



Operating & Maintenance Procedures

Book 7 – Emergency Response Region Specific

Manual Number: SU-RS-32

Position Title: Environment Library

Location: Superior Office

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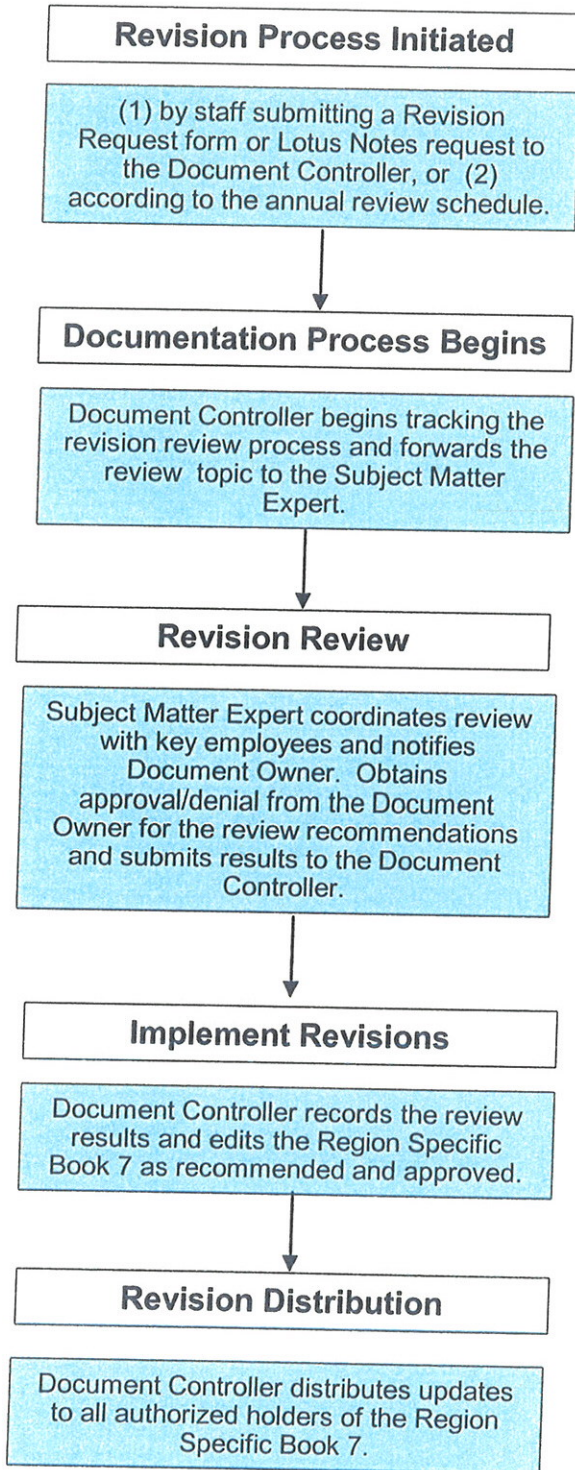
Region Specific

Region Specific

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Revision Process Flowchart



<u>Responsible Party</u>	<u>Assignment</u>
Document Owner – Mark Willoughby	Approver for changes to Region Specific Book 7
Document Controller - Nori Ferris	Administers revision schedule, document control and manual distribution
Subject Matter Expert - Al Aleknavicius	Coordinates content review and recommends changes



REVISION PROCESS

Enbridge requires a review and update to the regional Emergency Response Plan (ERP) immediately when a substantial change occurs. The following operating condition changes would be cause for a modification:

- Extension of existing pipeline;
- Construction of new pipeline;
- Type of oil transported;
- Worst-Case Discharge;
- Qualified Individual;
- Response Procedures;
- Response Equipment Requirements; or
- Circumstances that may influence full implementation of the ERP.

Annually, as HCA Management Plans are reviewed and HCA maps and tables are updated all maps and worst-case discharge changes will be incorporated into the regional Emergency Response Plans. Review of the O&MP will ensure that the most accurate drawings and references are included in Book 7: Emergency Response.

In the event of a revision requirement before the annual review, a revision request may be submitted for consideration by completing and sending a Revision Request Form to the Manual Custodian of this Plan (Environment & Safety Clerk in the Superior Office). As required of CFR49 §194.121, within thirty days of a revision incorporated into the Emergency Response Plan, Pipeline and Hazardous Materials Safety Administration (PHMSA) will be notified.

The Revision Request Form is examined and when integrated, it is listed on the Annual Revision Sheet with the revisions sent to respective manual holders to update their manuals. The Revision Record within each manual is to be signed and dated whenever a revision is issued.



