1.5" binder cover

Integrated Contingency Plan
Eastern Region Response Zone
Version Core 10.2 | Annex 10.0
2025-2026
Eastern-ICP-##

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Integrated Contingency Plan

Eastern Region Response Zone

Version Core 10.2 | Annex 10.0
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Integrated Contingency Plan

Eastern Region Response Zone

ENBRIDGE

Version Core 10.2 | Annex 10.0
2025-2026

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CORE REVISIONS					
Date (MM/DD/YY)	**Version**	**Subject No.**	**Subject Title**	**Change Type**	**Change Description**
12/18	Core Version 6.0	Core 1-3	Annual Review	Annual	Complete Revision of Core Sections 1-3
12/06/19	Core Version 7.0	Core 1-3	Annual Review	Annual	Complete Revision of Core Sections 1-3
12/01/20	Core Version 8.0	Core 1-3	Annual Review	Annual	Complete Revision of Core Sections 1-3
03/16/21	Core Version 8.1	Core Section 1.1	Acronyms	Update	Added: SIN – Safety, Isolation, Notification
		Core Section 1.6	Regulatory Compliance	Update	Correction to section numbering: ECCC, Fisheries Act, RSC 1985, c F- 14, s. 38(5) and s. 38(7); and the Fisheries Act sections under DFO, to s. 38(4), 38(4.1), and 38(7).
		Core Section 2.2.1	Emergency Activation and Notification Overview	Update	In the First Responder section, under support services added to contact Environment.
		Core Section 2.2.2	Regional Communication	Update	Added: Environment to support services.
		Core Section 2.3.5	Initial Response – Initial Actions (First Responder)	Update	Added: Environment to support services, updated the CER Incident Reporting Number, under the documentation section, add a row *ICS forms are required for incidents classified at Level 1-3, not an alert level.
		Core Section 2.3.5	Initial Response – Initial Actions (Regional Management)	Update	Under the documentation section, added “if applicable based on the Incident Classification” to the individual log.
		Core Section 2.4.9.5	Non-Mechanical Response Options	PHMSA Letter of Correction	As per PHMSA Letter of Correction dated 01/02/2021 update section to include “In the U.S., the request to use dispersants as a tactic is requested through Unified Command to the appropriate Federal On-Scene Coordinator.”
11/18/2021	Core Version 9.0	Core 1-3	Annual Review	Annual	Complete Revision of Core Sections 1-3
11/18/2022	Core Version 10.0	Core 1-3	Annual Review	Annual	Complete Revision of Core Sections 1-3

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CORE REVISIONS					
Date (MM/DD/YY)	**Version**	**Subject No.**	**Subject Title**	**Change Type**	**Change Description**
11/11/2023	Core Version 10.1	Core 1-3	Annual Review	Annual	• Partial review and revision of Core Sections 1 – 3. • C1-1.0.2 Revised definitions for the Field Emergency Response Team, Incident Management Team, and Enbridge Enterprise Emergency Response Team. • C1-1.4 Updated system maps to reflect the sale of L10 and L32. • C2-2.4.1 Updated Enb Response Mngt System based on the new ER Teams definitions. • C2-2.5.1 Removed Hot Bitumen Section (as the result of the L32 sale). NEW: Overhead Power Line hazard information. • C3 Based on the updated competencies, removed refences to Containment and Recovery as the details have been included within the Response to a Release Emergency competency.
03/11/2025	Core Version 10.2	Core 1-3	Annual Review	Annual	• Revision of Core Sections 1-3

