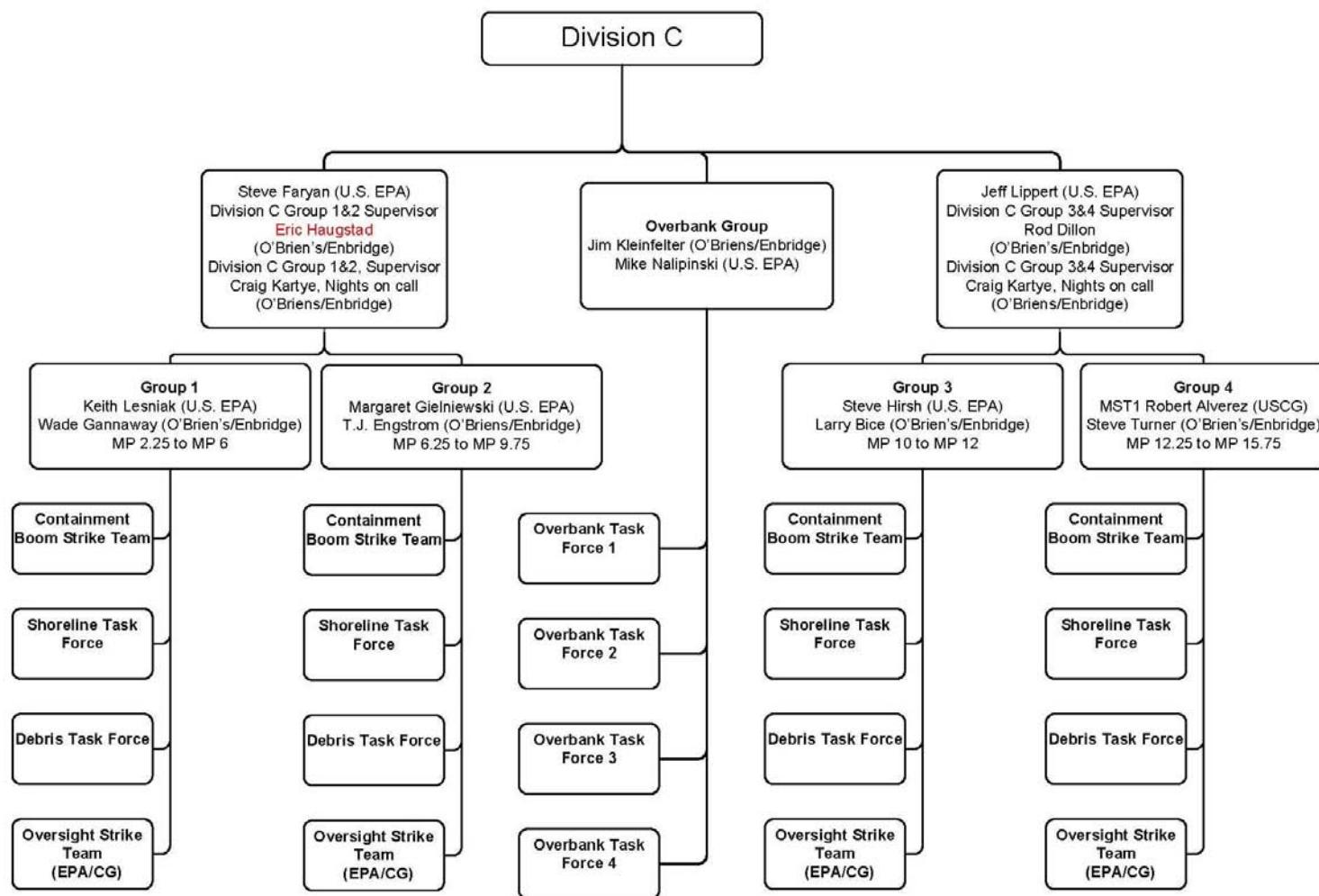


Figure 4 Division C



ICS 207  
8/28/2010 1700  
OP 8/29 - 8/31