

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 #31
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: 08/25/10

Reporting Period: 1900 hours 08/24/10 to 1900 hours 08/25/10

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 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) Review SCAT recommendations with Science Team, with emphasis on Division C, to coordinate near-term cleanup efforts.
- 3) Concentrate resources for river, shore, and floodplain cleanup and sheen management in Division C, with emphasis on increased overall work efficiencies.
- 4) SCAT update on entire river system.
- 5) Enbridge to maintain primary responsibility for planning cycle and IAP development:
 - Monitor effectiveness of IAP briefing and use by Operations;
 - Reevaluate timing of operational period and meeting schedule; and
 - 0630 Operations briefing at the new CP with Command & General Staff.

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.
- 3) Review potential completion status of Division A (Source Area).

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 24 to 1900 hours on August 25, 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 focusing resources on Division A to complete cleanup efforts by August 27, 2010. Enbridge reported removing standing oil in Division A. Enbridge reported continuing removal of contaminated soil to the containment site. Enbridge continued scraping soil with a backhoe working downstream towards Division B. Enbridge reported continuing with the approved Pipeline Repair Plan including backfilling, chipping and clearing activities. Enbridge reported Division A nearing completion.

EPA

EPA observed increased activity in Division A during night operations and at 0400 observed that hot spot excavation had ceased and backfilling was progressing well. Hot spot excavation was subsequently observed during day operations.

Division B

Enbridge

Enbridge reported flushing the east and west bank of Talmadge Creek in the southern portion of Division B. Enbridge reported continued oil collection at boom containment sites and replacement of contaminated boom as required. Crews worked on chipping and scraping of oiled bank vegetation and soil along Talmadge Creek. Enbridge reported laying swamp mat road along Talmadge Creek and constructing berms, flumes, and mat roads at Location B2.7

Enbridge reported an archeologist onsite during scraping near an old foundation located next to Talmadge Creek at Location B4.2.

EPA

Silt fence placement was on target to be completed during this operational period. EPA and START continued collection of turbidity data during bank excavation along Talmadge Creek. EPA observed ongoing oil collection operations. Excavation of hotspots continues throughout Division B. Two underflow dams have been constructed between Locations B4.7 and B5.0.

Submerged Oil Task Force (Division C, D, and E)

The Science Team meeting included discussion of providing technical expertise to support operations in the evaluation of submerged oil, in addition to such things as groundwater flow modeling, SCAT coordination, and countermeasure evaluations. The Science Team will serve in an advisory capacity only. Ultimate authority for all actions continues to reside with the FOSC. The team requested representation from operations to get accurate updates about the current operations.

Division C

Enbridge

Enbridge reported it is implementing a new island access plan to minimize vegetation damage, employing step-wise plywood placement among other measures. Enbridge reported additional oil coming from Location C6. Enbridge reported the creation of a new deployment site at MP 14. The overbank group discovered additional oil at "Pooled

oil” Site 11. Enbridge reported continuing extensive operations in Division C collecting oily water, maintaining boom, removing debris and cleaning shoreline. Enbridge reported adding resources to Division C to expand the cleanup efforts.

EPA

EPA observed crews clearing oiled vegetation on Island E at MP 3.75 to MP 4.0. The work was estimated as partially completed on this island. EPA reported the discovery of a wetland behind the staging area at Location C1.5. EPA observed concentrated sheen flowing under 9 ½ Mile Bridge emanating from the island at Location C3, which had not been boomed. EPA observed sheen from the boat dock near 9 ½ Mile Bridge. EPA observed an increase in tar ball occurrence; specifically at Location MP 6.25, downstream from the Ceresco Dam, and at Location MP 6.75. EPA observed rakes being used to work snare boom into oiled soil replacing the “stomping” practice in Group 3 (MP 10 to MP 12). EPA requested an evaluation of booming strategies at Location C6 where sheen was observed. EPA observed Enbridge crews removing surface debris.

EPA observed two oiled blue herons. Wildlife staff were unsuccessful in netting the birds. EPA observed workers conducting operations without proper PPE and smoking outside of a designated smoking area. Enbridge supervisors were notified.