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ANNEX REVISIONS					
Date (MM/DD/YY)	**Version**	**Subject No.**	**Subject Title**	**Change Type**	**Change Description**
07/09/18	Annex Version 4.1	Annex 1.4	Incident Commanders (Qualified Individuals)	Critical	Changed [redacted] title
		Annex 1.5.1	Response Zone Description - Eastern Region		Changed five terminals to four as Clarkson Terminal was deactivated.
		Annex 1.5.2	Pipeline Information		Revise info for Line 10 diversions – Pipeline Section: revise wording to "decommissioned" [redacted]
		Annex 1.5.6	Eastern Region Maps		Revise Maps to show L10 diversions
07/09/18	Annex Version 4.1	Annex 1.6	Local Spill Response Equipment	Critical	Changed area supervisor to "area manager"
		Annex 1.6.1	Enbridge Primary Spill Recovery Equipment		Fixed Branchton spelling
		Annex 1.8.3	Manned Stations with Emergency Response Trailers		Revise Maps to show L10 diversions Changed Mississauga…Warehouse to Mississauga Damage Prevention Team Office
		Annex 1.8.4	Mutual Aid Organizations with Emergency Response Trailers		Revise Maps to show L10 diversions
		Annex 2.2.3a	Emergency Contact Information		Updated the Edmonton Control Centre phone number for Quebec
		Annex 2.2.3b	Incident Management Team List		Updated the IMT list based on the MOC part A IMT - June 2018
		Annex 2.2.3d	Sarina –Lambton Pipeline Contact List		Updated Sarina –Lambton Pipeline Contact List – Revision 56 – January 2018
		Annex 2.2.3q	Enbridge Reporting Criteria / Requirements / Deadlines		Updated Book 1 Incident Reporting Standard to Version 21.0
12/19/18	Annex Version 5.0	Annex 1-5 FERP	Annual Review	Annual	Completed review and revision of Annexes 1-5 and Field Emergency Response Plan
04/04/19	Annex Version 5.1	Annex 1.3	Management Certification	Critical	Replace the Director name of [redacted] with [redacted]

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ANNEX REVISIONS					
Date (MM/DD/YY)	**Version**	**Subject No.**	**Subject Title**	**Change Type**	**Change Description**
		Annex 1.4	Incident Commanders (Qualified individuals)		Replace the primary IC – Qualified Individual, [redacted]
		Annex 2.0.1	Notification Chart & PEMTS		Replace the name of [redacted] in the regional management section with [redacted]
		Annex 2.2.3a	Emergency Contact Information		Replace the Director name of [redacted]
		Annex 2.2.3b	Incident Management Team List		Replace the primary Incident Commander, [redacted]
		Annex 2.2.3d	Sarnia Lambton Pipeline Emergency Contact List		Updated Sarina –Lambton Pipeline Contact List – Revision 58 – March 2019
		Annex 2.2.3q	Incident Reporting – Book 1 CAN		Updated Book 1 Incident Reporting Standard to Version 24.0
12/06/19	Annex Version 6.0	Annex 1-5 FERP	Annual Review	Annual	Completed review and revision of Annexes 1-5 and Field Emergency Response Plan
12/01/20	Annex Version 7.0	Annex 1-5 FERP	Annual Review	Annual	Completed review and revision of Annexes 1-5 and Field Emergency Response Plan
03/16/2021	Annex Version 7.1	Annex 2.0.2	Notification Chart	Update	Listed "Environment, and other groups as required" under Support Services. Changed CER Incident Line phone number to 403-299-2773
		Annex 2.1	Initial Response	Update	Updated the Federal Regulatory Reporting (new CER Incident Line). Internal Notifications: list "Environment" with the Support Services under. First Responder - Documentation: add "*ICS forms are required for incidents classified at Level 1-3, not an alert level". Regional Management – Documentation: Document initial actions on 214a Individual Log (if applicable based on the Incident Classification).
		Annex 2.3.2	Sarina –Lambton Pipeline Contact List	Update	Replaced Revision # 61 with Revision # 62
		Annex 2.3.4	Indigenous Business Database	Revision	Moved Federal and Provincial Agency Roles to A2.3.5 and added new section.
10/15/2021	Annex Version 7.2	Annex 1.3	Management Certification		Replaced the director [redacted]

