

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 #34  
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:** 08/28/10

**Reporting Period:** 1900 hours 08/27/10 to 1900 hours 08/28/10

## 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 27, 2010, 0700 to August 29, 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 27 to 1900 hours on August 28, 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:**

- Excavation of product, restoration to grade and stabilization at Location A1 through Location A4 was 90% complete.
- Only a small portion of restoration to grade remained to be done in Location A4.
- Crews eliminated ponds that were developing in low areas.
- A flexible culvert was being installed at Location A6 to facilitate scraping activities.
- Traffic on the mat roads delayed progress at Location A6.



- They are working with MDNRE to establish natural grade elevations in order to maintain the meanders of Talmadge Creek.
- Crews observed a lot of new vegetation growth around Talmadge Creek.
- The workforce in Division A has been cut significantly.

**EPA observed the following:**

- Overnight backfilling efforts made significant progress.
- Dewatering operations and soil excavation continued.
- Excavation of hotspots in Location A1 through Location A4 was completed at 2000 hours on August 27, 2010.
- 9,000 cubic yards of backfill had been placed at Locations A1 through A4.
- Testing of the pipeline continues.

**Division B**

**Enbridge reported the following:**

- They completed the bypass piping connection at Location B2.7, completed building a discharge-diffuser to prevent erosion and dug a sump pit for the pump.
- They began operating the pump to divert water from Location B2.7.
- They completed removal of the remaining mat road that extended into Location B2.7.
- New vegetation growth was observed at Location B5.
- They continued to replace absorbent booms and absorbent sheets as needed in Division B.

**EPA observed the following:**

- Crews were vacuuming wet areas and placing and removing mats at Location B2 during night operations.
- A “pump around” was initiated during day operations at Location B2.7 so that excavation can be executed. The “pump around” was causing a slight back-up upstream and low water level below the diversion area. EPA discussed with Enbridge supervisors the strategy to address this by increasing the pumping rate. Additional observations by EPA FOB relating to this are in Section 2.2, Planning, of this report.
- Excavation was taking place near Location B5.
- No visible sheen was reaching the Kalamazoo River.
- Hot spot excavation continued across all of Division B.

**USCG observed the following:**

- Removal of vegetation at Location B4.5 released oil into Talmadge Creek, which was being captured by the flume at Location B4.5.
- Drum skimmers had been removed from Location B4.5 and Location B5.

- Oil appeared to be coming out of sediments at Location B4.2, in the middle of the creek bed.
- Matting was being removed and contaminated soils below the matting were being excavated along the creek.

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

The Submerged Oil Task Force operated on two boats, continuing to collect core samples for additional qualitative testing. The Submerged Oil Task Force continued to set up a mobile lab at the airport for use in a couple of days when quantitative sampling begins.

### **Division C**

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

- They continued to remove vegetation as needed in Division C, emphasizing island cleanup activities.
- They completed deflection boom at a railroad bridge between MP 4.0 and MP 6.0.
- Boom deployed over the last two days between MP 4.0 and MP 6.0 had sunk, requiring using resources and manpower for installation of replacement boom.
- They deployed new containment boom and absorbent boom at Location C1.
- Location C2 is being used as a decontamination, roll-off staging, and break area.
- Shoreline cleanup is 60% complete between MP 14.25 and MP 14.5.

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

- Vegetation was being cut on Island A.
- Absorbent boom was put in place to collect the oil and sheen emanating from the work being conducted on Island A.
- A large pool of oil at the island at MP 7.75.
- Crews were cutting un-oiled vegetation in two areas in Division C. EPA and Enbridge are working together on how to clarify vegetation removal instructions to crews in order to reduce the amount of vegetation removed and increase crew efficiency.
- Requested that an island east of Location C5 be re-boomed with containment boom instead of absorbent boom.

### **Division D**

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

- They continued boom management, skimming operations, decontamination operations, and limited shoreline vegetation removal.
- Crews have been reduced in this Division due to consolidation of locations and reallocation of resources to Division C.



**EPA observed the following:**

- Light sheen in Division D.
- Boom maintenance and shoreline cleaning continued in Division D.
- Visible sheen downstream of D5 to the northwest, northeast, and southeast near existing installed sweep boom.
- Visible sheen at the containment boom near the Location D5 boat launch access location.
- Gabion baskets were not catching many tar balls in Division D.

