Emergency Response Planning

Joint Region 5 & Region 7 Regional Response Team Meeting

Katy Mays
Emergency Response and Security Coordinator
Mid Continent Region
Agenda

- About Enbridge
- ER Plan Development
- Mutual Aid Agreements
- ER Mapping
- Equipment / Training
- First Responder Outreach
Enbridge: A Vital Link to Energy Supply

- Leader in the safe and reliable delivery of energy in North America
- Operates world’s longest liquids pipeline and Canada’s largest natural gas distribution company
- Has been delivering energy with integrity since 1949
- 50,000 miles of pipelines
- Delivers 2.6 million barrels per day (bpd) of crude and liquid petroleum
- Growing interests in renewable energy, including wind and solar, geothermal and hybrid cells.
- Enbridge’s workforce increased from 6,500 in 2011 to 11,000 in 2014
Emergency Management Program
Enbridge’s Four Pillars of Emergency & Security Management

- Safety Culture
- Lessons Learned shared across departments to strengthen infrastructure
- Early integration of EM practices into projects before first oil
- Security Vulnerability Assessments & Target Hardening

- Exercises & Training
- Equipment Location
- Mutual Aid Agreements
- Plan Development
- Personnel, Stakeholder & Public Awareness

- Mitigation & Prevention
- Preparedness

- Recovery
- Response

- Equipment Replacement
- After Action Review
- Activation
- Mobilization
- Incident Command
- Coordination & Support
ER Plans

How we develop plans across Enbridge
Crisis Management Team
LP Incident Support Team
Regional Incident Management Team
Spill Management Team / Field Response Team

LP Strike Team
E3RT
Background

Spill Management Team / Field Response Team

Guiding Plans
• Integrated Contingency Plan
• Emergency Response Action Plan
• Tactical Response Plans/Control Point
  Tactical Mapping

Resources
• Emergency Response Guide
• Inland Spill Response Tactics Guide

Actions taken by Enbridge responders at an incident scene to assess the situation and safely mitigate (or address) the problem and its impacts.
Regional Incident Management Team / LP Strike Team

Guiding Plans
- Integrated Contingency Plan

Resources
- IAP Software
- IMH Handbook

Actions taken at and/or away from the incident scene to support tactical response operations, facilitate planning, and address the immediate concerns of the public and government agencies.
LP Strike Team

- 1 in US, 1 in Canada, separate from E3RT
- Strike Team supports IMT
- Works for IMT IC, cold zone only
- Fill a role(s) and/or mentor IMT members,
- Deploy en masse, then “thin out”
Enbridge Enterprise Emergency Response Team (E3RT)
Enbridge Enterprise Emergency Response Team (E3RT)

- Cross-business unit team of individuals
- Support (ICS roles in IMT) to significant incident when requested by business
- Unit leadership
- Activated through E3RT Team Leads
Background

LP Incident Support Team

Guiding Plans
LP Incident Support Plan

LP Incident Support Team

Actions taken at and/or away from the incident scene to support the IMT, facilitate planning, and manage business recovery projects.
Background

Crisis Management Team

Guiding Plans
- Enterprise Crisis Management Plan

Actions taken away from the scene to support and assist the IST and IMT in planning, business recovery projects and address the implications of the problem and its potential on the Company’s viability, operability and credibility.
Integrated Contingency Plan
Integrated Contingency Plan

**Core**
- US Regions

**Annexes**
- Region Specific
Integrated Contingency Plan

Core Plan

- Discovery
- Initial Response
  - Notification
  - Response Management System
- Detection/Mitigation
- Sustained Actions
- Termination

Forms

Core Elements

Core Plan

Training & Exercises

• Training = ICS, HAZWOPER, Tactical, QI
• PREP Core Components
• Record of exercises
• EGRET
Integrated Contingency Plan