Division D

Enbridge

Enbridge reported considerable resources were devoted to the creation of a single, consolidated deployment site at Location D2. As a result of consolidation of deployment sites in Division D, Enbridge is reallocating resources to Division C. Additionally, Enbridge reported that boom maintenance, vegetation removal, and skimming operations continued.

EPA

EPA reported that the installation of the X-TEX sediment boom just above Location D4 was on target to be completed during this operational period. EPA observed ongoing boom maintenance activities, shoreline cleaning, and the collection of oiled debris and vegetation. EPA START observed continuing sheen on north bank of Location D5 (Custer Street Bridge). EPA observed an increase in the number of the gabion baskets upstream of Location D 2.5. EPA observed sediment sampling on the shoreline below the bridge near Location D2.5.

Division E

Enbridge

Enbridge reported vegetation and debris removal today. Enbridge reported Location E2 being used exclusively for boat launching. Enbridge reported deploying more silt fence in Location E4 and investigating Morrow Lake for sheen and tar balls.

EPA

EPA observed the ongoing installation of gabion baskets in Division E. EPA also observed oil collection operations, shoreline cleaning, skimming operations, and boom maintenance in Division E.

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 met with EPA to refine the SCAT process for the West Branch. Enbridge also reported they provided oversight for cleanup activities within Divisions C, D and E.

EPA observed sampling of contaminated soil, air monitoring, surface water, and debris. EPA Transportation and Disposal Team checked solid and liquid waste projections, audited soil waste manifests, and met with SITL to resolve waste and oily water reporting discrepancies.

DECON Branch

Enbridge

Enbridge submitted a revised decontamination plan to EPA. Enbridge reported setting up a decontamination staging area at C0.5

EPA

EPA received the revised decontamination plan. It is currently in review.

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, with a new focused monitoring program at Morrow Lake.

Enbridge reported collecting the following samples:

Sample Type	Number collected*
Surface Water	20
Private Well Samples	1
Sediment Samples	11
Other	0
Soil Samples	0
Vertical Water Column Samples	8

*Reflects samples collected 08/25/10

EPA

EPA 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). All Tedlar bag samples submitted for analysis were below 6 ppbv for benzene.

EPA collected the following monitoring samples:

Media	Sample Type	Number collected*
Air	Summa Canister	0
Air	Tedlar Bags	16
Air	Monitoring Samples	331
Surface Water	Grab	0
Sediment	Grab	0

*Reflects samples documented in SCRIBE as of 8/25/10.

During this operational period, the three SCAT teams assessed portions of the banks and islands in Division C from MP 2.25 to MP 5.75. SCAT teams observed and geo-located pooled oil on the islands

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 218 animals in live care. A total of 306 animals have been rehabilitated and released. USFWS crews reported that the oil slick at MP 36 in Division E appeared larger on 8/24/10 than on 8/23 and expressed continued concern on 8/25 that a boom had not been placed in the immediate area of concern on the south shore of the river where it widens into Morrow Lake. USFW continues to collect ephemeral data for the NRDA, primarily floodplain surveys of percentage of oiling and worked on protocols to determine baseline conditions of plant communities. MDNRE staff sampled mussels.

Air Ops Branch

Enbridge

Enbridge reported conducting 6 over-flights. Enbridge reported to Operations that multiple boats were creating a wake onto the shoreline. Enbridge reported a heavy mud-line at the confluence of Talmadge Creek and the Kalamazoo River. Enbridge reported no visible sheen trailing from the islands in Division C. Enbridge reported no visible sheen flowing over the Ceresco dam. No visible sheen was reported on Morrow Lake and no sheen was observed in the wetland area at the delta of the lake.

EPA

EPA START accompanied Enbridge on one over-flight for observation in preparation of the daily situational briefing. As of August 23, 2010, both the EPA START SitRep contractor 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. EPA observed a significant reduction in the sheen in the Mill Pond. EPA also observed boats creating a wake in the river.