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

- Shoreline vegetation removal continued in all Locations in Division E.
- Location E1 and Location E2 crews were reassigned to Location E3.
- All aerators are functioning at Locations E1, E3, and E4.

**EPA observed the following:**

- Light sheen in Division E.
- Boom maintenance and shoreline cleaning continued in Division E.
- Skimmers and hotshot boats continued removing oiled vegetation in Lake Morrow.

**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:**

- They submitted Cleanup Documentation for Division A to EPA and subsequently submitted a revised document in response to EPA comments.
- They conducted a final walkover with EPA in Division A.
- They met with EPA to refine the SCAT process for the West Branch.

**EPA observed or took actions as follows:**

- Requested that Enbridge address some deficiencies in the Cleanup Documentation for Division A. Enbridge submitted a revised document, which is under review.
- Observed sampling of air monitoring, sediment, and surface water samples.
- Met with Enbridge and SCAT to refine their sampling process.

- Provided laminated cleanup sheets to supervisors in Division C.
- Debris removal at Location D3 looked good, but crews were uncertain about how far in to go for vegetation clearing for shoreline preparation.
- Reviewed and approved the soil data as non-hazardous and shipment of soil solid waste offsite for Soil Cell 11.
- The carbon treatment system treating non-hazardous water at Frac Tank City had been inoperable due to a slight petroleum breakthrough. Laboratory analysis did not indicate BTEX was present. The carbon treatment system was back on-line as of 1030 on August 28, 2010.
- Continued to work with Enbridge to develop best management plan (BMP) procedures to avoid de minimis hazmat mixing with non hazmat debris.
- Submitted initial comments on the draft BMP.
- OSC worked with Enbridge personnel and contractors to develop methods to calculate oil volume in soil, debris, wastewater, and tank 1605.

### **DECON Branch**

#### Enbridge reported the following:

- They continued making final revisions to the approved decontamination plan.
- They continued to construct a decontamination staging area at Location C0.5.
- Frac tank cleaning and confined space entry system is operational.
- They conducted a confined space entry practice, which went well.

#### EPA took the following action:

- Conditionally approved the decontamination plan.

## Monitoring Branch

Enbridge reported the following:

- The air sampling program continued 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.
- Its air sampling program continued to focus around Baker Estates mobile home park, the Ceresco Dam, and the leak site.
- They collected the following samples:

**Table 1. Samples collected 08/28/10**

Sample Type	Number collected
Surface Water	15
Vertical Water Column Samples	8
Private Well Samples	0
Sediment Samples	11
Sheen Samples	1
Other	0
Soil Samples	0

EPA observed the following or took the following actions:

- Continued air monitoring in all divisions.
- Tedlar bag air samples were collected in the 11 grid areas of Division B and in the five focus areas (Daycare Center, Baker Estates, Frac Tank Storage Area, Squaw Creek, and Ceresco Dam).
- Shadowed one CTEH air monitoring crew in Division B and Division C.
- Forwarded one odor complaint to Enbridge.
- Sampling activities were turned over to Enbridge personnel for the night shift. (Note: Air samples were not collected for the night shift on 08/27/10 due to a misunderstanding of the takeover date.)
- All Tedlar bag samples submitted for analysis were below 6 ppbv for benzene.
- Four teams collected SCAT field data in Division C from MP 13 to MP 17.
- Collected the following monitoring samples:

**Table 2. Samples Documented in SCRIBE as of 08/28/10**

Media	Sample Type	Number collected
Air	Summa Canister	0
Air	Tedlar Bags	0
Air	Monitoring Samples	23
Surface Water	Grab	0
Sediment	Grab	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 241 animals in live care. A total of 365 animals have been rehabilitated and released. USFWS is continuing to assess implementation of floodplain cleanup recommendations and assessing and addressing oil residuals in sediment. USFWS continues to collect ephemeral data for the NRDA, primarily floodplain surveys of percentage of oiling of soils, herbaceous vegetation, shrubs, and trees. Two vegetative community teams determined baseline conditions of plant communities in Division C. The Wildlife Branch brought in 20 turtles and 2 frogs. They are operating approximately 80 traps in addition to a hand netting and surveillance team. The turtle care area and turtle washing areas at the Wildlife Recovery Center expanded. The Wildlife Branch evaluated potential new release sites.