Revision Request Form

Photocopy this form and return the original to your manual.

Name: _____ Date: _____

Subject Title: _____

Section No.: _____ Subsection No.: _____ Page No.: _____

Date Issued: _____ (printed at bottom left-hand corner of page)

Existing wording: _____

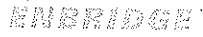
Proposed wording: _____

Reason for change: _____

Issued: 1/20/10

Submit Request Form to Manual Custodian.

Attn: Health & Safety Clerk, Superior Office



REVISION RECORD

Use this Revision Record to document the insertion of all revisions. After inserting a revision into your manual, enter the date inserted and your signature. Discard old pages. Detailed supporting documents (Revision Request Form) for each of the revisions are retained in the Superior Region Office.

Revision	Date Requested	Date Inserted	Signature
01		6-5-09	✓
02		6-16-10	Julie O'Brien
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Qualified Individual(s)

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RESPONSE ZONE DESCRIPTION

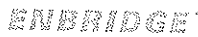
The Enbridge Liquids Pipeline System (Lakehead System) consists of four response zones. These response zones represent the regional boundaries designated in the normal operating structure. The response zones include:

- **Superior Region**
- Chicago Region
- Cushing Region
- Enbridge Pipelines North Dakota

Superior Region Response Zone (#866)

The Superior Region response zone begins at the Canadian border near Neche, North Dakota and continues across northern Minnesota into Superior, Wisconsin. This section of response zone includes seven pipelines that transport crude oil, natural gas and diluent condensate. The response zone continues south of Superior to Ladysmith, WI with four pipelines transporting crude oil and diluent condensate. A 30-inch pipeline originates in Superior, WI that transports crude oil and natural gas liquids west across northern Wisconsin, the Upper Peninsula of Michigan and into lower Michigan. The Superior Region system is comprised in total of eleven pipelines:

- Approximately 2,838 miles of pipeline, with pipe diameters ranging from 18 to 48 inches;
- 29 Pump Stations are located along the pipes;
- The Superior System includes 44 tanks (35 Tanks at Superior; 9 at Clearbrook). Tanks located in Superior, WI have 7.5 million barrels storage capacity and Clearbrook, MN has 1.3 million barrels storage capacity.



Counties included in the Superior Region response zone are:

North Dakota	Minnesota	Wisconsin	Michigan
Pembina	Kittson	Douglas	Cheboygan
	Marshall	Bayfield	Delta
	Red Lake	Washburn	Dickinson
	Polk	Sawyer	Emmet
	Hubbard	Ashland	Gogebic
	Clearwater	Iron	Iron
	Beltrami	Rusk	Mackinac
	Cass		Marquette
	Itasca		Otsego
	Aitkin		Schoolcraft
	St. Louis		
	Carlton		



This response zone includes the following pipelines:

Line	Pipeline Sections	Begin Stationing	End Stationing	Miles	Pipeline Diameter	Product
1	Gretna, Manitoba to Clearbrook, MN	0	716,232	135.7	20"	Crude Oil & Natural Gas Liquids
1	Clearbrook, MN to Superior, WI	716,232	1,712,883	188.8	18"	Crude Oil & Natural Gas Liquids
2	Gretna, Manitoba to Superior, WI	0	1,712,887	324.4	26"	Crude Oil
3	Gretna, Manitoba to Superior, WI	0	1,712,887	324.4	34"	Crude Oil
4	Gretna, Manitoba to Donaldson, MN	0	168,408	31.9	36"	Crude Oil
4	Donaldson, MN to Viking, MN	168,041	213,109	8.5	48"	Crude Oil
4	Donaldson, MN to Viking, MN	213,461	322,423	20.6	36"	Crude Oil
4	Donaldson, MN to Plummer, MN	320,971	393,021	13.6	48"	Crude Oil
4	Viking, MN to Plummer, MN	394,395	527,703	25.2	36"	Crude Oil
4	Viking, MN to Clearbrook, MN	526,404	545,840	3.7	48"	Crude Oil
4	Plummer, MN to Clearbrook, MN	547,141	647,345	19.0	36"	Crude Oil
4	Plummer, MN to Clearbrook, MN	645,406	716,261	13.4	48"	Crude Oil
4	Clearbrook, MN to Cass Lake, MN Loop	716,411	878,927	30.8	36"	Crude Oil
4	Cass Lake, MN Loop (MP939.87 to MP953.04)	877,981	946,695	13.1	48"	Crude Oil
4	Clearbrook, MN to Deer River, MN Loop	946,641	1,059,570	21.4	36"	Crude Oil
4	Deer River, MN Loop (MP974.73 to MP995.83)	(127,102)	1,173,196	22.0	48"	Crude Oil
4	Cass Lake, MN to Floodwood, MN Loop	1,173,151	1,306,304	25.2	36"	Crude Oil