2.1.2 Progress Metrics

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

Waste Tracking

Waste Stream	Quantity Shipped (8/24/2010)	Cumulative Quantity Shipped*	Quantity On-Site Awaiting Disposal*
Soil ¹	744 yd ³	14,518 yd ³	19,225 yd ³
Debris ²	775 yd ³	10,500 yd ³	NA
Treated Non Haz Water ³	172,100 gallons	3,143,900 gallons	NA
Haz Water ⁴	82,310 gallons		
Oily Water (Griffith, IN)	7,956,144 gallons		

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

** Data previously reported was barrels incorrectly labeled as gallons. Data will be reported in gallons.

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 to Dynecol, to Plummers, discharged through A-1 NPDES discharge point, and was previously sent to the Battle Creek POTW and Liquid Industrial Waste Services.
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) (8/25/10)
Division A	4,273,709
Division B	2,816,175
Division C	742,900
Division D	117,825
Division E	45,350
Undetermined	109,200
TOTAL	8,105,159

Oily Water Shipped Off-Site (8/24/10)		
Oily Water Leaving Site	Destination	Cumulative Quantity Shipped (gallons)
Haz Water	Dynecol, Detroit, MI	1,785,068
Treated Non Haz Water	Dynecol, Detroit, MI	124,700
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	107,500
Oily Water	RP facility, Griffith IN	2,091,000
TOTAL		6,409,668

Oily Water Volume Summary (gallons)	
Oily Water Collected	8,105,159
Oily Water Shipped Off-site	6,409,668
OILY WATER REMAINING ON-SITE	1,695,491

Oil-Water Separation at Griffith IN Facility (gallons) (8/24/10)	
Oil	654,000
Water	1,437,000
TOTAL	2,091,000

Boom Report

Number of Locations	32
Boom Deployed (feet)	148,315*

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 8/24/10 1900

2.2 Planning Section

ENVL participated in the Submerged Oil Task Force meeting and met with the PIO to discuss data transfer transparency issues.

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 a Public Health Workgroup meeting today at 1100. Public Health reviewed ground water and well water sampling data, air sampling and monitoring data, notification letters of testing results, the data reporting transition from EPA to Enbridge, and the Public Health Update Document. 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. Additionally, there are continuing safety issues identified by MIOSHA regarding electrical issues, slip and trip issues, and non-secured stairs.

2.4 Finance Section

The current NPFC issued ceiling is \$16 million. Approximately 76.1.6% of the ceiling has been spent through August 24, 2010, with a burn rate of \$315,771 per day. These cost summaries reflect only EPA-funded expenditures for the incident.

FPN E10527 - Enbridge Pipeline Oil Spill 8/24/2010

ERRS Contractors		Est. Expended	Est Burn Rate (Lastest Daily)
EQM (EPS50802)	T057	\$1,258,770	\$0
	T060	118,938	14,000
LATA (EPS50804)		1,451,396	0
ER LLC (EPS50905)		723,669	0
ERRS Contractors		<u>\$3,552,773</u>	<u>\$14,000</u>
START Contractor			
WESTON (EPS50604)		<u>3,504,044</u>	<u>129,961</u>
Response Contractor Sub-Totals		\$7,056,817	\$143,961
EPA Funded Costs:			
Total EPA Costs		2,447,449	95,450
Pollution Removal Funding			
Agreements:			
US FWS		271,320	8,560
Total Other Agencies		\$1,156,032	\$37,217
Sub-Totals		\$10,660,298	\$276,628
Indirect Cost (14.15%)		<u>1,508,432</u>	<u>39,143</u>
Total Est. Oil Spill Cost		<u>\$12,168,730</u>	<u>\$315,771</u>

2.5 Safety Officer

Fish & Wildlife requested permission from EPA Safety to use a kayak in Division C; specifically Location C1.5 to Location C5. EPA denied the request but gave permission for kayak access in Divisions D and E. One minor first aid injury was reported and one

minor vehicular incident with property damage occurred. The Enbridge Safety officer reported at the 1600 Planning Meeting that a wheel fell off of a transport vehicle hitting a car which resulted in damage to the car but no injuries. Additionally, the Enbridge Safety Officer reported at the Planning Meeting that two employees were engaged in an altercation. No other incidents were reported.

2.6 Liaison Officer

The LNO attended the Science Team meeting to gauge the interest of the assisting and cooperating agencies in maintaining continued participation. The LNO also held an evening meeting with representatives from the assisting and cooperating agencies.