## Air Ops Branch

Enbridge reported the following:

- Conducted 7 over-flights.
- No sheen observed within the boom area at the confluence of Talmadge Creek and Kalamazoo River.
- The mud line was still noticed in the same area but had diminished from the flight on 08/27/10.
- No sheen observed trailing off any of the islands in Division C.
- Very little sheen observed downstream of Division C.
- The only area of significant sheen was observed in the oxbow extending north of the main channel at MP 21.5.
- No visible sheen observed on Morrow Lake or in the wetland area at the delta of the lake.
- Sediment sampling activities on Morrow Lake were less active, so the significant sheen and mud line seen on 08/27/10 were reduced, but a small area was still visible.
- Sheen monitors continued to operate on Lake Morrow and their locations remained the same.

EPA observed the following:

EPA START accompanied Enbridge on one over-flight for observation in preparation of the daily situational briefing. 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.

- During the over-flight, EPA START observed topsoil south of the pipeline release point.
- Soil placement appeared complete as there was little to no activity in Division A.
- There was a soil staging area where trucks were actively being loaded.
- Heavy activity at islands upstream of Ceresco Dam and sheen was being effectively contained and collected.
- Sheen persisted in the oxbow area at MP 21.5.
- The aerator at Location E1 was not operating because it appeared that it was being refueled.
- Some stirring of sediment by the recovery boat on Morrow Lake, but it was less than what was observed on 08/27/10.

### 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 08/27/2010 1900**

Number of Locations	34
Boom Deployed (feet)	124,528

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 08/27/10**

Waste Stream	Quantity Shipped	Cumulative Quantity Shipped*
Haz Soil <sup>a</sup>	0 yd <sup>3</sup>	15,344 yd <sup>3</sup>
Non Haz Soil <sup>b</sup>	1638 yd <sup>3</sup>	3526 yd <sup>3</sup>
Debris <sup>c</sup>	20 yd <sup>3</sup>	12,045 yd <sup>3</sup>

\* 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.

## 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) (8/28/10 0700)
Division A	4,552,490
Division B	2,953,575
Division C	756,800
Division D	117,825
Division E	49,950
Undetermined	109,200
<b>TOTAL</b>	<b>8,539,840</b>

**Table 6. Oil-Water Separation as of 08/27/10**

Oil-Water Separation at Tank 1605, Enbridge Facility in Griffith, IN Facility (gallons)	
Oil	669,000
Water	1,440,000
<b>TOTAL</b>	<b>2,109,000</b>

**Table 7. Liquid Shipped Off-Site 08/27/10**

Oil/Water Leaving Site	Destination	Cumulative Quantity Shipped (gallons)
Haz Water	Dynecol, Detroit, MI	1,884,483
Treated Non Haz Water	Dynecol, Detroit, MI	134,200
Treated Non Haz Water	Battle Creek POTW	1,968,700
Treated Non Haz Water	Liquid Industrial Waste Services, Holland, MI	332,700
Treated Non Haz Water	Plummer, Kentwood, MI	546,500
Oil/Water	Tank 1605, Enbridge Facility, Griffith, IN	2,109,000
<b>TOTAL</b>		<b>6,975,583</b>

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

Oil/Water Collected <sup>a</sup>	8,539,840
Oil/Water Shipped Off-site <sup>b</sup>	6,975,583
<b>OIL/WATER REMAINING ON-SITE</b>	<b>1,564,257</b>

a. As of 08/27/10 0700

b. As of 08/26/10



## 2.2 Planning Section

The DMU began its first day of operating only during the day shift as a result of the shift in air monitoring and sampling operations to Enbridge. The DMU continued importing preliminary and validated data into SCRIBE. EPA GIS continued the map processing, as requested.

EPA FOB observed the following:

- Cleanup and backfill operations in Division A were not active and appeared to be generally completed.
- Creek diversion, dewatering operations, excavation of contaminated soil, and product collection at Location B2.75.
- Work crews had installed two inflatable bladder dams in Location B2.75 to prevent water from moving through that section. The isolated area was subsequently dewatered, and oiled soil was scraped.
- A test run for the fractionation tank decontamination system. As tanks are drained and prepared for demobilization, they are mobilized to a decontamination pad for a full internal and external decontamination.
- Observed the Enbridge confined space entry preparation and practice.

### 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. 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. A backup copy of all networked files will be stored and secured in a location separate from the server located in the communications trailer.

## 2.4 Finance Section

The current NPFC issued ceiling is \$16 million. Approximately 78.9% of the ceiling has been spent through August 27, 2010, with a burn rate of \$269,371 per day. These cost summaries reflect only EPA-funded expenditures for the incident.