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ANNEX REVISIONS					
Date (MM/DD/YY)	**Version**	**Subject No.**	**Subject Title**	**Change Type**	**Change Description**
		Annex 1.4	Incident Commanders (Qualified Individuals)		Replaced the director [redacted]
		Annex 2.0.2	Notification Chart		Replaced [redacted]
		Annex 2.0.3	Pipeline Emergency Measures Technical Subcommittee (PEMTS)		Replaced [redacted]
		Annex 2.2.1	Required Notifications / Emergency Contacts		Replaced the director [redacted]
		Annex 2.2.3	Incident Management Team List		Replaced the Incident Commander [redacted]
11/18/2021	Annex Version 8.0	Annex 1-5	Annual Review	Annual	Completed review and revision of Annexes 1-5 and Field Emergency Response Plan
		FERP			
11/18/2022	Annex Version 9.0	Annex 1-5	Annual Review	Annual	Completed review and revision of Annexes 1-5 and Field Emergency Response Plan
		FERP			
11/11/2023	Annex Version 9.1	Annex 1-5	Annual Review	Annual	• Review and revision of Annex 1 & 2. Updates to personnel based on organizational changes. • Minor updates to the IMT and regional notification chart, updated facility data (included facility information) and reproduced system maps. • Updated the format of the Annex to house all maps and the equipment lists at the end of Annex 1.
		FERP	2023-2024		Review and revision of the Field Emergency Response Plan based on the changes listed above.
11/18/2024	Annex Version 9.2	1.0.4	Incident Commanders (Qualified Individuals)	Revision	Replaced [redacted], and added [redacted]
		1.6.2	Spill Response Organizations – Internal & External Locations	Revision	CAER name has changed to BASES. Address and phone number haven't changed.
		1.6.3	CAER Mutual Aid Inventory	Revision	CAER name has changed to BASES. Address and phone number haven't changed. Replaced the inventory list with the most recent one.

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ANNEX REVISIONS					
Date (MM/DD/YY)	**Version**	**Subject No.**	**Subject Title**	**Change Type**	**Change Description**
		2.0.2	Eastern Region Notification chart	Revision	Replaced [redacted], and added [redacted] Updated [redacted] phone numbers.
		2.0.3	Pipeline Emergency Measures Technical Subcommittee (PEMTS)	Revision	Replaced [redacted], and added [redacted] Updated [redacted] phone numbers.
		2.2.1	Required Notifications / Emergency Contacts	Revision	Replaced [redacted], and added [redacted]
		2.2.3	Incident Management List	Revision	Replaced [redacted]. Added to the 1st paragraph "To see the latest IMT List, go to the ER Portal - Regions." Updated the IMT List s per the ER Portal updates.
		2.3.1	External Response Agencies	Revision	CAER name has changed to Bases. Address and phone number haven't changed.
		2.3.2	Government Contacts	Revision	CAER name has changed to BASES. Updated the list of companies in Categorie 6
		2.3.3	Sarnia –Lambton Pipeline Contact List	Revision	Replaced version 64 of the contact list with version 65.
		2.3.4	CAER – Community Awareness Emergency Response	Revision	CAER name has changed to Bases. Address and phone number haven't changed. Updated the Codes description as listed on BASES website.
		All		Revision	Replaced throughout the plan, where it's needed, "Incident" with "Event", and "Reputation" with "Relationship", to align with Enbridge's terms.
03/11/2025	Annex Version 10.0	Annex 1-4 FERP	Annual Review	Annual	Completed review and revision of Annexes 1-4 and Field Emergency Response Plan. Annex 5 has been incorporated in Core 1.

Core Sections	
1: Plan Introduction Elements	Purpose and Scope of Plan, Operations and Maintenance, Safety and Operational Reliability, Regulatory Compliance, System Maps – Canada and United States.
2: Core Plan Elements	Discovery/Detection/Confirmation, Notification and Communication, Initial Response, Spill/Site Assessment/Product Information, Response Operations, Hazard Specific Response Scenarios and Actions, Environmental Response, Protection / Containment / Recovery, Demobilization.
3: Training/Exercise Program	Training, Response & Competency-Based Training, Incident Command System, Operational Training, HAZWOPER Training, Response Exercise Program.
Annex Sections	
1: Facility & Locality Information	Owner & Operator, Purpose, Interface with Contingency and Company Plans, Management Certification, Incident Commanders (Qualified Individuals), *Significant and Substantial Harm Certification, Response Zone Description (Information Summary), Local Spill Response Equipment, Worst-Case Discharge (U.S. only), Emergency Response Time Maps, ER Mapping and Equipment Lists.
2: Notification Procedures	Notifications Overview, Initial Response, Incident Reporting, External Agencies and Support Resources, Emergency Services Contacts, Oil Spill Response Organizations (U.S. only), Emergency Communications.
3: High Consequence Area Information	High Consequence Area Information, Public Water Supplies/Water Intakes, Indigenous Community Lands or Tribal Lands, National/Provincial Parks or State/Local and National Parks/Forests, Sensitive Impact Areas, Water Resources/Lakes and Streams, Historical/Archaeological Sites, Transportation Areas.
4: Regulatory Cross Reference	All Related Regulations & Legislations: *Canada:* National Energy Board (OPR), TSB, Fisheries Act, CEPA, etc. *US:* DOT 49CFR§172 (North Dakota), DOT 49CFR§192, DOT 49CFR§194, DOT CFR§195, 29 CFR§1910.120, MDEQ Rule #5 (Great Lakes), Other Regulatory References (Worst- Case Discharge Methodology), etc.
Field Emergency Response Plan (FERP	Condensed version of the Integrated Contingency Plan, Incident Command System Forms, Initial Response Actions, Notifications Overview, Incident Reporting / Resources Activation, Response Zone Description, Spill / Site Assessment/ Product Information, Evacuation / Shelter in Place, Response Operations, Hazard-Specific Field Response Team Considerations, Environmental Response, Protection, Containment and Recovery, Response Equipment, Maps, Safety Data Sheets.