2.7 Information Officer

PIO staff arranged and monitored television interviews with Lansing TV-6 and TV-13 with the EPA Deputy Incident Commander. PIO hosted the weekly media briefing. PIO established a new media inquiry hotline number. PIO began development of a near-term and future PIO/JIC staffing and action plan to be presented to the Unified Command for review. PIO arranged photo opportunities for photographers from Michigan Department of Natural Resources and Environment and EPA Region 5.

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

Media Inquiry Line (877-440-7157)

Calls received during reporting period: Two

Media inquiry calls related to the two interviews.

Enbridge reported the following call volume and community center visits:

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

Calls received during reporting period: 114

Community Center Visits: 44

Visits by location during reporting period:

Battle Creek 31

Marshall 14

Enbridge reported that it received two inquiries from its www.response.enbridgeUS.com website.

2.8 Response Actions to Date

Response Actions to date may be found in Situation Reports 1 through 30.

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

4.0 Personnel On Site

Agency/Entity	Numbers Reported
EPA	51
START	62
Calhoun County Public Health Dept. (CCPH)	4
Calhoun County (CC) Sheriff	3
City of Battle Creek	3
Kalamazoo Sheriff	2
MDA	0
MDCH	0
MDNRE	21
Michigan State Police (MSP)	7
NOAA - National Weather Service	2
NOAA- NRDA	4
USCG	8
USDA	2
USFWS	12
USFWS Contractors	2
Enbridge	20
Enbridge Contractors	1553
Total	1756

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>.