**Table 9. FPN E10527 - Enbridge Pipeline Oil Spill**

As of: 8/27/2010

ERRS Contractors		Est. Expended	Est Burn Rate (Lastest Daily)
EQM (EPS50802)	T057	\$1,258,770	\$0
	T060	155,934	12,000
LATA (EPS50804)		1,451,396	0
ER LLC (EPS50905)		723,669	0
ERRS Contractors		\$3,589,768	\$12,000
START Contractor			
WESTON (EPS50604)		3,865,542	111,331
Response Contractor Sub-Totals		\$7,455,310	\$123,331
EPA Funded Costs:			
Total EPA Costs		2,634,449	86,225
Pollution Removal Funding			
Agreements:			
Total Other Agencies		\$962,792	\$26,424
Sub-Totals		\$11,052,552	\$235,980
Indirect Cost (14.15%)		1,563,936	33,391
Total Est. Oil Spill Cost		\$12,616,488	\$269,371

## 2.5 Safety Officer

The EPA Safety Officer reported a minor car accident in which no one was hurt and Enbridge was notified. The Enbridge Safety Officer reported a minor injury and a minor car accident. The car accident resulted in law enforcement response.

## 2.6 Liaison Officer

The LNO provided information to the City of Battle Creek regarding the source of topsoil being used in Division A.

## 2.7 Information Officer

PIO staff prepared message to distribute to area schools about truck traffic as well as a fact sheet to update residents about cleanup activities and safety issues.

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

### **Media Inquiry Line (877-440-7157)**

Calls received during reporting period: 1

Enbridge reported the following call volume and community center visits:

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

Calls received during reporting period: 54

### **Community Center Visits: 27**

Visits by location during reporting period:

Battle Creek 15

Marshall 12

Enbridge did not report inquiries from its [www.response.enbridgeUS.com](http://www.response.enbridgeUS.com) website.

## 2.8 Response Actions to Date

Response Actions to date may be found in Situation Reports 1 through 33.

### 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 Battle Creek

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

MDNRE

Michigan State Police

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 08/28/10**

Agency/Entity	Numbers Reported
EPA	50
START	46
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	4
Michigan State Police (MSP)	1
NOAA - National Weather Service	2
NOAA- NRDA	2
USCG	8
USDA	2
USFWS	8
USFWS Contractors	2
Enbridge	12
Enbridge Contractors	1435
<b>Total</b>	<b>1586</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>.