Annexes 1-6

1. Facility & Locality Information
2. Notification Procedures
3. Environmentally Sensitive Area Information
4. Regulatory Cross Reference Table
5. Administration
6. Emergency Response Action Plan (ERAP)
Emergency Response Action Plan
Emergency Response Action Plan

ERAP

- Response Zone Description
- Initial Response
- Response Equipment
- Evacuation
- Mitigation Efforts
- Forms
Mutual Aid Agreements
Safety Alliance of Cushing

- Established in 2001
- 14 members – Oil Storage Terminals
- Monthly Meetings
- Response agreement - to assist with appropriate equipment, material and/ or personnel
ER Mapping
Control Point Mapping
<table>
<thead>
<tr>
<th><strong>Upstream and Downstream Valve Sites:</strong></th>
<th>392.59-51-V (motorized) [R]</th>
<th>GPS (NADA 83) Decimal/Decimal:</th>
<th>Latitude: 38.79311°</th>
<th>Longitude: -90.47381°</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upstream Distance to Pipeline:</strong></td>
<td>16.2 miles</td>
<td><strong>Upstream Control Point:</strong></td>
<td>CP393-14.7W</td>
<td></td>
</tr>
<tr>
<td><strong>Access Requirements:</strong></td>
<td>Public access at Blanchette Landing</td>
<td><strong>Downstream Control Point:</strong></td>
<td>CP393-16.6E</td>
<td></td>
</tr>
<tr>
<td><strong>Objective (Control Point/Boat Launch/ Staging):</strong></td>
<td>Primary – Control Point, Staging Area, Boat Launch</td>
<td><strong>Resources at Risk:</strong></td>
<td>Missouri-American SW DW intake at CP393-23.05, 6.8 miles downstream.</td>
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</tr>
<tr>
<td><strong>Watercourse Description:</strong></td>
<td>The channel is approximately 1,200’ wide, &gt;10’ deep and is navigable. River banks are steep and consisting of muck, weeds, logs, and some large rocks near landing. Medium grade banks. Average velocity is ~3 ft/s.</td>
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<td><strong>Staging Area Description/Boat Launch:</strong></td>
<td>Staging area is a 175’ x 175’ paved parking lot with ample turnaround room. During the field visit it was moderately busy. The boat launch is concrete and a two lane.</td>
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<tr>
<td><strong>Safety Concerns and Communications:</strong></td>
<td>Care should be taken when launching boat as this river is very fast moving. Also, pedestrian vehicles may make it difficult to stage equipment. Cell Coverage: Verizon – 3 Bars.</td>
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<td><strong>Implementation:</strong></td>
<td>Visual assessment for new hazards and water conditions. Extend containment boom out ~500 feet from shore using anchors to secure the southeast end. Use sorbent boom along western bank as necessary. Clear debris away from launch if need and use launch to deploy response vessels. Stage equipment in the large asphalt parking lot adjacent to the launch. Park the vacuum truck on the launch.</td>
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<tr>
<td><strong>Closest Equipment Cache to this Control Point:</strong></td>
<td>The nearest OSRO is Environmental Restoration – 24.1 miles (27 minute travel time).</td>
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<tr>
<td><strong>Comments:</strong></td>
<td>This control point boat launch is well maintained and is in good shape, free of debris unlike CP393-14.7W.</td>
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<tr>
<td><strong>Required Contact Numbers:</strong></td>
<td>Nearest OSRO: Environmental Restoration (24.1 miles) – 27 Minutes – Telephone: (636) 227-7477</td>
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<td></td>
<td>Future Environmental Inc. (285 miles) – 4 Hours 32 Minutes – Telephone: (708) 479-6900</td>
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<td></td>
<td>Nearest Manned Enbridge Facility: Wood River (27.0 miles) – 32 Minutes - Telephone: (618) 254-3903</td>
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</table>
ENBRIDGE PIPELINES – Cushing Region
Line 51
MP: 393.39

Directions:
From Highway 141, head northwest on Interstate 70 W for 2.0 miles. Take Exit 229B for I-70 Loop N/Fifth St and turn right onto S 5th Street. Continue for 1.2 miles then turn right onto Clark St. After 0.2 miles turn left onto N 2nd St and continue for 0.6 miles. Turn right onto Olive Street to get to control point at Eco Park.