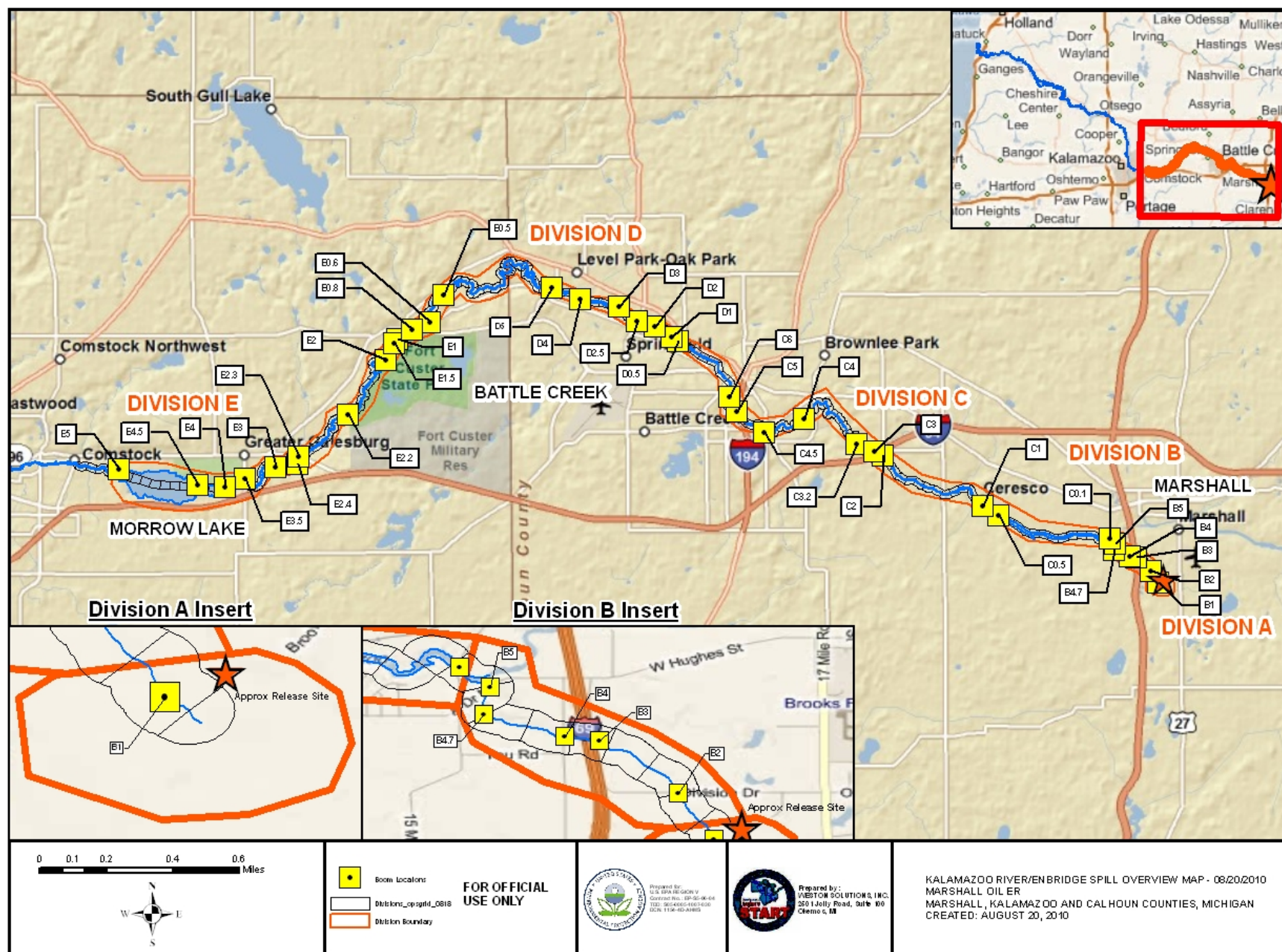
6.2 Reporting Schedule

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