Line	Pipeline Sections	Begin Stationing	End Stationing	Miles	Pipeline Diameter	Product
4	Floodwood, MN Loop (MP1019.73 to MP1044.33)	1,299,654	(47,009)	24.6	48"	Crude Oil
4	Deer River, MN to Wrenshall, MN Loop	1,429,072	1,512,231	15.7	36"	Crude Oil
4	Wrenshall, MN Loop (MP1060.11 to MP1079.91)	1,512,091	1,616,806	20.0	48"	Crude Oil
4	Wrenshall, MN Loop to Superior, WI	1,616,840	1,712,760	19.8	36"	Crude Oil
SL 13	Gretna, Manitoba to Clearbrook, MN	0	715,074	135.4	18"	Diluent Condensate
SL 13	Clearbrook, MN to Superior, WI	0	1,003,300	190	20"	Diluent Condensate
AC 67	Gretna, Manitoba to Superior, WI	0	1,723,800	326.7	36"	Crude Oil
5	Superior, WI to Mackinaw, MI	0	1,993,306	377.5	30"	Crude Oil & Natural Gas
5	Straits of Mackinac East and West (*2)	1,993,306	2,015,016	8.2	20"	Crude Oil & Natural Gas
5	Straits of Mackinac to Lewiston Pump Station MP1544.3	2,015,016	2,378,371	68.8	30"	Crude Oil & Natural Gas
6A	Superior, WI to MP97.23 (Ladysmith, WI)	0	513,368	97.2	34"	Crude Oil
14	Superior, WI to MP97.23 (Ladysmith, WI)	0	512,719	97.1	24"	Crude Oil
61	Superior, WI to MP97.23 (Ladysmith WI)	0	523,170	99.08	42"	Crude Oil
LSr (65)	Gretna, Manitoba to Clearbrook, MN	0	721,140	136.6	20"	Crude Oil
	Total Pipeline Miles			2838.38		

(Number) Diversion Stationing

Company/Co-Op Equipment Lists



ENBRIDGE EMERGENCY RESPONSE EQUIPMENT

As required in the Federal Response Framework and Area Contingency Plans, Enbridge owns and maintains extensive emergency response equipment throughout its liquid pipeline systems. This equipment is located at all area office locations as well as other strategic locations along the system to ensure a prompt containment and recovery response in the event of a pipeline release. It is the responsibility of each Area Supervisor/ Maintenance Team Leader to ensure that the equipment is inventoried annually and restocked as resources are expended.

Further company owned and maintained equipment is stored in listed trailers at local area storage facilities for immediate response until additional resources arrive. These resources are maintained and restocked by the respective area supervisors as needed.

Temporary storage is available via company owned and operated storage tanks throughout the pipeline system. Recovered product can often be off loaded at pump stations with tankage and then re-injected into the pipeline.

Enbridge has working agreements with Garner Environmental Services Inc. and Bay West to supplement resources in the event of a worst case discharge scenario. Both of these entities are United States Coast Guard (USCG) classified Oil Spill Response Organizations (OSRO). A copy of the OSRO's equipment inventories are kept on file at each region office.

Numerous other HAZWOPER trained contractors may be utilized for emergency response and their contact information and resources can be found listed by response zone in the Enbridge Emergency Response Directory. Enbridge does not retain equipment inventory lists for all non USCG classified contractors.



Company/Cooperative Equipment Lists

Company-

Superior Terminal Inventory.....	3
Clearbrook Terminal Inventory.....	4
Thief River Falls PLM Inventory.....	6
Bemidji PLM Inventory.....	9
Superior PLM Inventory.....	12
Ironwood PLM Inventory.....	14
Escanaba PLM Inventory.....	16
Station Response Equipment Guidelines.....	22
• Iron River Station	
• Manistique Station	
• Gould City Station	
• St. Ignace Valve	
• Mackinac Station	
• Indian River	
Winter Spill Equipment.....	27
Primary Water Recovery Equipment.....	28

Other-

Government, Contractors or other Cooperative Resources-

Twin Ports Mutual Aid Group.....	30
OSRO.....	33

Canadian Cross Border Emergency Response Equipment

Gretna Manitoba.....	34
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SUPERIOR TERMINAL EMERGENCY RESPONSE INVENTORY