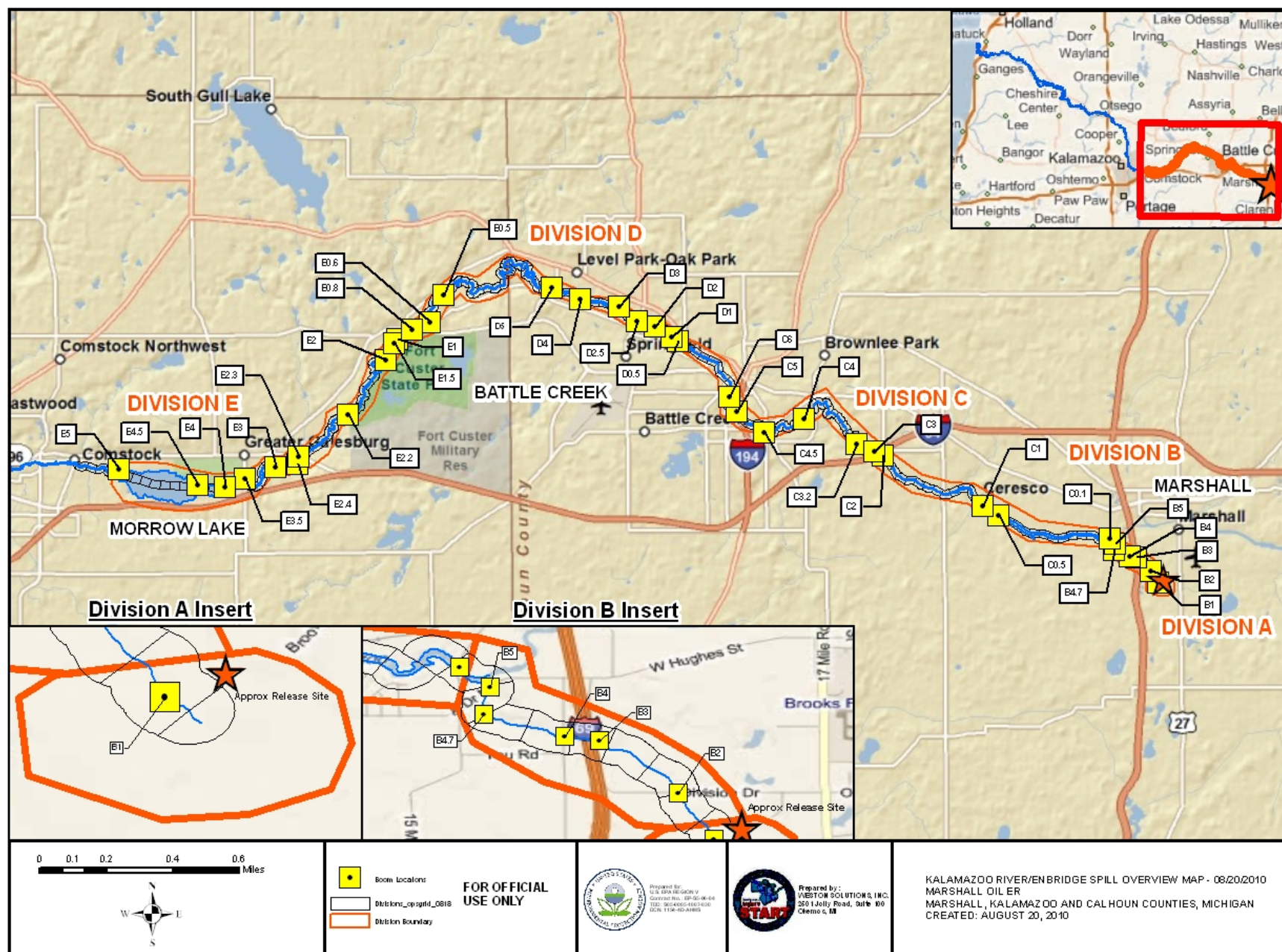
### **6.2 Reporting Schedule**

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