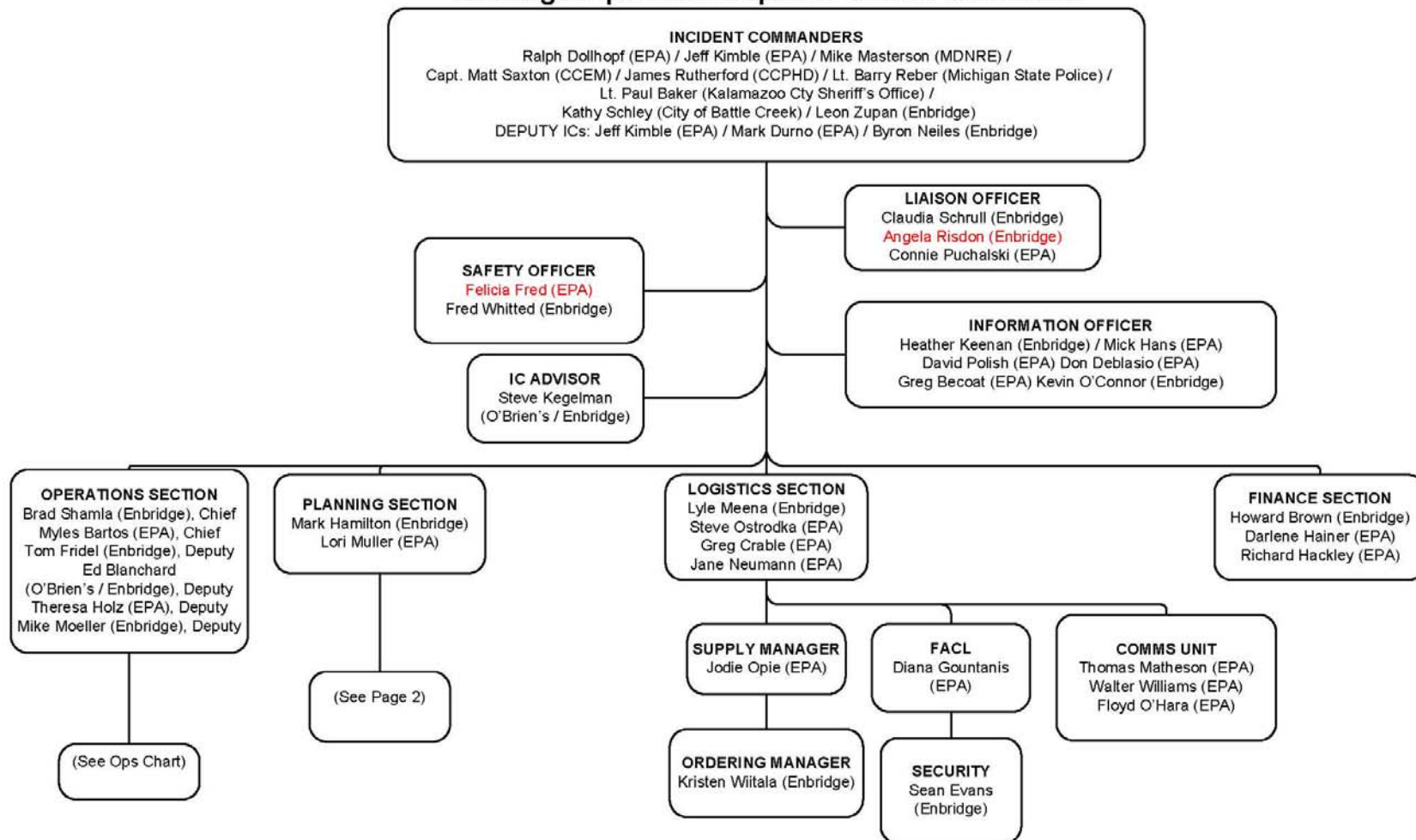


Figure 1 Unified Command



ICS 207
 8/24/2010