QTY	DESCRIPTION
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SUPERIOR TERMINAL- FIRE BARN

6	Barricades
2	Foam Trailers - 700 Gal. & 500 Gal.
11	Barrels AFFF Foam
13	50 # Pails of Dry Chemical Fire Extinguishing Agent
49	Bundles Sorbent Pads - 100 / Bundle
14	Bags 8" x 10' Sorbent Booms - 40'/Bag
45	2 ½" x 50' Fire Hose
11	Windssocks

SUPERIOR TERMINAL - CONTINGENCY BUILDING

10	Bags 8" x 10' Sorbent Booms - 40'/Bag
13	Bundles Sorbent Pads - 100/Bundle
4	#2 Shovels
2	Flat Shovels
4	Aluminum Scoop Shovels
1	Sledge Hammer
15	Bundles of 5 Fence Posts
7	50' x 3' Plastic Hose
3	50' x 3' Wire Fence
1	Roll Orange Safety Fence
4	15" x 8' Sorbent Booms

SUPERIOR TERMINAL - MAINTENANCE SHOP

9	Aluminum Scoop Shovels
4	Rakes
2	Fan Rakes
2	Pitch Forks
2	#2 Shovels
3	Square Shovels
2	Aluminum Square Shovels
3	Squeegees
2	Brooms
7	10 Minute Emergency Escape Packs

SUPERIOR TERMINAL - CONTROL BUILDING

1	Pair Chest Waders
1	Square Shovel
2	Snow Blade Shovels



SUPERIOR TERMINAL - CONTROL BUILDING cont.

QTY	DESCRIPTION
4	Scrapers
4	Squeegees
5	Aluminum Scoop Shovels
1	100' Rope
3	4" x 20' Suction Hoses
1	Air Mover
	Assorted Sets of Fire Retardant Pants and Shirts
9	Fire Retardant Coveralls
4	Rescue Harnesses
3	Reflective Vest

SUPERIOR TERMINAL - MISCELLANEOUS

6	SCBA Air Packs
	Tank Rescue Equipment - Rigging, Harnesses, Sled, etc.

CLEARBROOK TERMINAL EMERGENCY RESPONSE INVENTORY

CLEARBROOK TERMINAL - MAIN BUILDING

5	Escape Packs
3	30 Minute Scott SCBA's
1	Tank Rescue Equipment
4	Harness'
8	Assorted Fire Retardant Coveralls
30	Tyvek Coveralls
4	Squeegees
4	Snow Shovels
7	Windsocks

CLEARBROOK TERMINAL - UTILITY BUILDING

1	500 Gal. Foam Trailer (Full)
4	Squeegees
2	Aluminum Scoop Shovels
2	Square Shovel
2	Leaf Rakes
1	Garden Rake
1	Sledge Hammer
1	Axe
3	Ice Scrapers
22	2 ½" Fire Hose (50' Rolls)
4	1 ¼" Fire Hose (50' Rolls)
13	50 # Pails of Purple K Fire Extinguisher Agent
1	55 Gal. Barrel of AFFF Foam



CLEARBROOK TERMINAL - UTILITY BUILDING cont.

QTY	DESCRIPTION
4	3" Suction Hose (10' Piece)
6	2" Suction Hose (10' Piece)
6	3" Discharge Hose (50' Rolls)
5	2" Discharge Hose (50' Rolls)
100'	Rope
1	Pressure Washer/Steamer
2	Brooms

CLEARBROOK TERMINAL - NEW COLD STORAGE BUILDING

7	Bags of Sorbent Pads (100/Bag)
28	3"x 8' Sorbent Booms
5	Bags of 8"x 10' Sorbent Booms (40' /Bag)
5	Box of Tyvek Coveralls (25/Box)
1	2" Diaphragm Pump
1	1" Diaphragm Pump
5	2" Suction Hose (10' Piece)
2	2 Pneumatic Air Movers

CLEARBROOK TERMINAL - PRESSURE WASHER BUILDING

3	Squeegees
2	Brooms
1	Pressure Washer/Steamer
1	Generator

CLEARBROOK TERMINAL - OLD COLD STORAGE BUILDING

20	Rolls of Snow Fence (Orange)
40	Fence Posts

CLEARBROOK TERMINAL - LEAK RESPONSE STORAGE PIPE

3	#2 Shovels
4	Rolls of Chicken Wire (50' Roll)
20	Fence Posts
4	Rolls of Snow Fence (Orange)
5	2 ½" Fire Hose (50' Rolls)