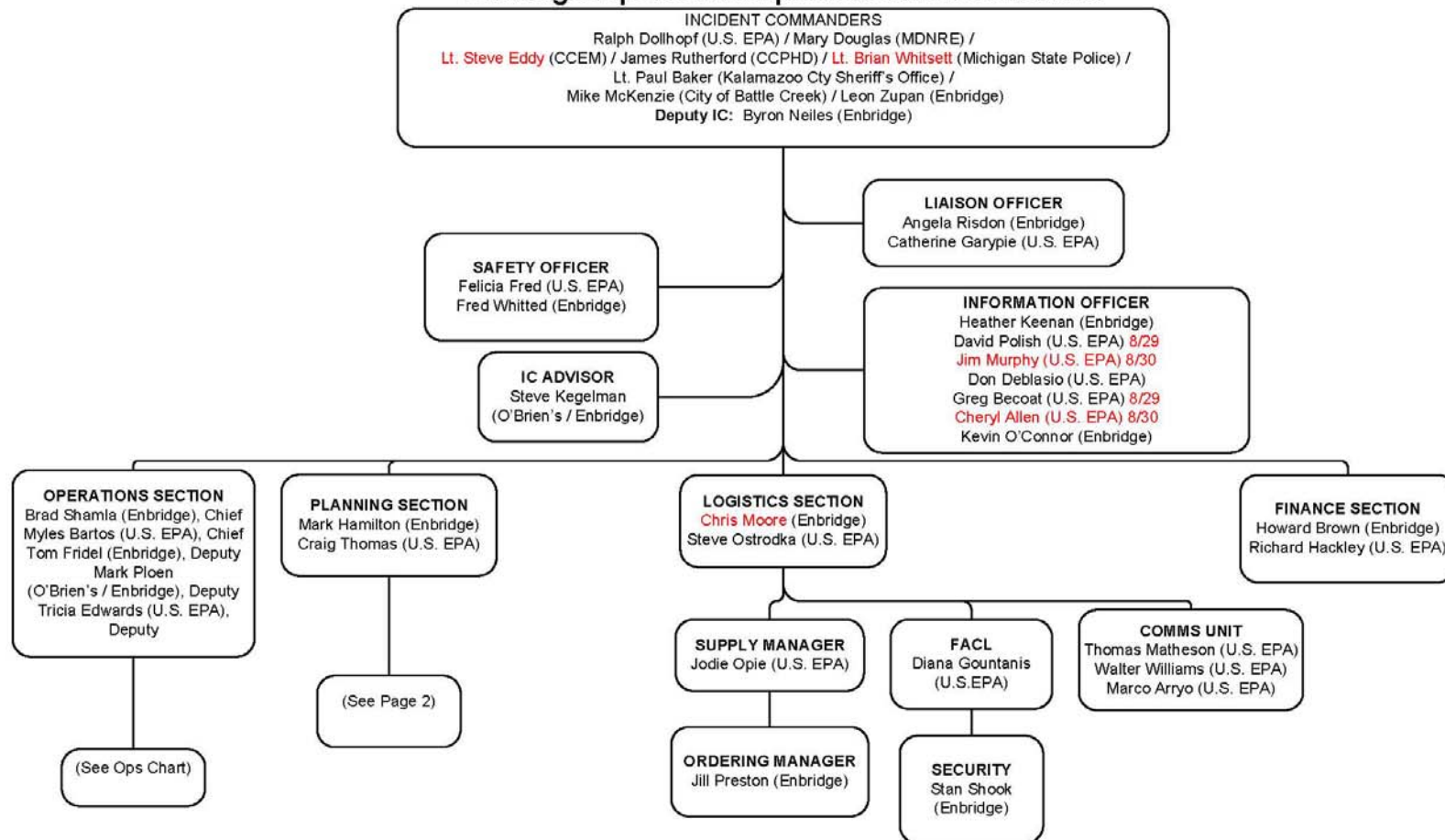


Figure 1 Unified Command



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



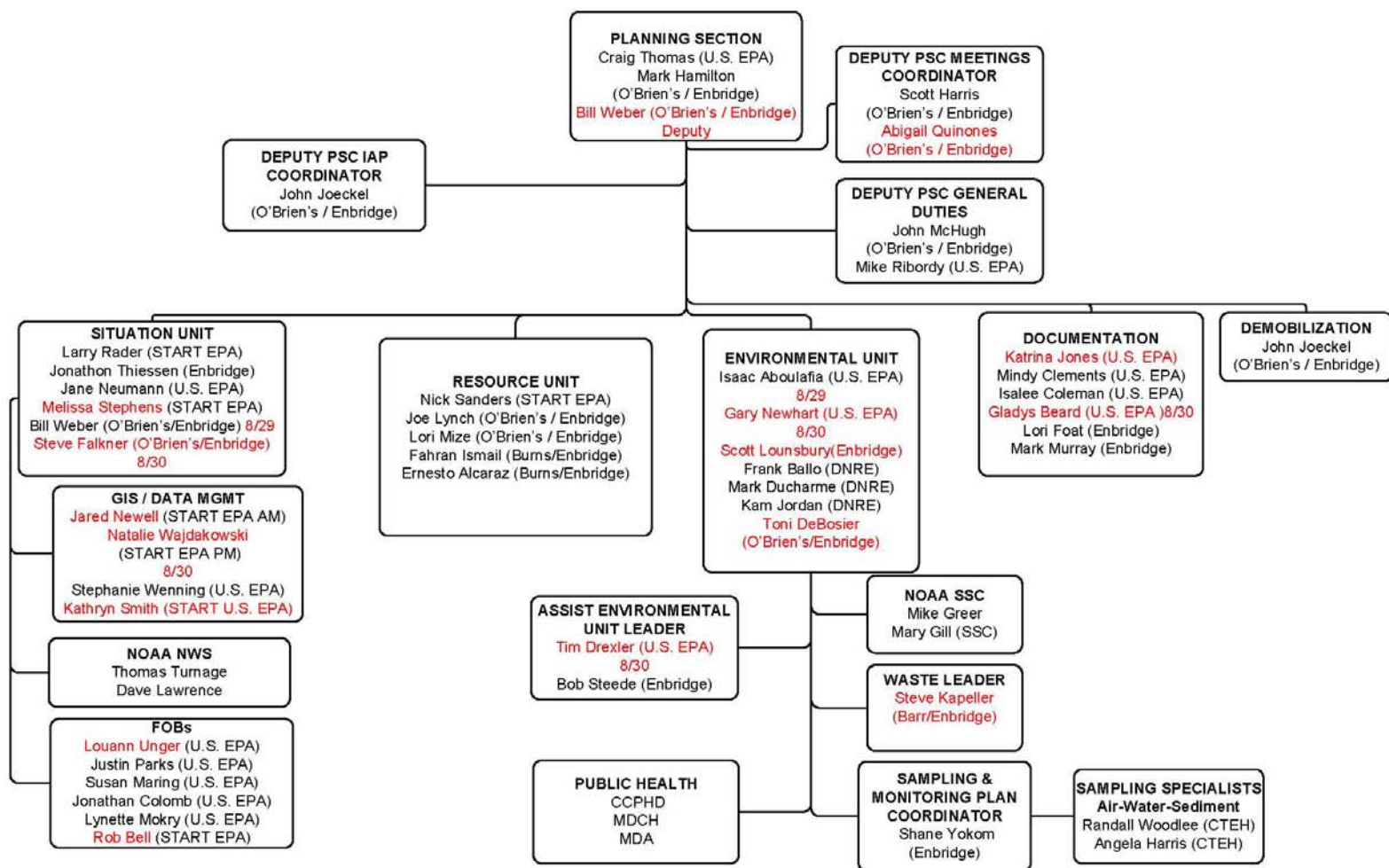