 OP 8/25 - 8/26

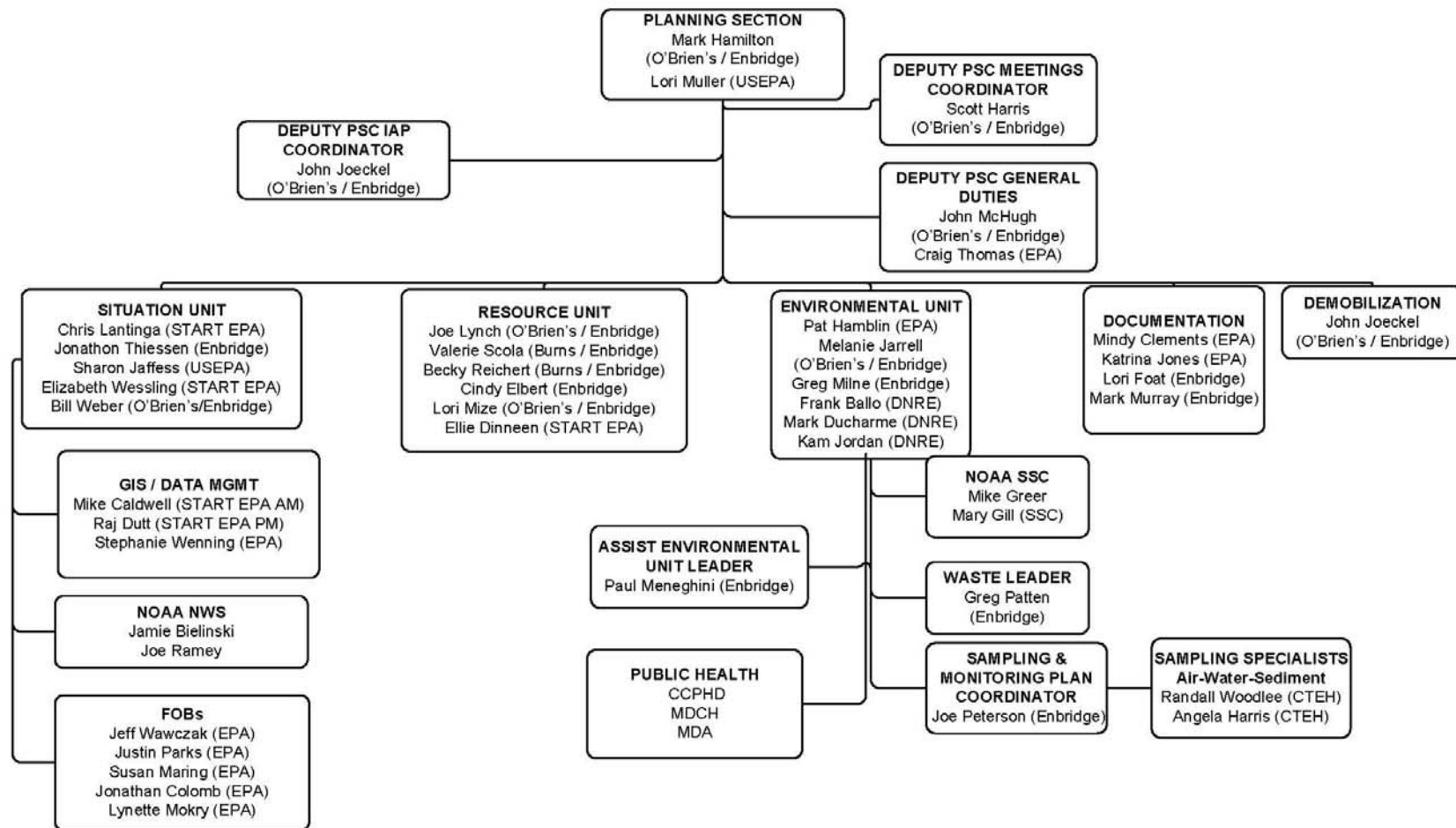


Figure 2 Planning Section



Operations