CLEARBROOK TERMINAL - MANIFOLD BUILDING

14	2" Suction Hose (10' Piece)
1	Air Mover



CLEARBROOK TERMINAL - METERING BUILDING

QTY	DESCRIPTION
3	Brooms
85	Sorbent Pads

THIEF RIVER FALLS PLM ER INVENTORY

THIEF RIVER FALLS PLM MISCELLANEOUS

6	2" Trash Pumps and Hoses
1	3" Trash Pump and Hose
1	3" Air Pump with Air Fittings and Hose
2	2" Air Pump with Air Fittings and Hose
1	Air Compressor
2	Hydraulic Pumps with Fittings for Power Units - Includes 3' Discharge Ports
6	Aluminum River Anchors
6	2" Air Pumps, 2" & 3" Discharge
1	1800 Gal. Port-a-Storage Tank with Liner
22	3" Hoses
10	2" Hoses
18	Bundles Sorbent Pads - 100 /Bundle
18	Bundles of Sorbent Booms 8" x 40' = 720'
3	Manifolds (Assorted Sizes - 3"x 2", 3"x 3", 2"x 2", 2"x 3")
2	Plastic River Dams
1	Extra Generator & Cords
1	Skimmer Power Pak

THIEF RIVER FALLS PLM COMMAND POST

1	Honda Generator
1	8' Table
8	Chairs
1	Grease Board with Markers & Erasers
1	Company Radio with A/C Converter & Directory
1	Emergency Weather Band Radio
1	Incident Command Chart
1	Site Safety Plot Plan Chart
1	Wind Sock with Mounting Bracket
8	Safety Vests
1	Set Incident Command Vests
3	Post Incident Drug/Alcohol Test Kits
1	TV / VCR Combo
1	Coffee Maker & Supplies
	Operating & Maintenance Manuals
	Safe Work Permit Books



THIEF RIVER FALLS PLM COMMAND POST cont.

QTY	DESCRIPTION
	Emergency Response Directory
	Contractor Handbook
	Minnesota Atlas
	Safety Orientation Video
	Flashlights
	Extra Gloves and Earplugs
	Safety glasses - Dark and Light
	Flare Gun & Cartridges
	Pipeline Strip Maps
	Hard Hats
	Trash Bag
	Caution Tape

THIEF RIVER FALLS PLM BOOM TRAILER INVENTORY

200'	16" Floating Containment Boom
750'	18" Floating Containment Boom
300'	24" Floating Containment Boom
6	Bundles of Sorbent Booms 8" x 40' = 240'
2	8' Oil Skimmers
8	Adjustable Boom Deflectors
5	Anchor Marker Buoys with Connectors
8	Totes of Nylon Rope (Various Lengths - 25', 50', 100', 150'), with Quick Connect Fittings
1	Sledge Hammer
4	Drive in Post Anchors

THIEF RIVER FALLS PLM LEAK TRAILER

1	Metal Stretcher
1	Roll ½" Nylon Rope
1	Roll ¾" Nylon Rope
2	Stop / Slow Signs
1	Roll Plastic Fence
2	Stihl Chainsaws with Ice Blades
2	Quarts Chain Caw Oil
2	Pair Chain Saw Chaps
2	Chain Saw Hard Hats with Ear Muffs and Face Shields Attached
3	Pair Ice Tongs
4	Slotted # 2 Shovels
2	# 2 Shovels
1	Bolt Cutter
1	Axe
1	Post Pounder for Fencing
1	Staple Gun



THIEF RIVER FALLS PLM LEAK TRAILER cont.

QTY	DESCRIPTION
1	3 in 1 Cutter
1	3" Skimmer with Air Hose and Controls
5	Face Shields with Hard Hat Adapters
8	Sets Rain Gear
10	Rolls Reflective Tape
2	Reflective Vests
1	12V Spotlight
2	AC Trouble Lights
12	Pair Rubber Gloves
8	Pair NGL Sleeves
2	Windssocks with Attachments for Mounting on Leak Trailer
4	Flashing Lights with Holders
6	Safety Belts
6	NGL Aprons
10	Pair Insulated Rubber Gloves
8	Security Barricades
25	Safety Cones
1	Fire Extinguisher -30# Ansul
2	Bundles, Absorbent Pads
1	Eskimo ice auger
36	Decontamination Suits
2	Poly Sprayers for Decon
4	Tubs for Decon
4	55 Gal. Containers with Covers
1	Box of Rags
12	Life Vests - Assorted Sizes (Two Containers)
1	25" Extension Cord
24	"Bird Chasers" - Wildlife Deterrents
1	Aerial Owl Predator
5	Rolls Plastic Sheeting
9	Pairs, Ice Picks of Life
1	Eagle Predator
8	Safety Belts and Ropes
1	First-Aid Kit
2	Fire Blankets
	Assorted Kamlock Fittings
	Assorted Floats
	Assorted Lumber – 2 x 4 x 12, 2 x 6 x 12