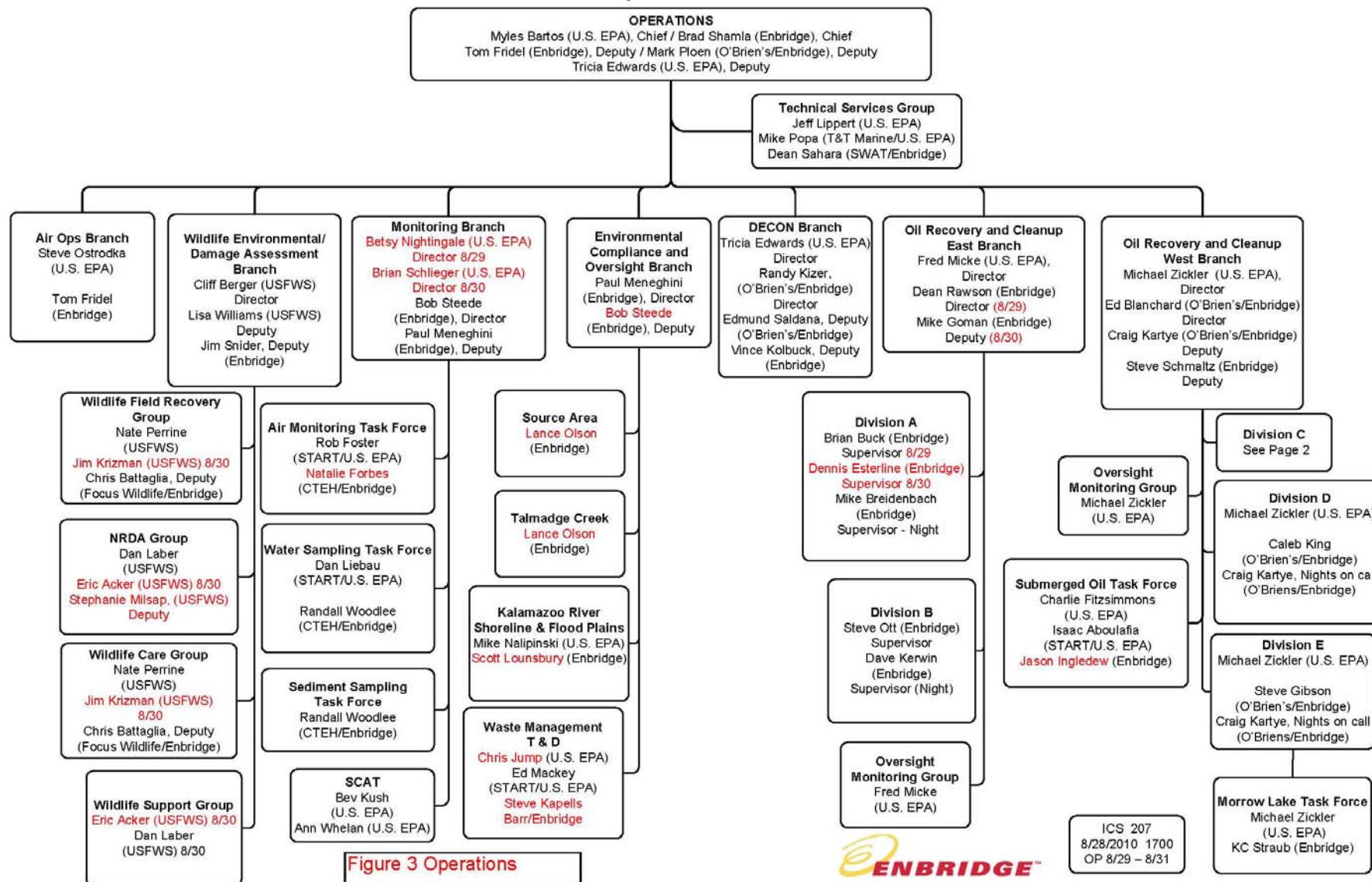
Figure 2 Planning



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