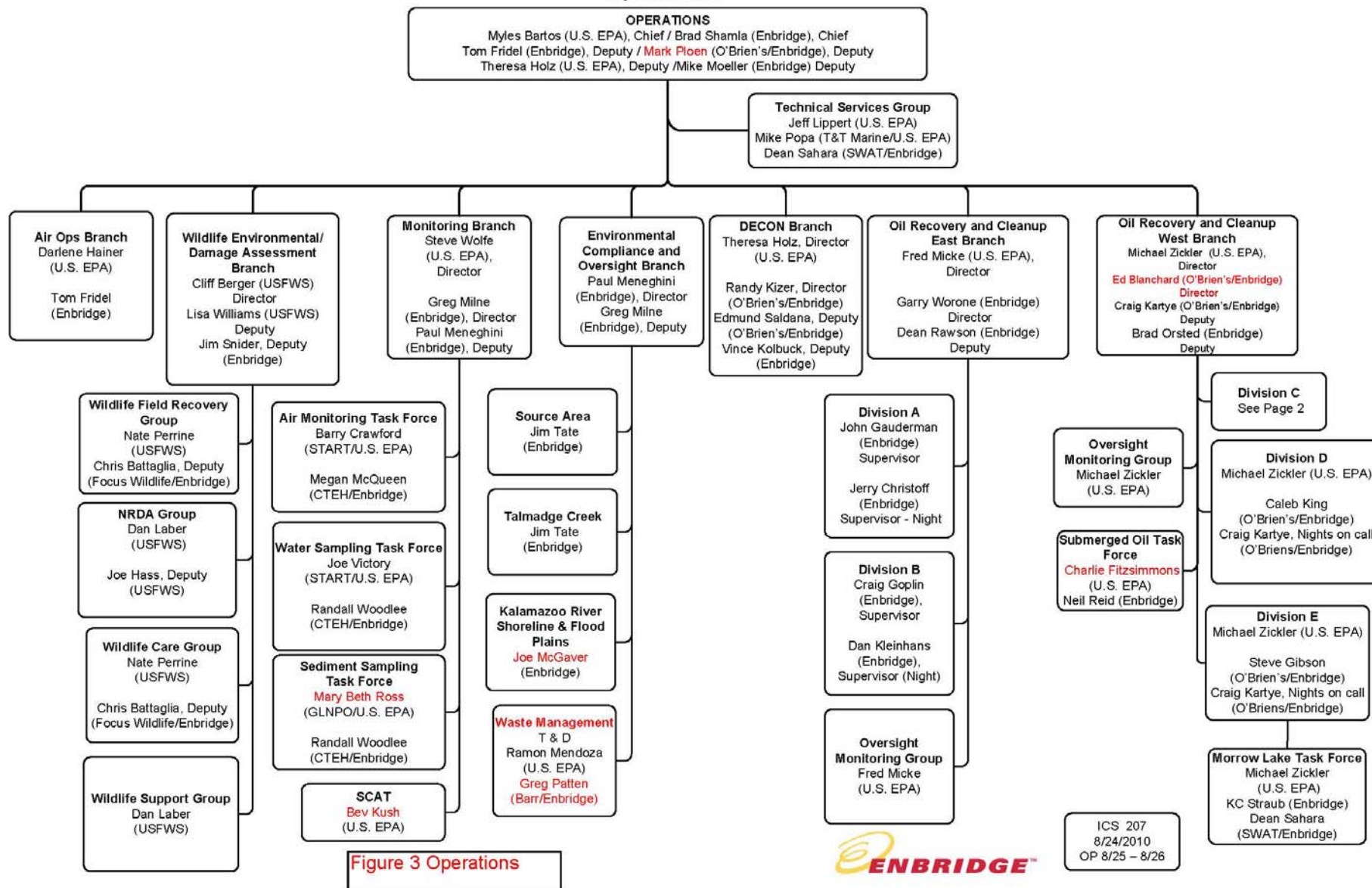


Figure 3 Operations

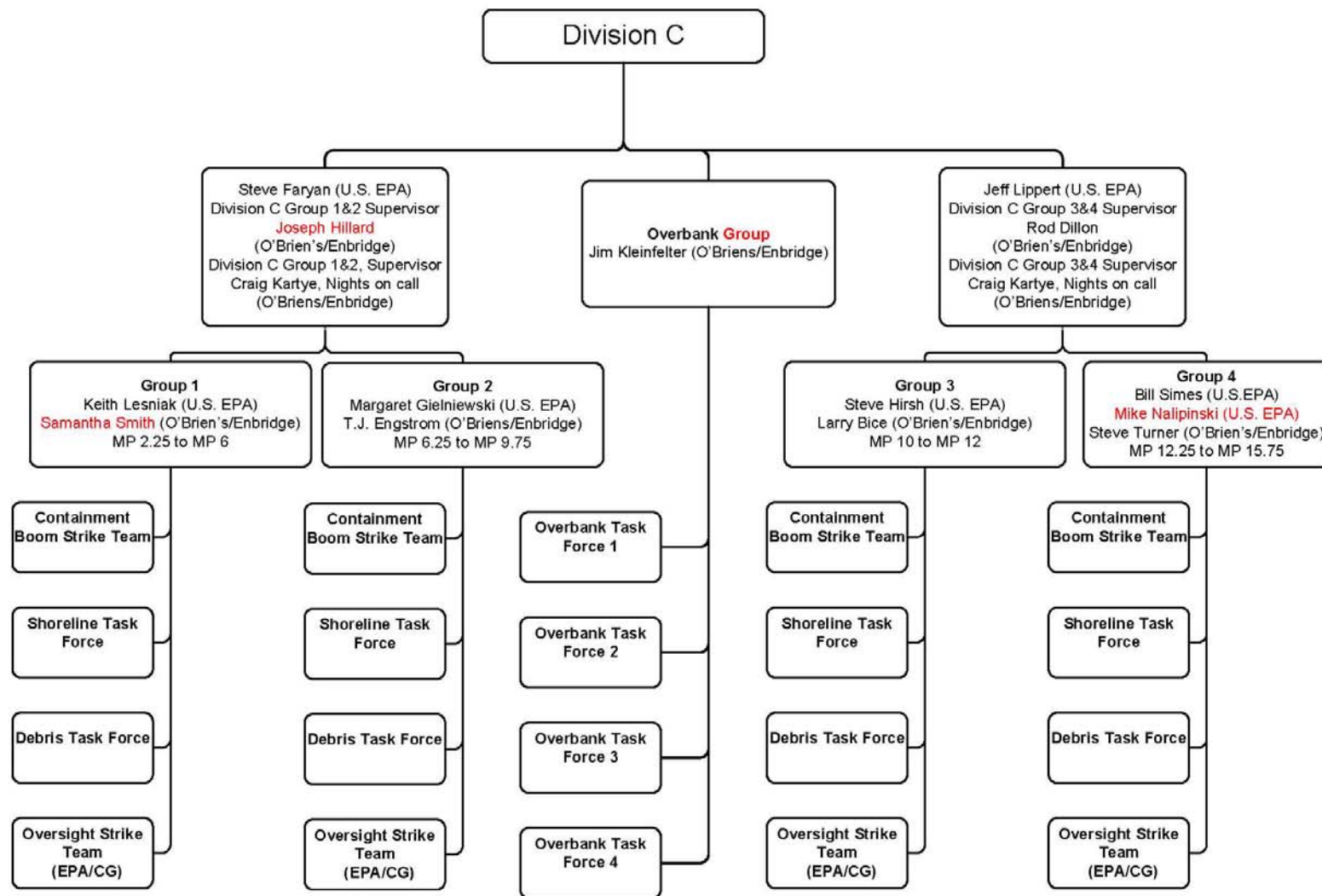


Figure 4 Division C