<table>
<thead>
<tr>
<th>Recommended Equipment</th>
<th>Quantity</th>
<th>Description</th>
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<tbody>
<tr>
<td>1,400'</td>
<td>18&quot; Booms</td>
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<tr>
<td>1,010'</td>
<td>Sorbent Boom</td>
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<tr>
<td>5</td>
<td>Boom Anchors</td>
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<tr>
<td>300'</td>
<td>3/8&quot; Rope</td>
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<tr>
<td>1</td>
<td>Skimmer</td>
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<tr>
<td>1</td>
<td>12' Jon Boat</td>
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<tr>
<td>1</td>
<td>Vacuum truck</td>
<td></td>
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<tr>
<td>1</td>
<td>Portable Tank</td>
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<thead>
<tr>
<th>Recommended Personnel</th>
<th>Number</th>
<th>Description</th>
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<tr>
<td>4</td>
<td>Shoreline Personnel</td>
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<tr>
<td>1</td>
<td>Supervisor</td>
<td></td>
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<tr>
<td>1</td>
<td>Vac. Truck Operator</td>
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<tr>
<td>1</td>
<td>Safety Personnel</td>
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<tr>
<td>1</td>
<td>Jon Boat Operator</td>
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</table>

Map of Driving Directions

Tactical Diagram
CP393-16.2W
River Width: 1,200 ft

Date Strategy Updated:
October 21, 2014

Date Strategy Site Visited:
August 24, 2014
Looking East – Entrance to Launch/Staging Area

Looking East – Down concrete boat launch

Looking Southeast – Large Staging Area

Looking Southeast – Boat launch/turnaround
Spill Response Equipment
Spill Response Equipment

Submerged Oil Trailer
ER Training
# Emergency Response Training

## ER Training Matrix

<table>
<thead>
<tr>
<th>Duration (Hours)</th>
<th>Instruction Type</th>
<th>Topics (Type of employees taking part)</th>
<th>Recertification Period</th>
<th>(ER) Enbridge Responder Awareness</th>
<th>Incident Management System Awareness</th>
<th>(ER) HAZWOPER 24hrs</th>
<th>(ER) HAZWOPER 40hrs</th>
<th>(ER) HAZWOPER Refresher 8hrs</th>
<th>(ER) ICS 100/200</th>
<th>(ER) ICS 300</th>
<th>(ER) Qualified IndividualRC Training</th>
<th>(ER) Basic Boat Operations</th>
<th>(ER) Boat Handling Operations</th>
<th>(ER) Boom Deployment</th>
<th>(ER) Skimmer Operations</th>
<th>(ER) Tank Fire Awareness</th>
<th>(ER) HAZWOPER On-Scene Incident Commander</th>
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<tr>
<td>1</td>
<td>eCourse</td>
<td>365 Days</td>
<td>3 Years</td>
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First Responder Outreach
Welcome to the Enbridge and Vector Pipeline Emergency Responder Education Program

Thank you for your interest in the Enbridge and Vector Pipeline Emergency Responder Education Program. This online education program will provide emergency responders in our areas of operation with the information needed to safely and effectively respond to a pipeline emergency. The program is free, and you can complete it at all once or at your own pace.

The content in this course is based on the “Pipeline Emergency” program, which is an industry-leading pipeline emergency response training program developed by the National Association of State Fire Marshals. The program also includes information specific to the Enbridge and Vector Pipeline systems.

In this course, you will learn:

- The basics of gas and liquids pipeline operations
- The hazards of the products transported by Enbridge and Vector Pipeline
- Pipeline emergency response tactics
- How to apply the information to real-life situations