## Operations



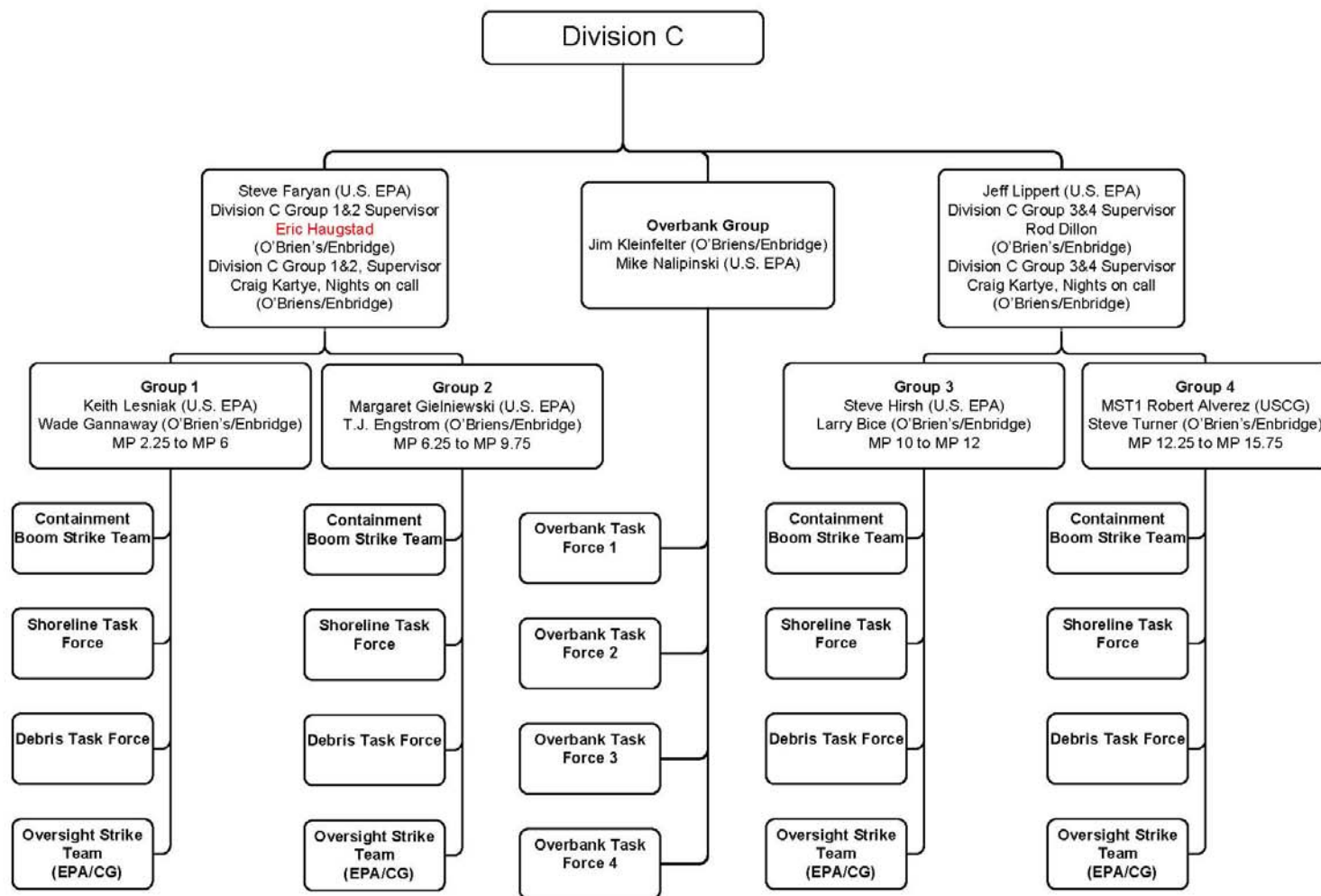


Figure 4 Division C



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