SECTION 1 – TABLE OF CONTENTS PAGE

1.0 Purpose and Scope of Plan

The Plan's primary purpose is to ensure an effective, comprehensive response that will prevent injury or damage to Company employees and the public and mitigate any possible impact on the environment. The objectives of the Plan are to:

- Outline the training and exercise program that prepares Enbridge responders
- Define alert and notification procedures to be followed when an emergency occurs
- Describe response teams' roles and responsibilities under the Incident Command System
- Document equipment, manpower and other resources available to assist with an emergency
- Provide guidelines for handling emergency response operations
- Define organizational lines of responsibility to be adhered to during an emergency
- Describe the Operating Regions or Response Zones and determine the worst-case discharge to minimize impacts to environmentally sensitive areas
- Apply an "All Hazards, All Risks" approach to Emergency Management.

1.0.1 Document Users

The Integrated Contingency Plan demonstrates the response capabilities available by the Company to respond to any product release. It is not a guarantee of what will occur or the equipment/deployment sequencing that will be used in an actual spill event. Nothing in this Plan is intended to limit the discretion of Company employees to select any sequence of actions or to take whatever time they deem necessary to maximize the effectiveness of the response, consistent with safety considerations.

This document is intended to be used by the following personnel and groups:

- Enbridge Field Response Team
- Enbridge Incident Management Team
- Enbridge Incident Support Team
- Enbridge Enterprise Emergency Response Team

1.0.2 Plan Administration

Distribution List

A distribution list for this Plan is maintained internally within the Emergency Management Program. It is also attached to the cover memo for control copy holders.
The Plan is available to all staff on the Governance Document Library (GDL) and the Emergency Respone Portal.

In addition to the Company Corporate Office, the entire Plan with appropriate Geographical Annexes will be kept at each regional office, with Qualified Individual / Incident Commander and with spill response trailers where appropriate. Additionally, the *Field Emergency Response Plan* is a concise truncated version of this plan, will be kept by designated response personnel.

Revision Process

The maintenance process for all Integrated Contingency Plans follows the Emergency Management Program's Emergency Response Plans Development and Maintenance Process. The purpose of this process is to ensure that plans and other essential emergency response documents are developed, maintained and updated when required.

The ICP will be reviewed and submitted annually at intervals not exceeding 15 months. Additionally, when an operating condition change occurs, the plan will be revised and submitted to the regulators within 30 days. Examples may include:

- Extension of existing pipeline; or relocation or replacement of a pipeline that may affect the information in the response plan;
- Construction of new pipeline; or construction of new terminal;
- The Qualified Individual / Incident Commander or designee as identified in *Annex 1* will be updated if needed to reflect accurate accountability in the Region;
- New response Procedures, such as new preferred response tactics that would alter how Enbridge manages a response.
- Name changes of the OSROs; or any change that has significant impact on the response equipment.
- Any other information relating to circumstances that may affect full implementation of the plan.

The annual review process of the ICP Annexes will ensure that the most accurate drawings and references are integrated into the Plan. The annual revision process will also include consultation with agencies that may be involved in an emergency response on the pipeline on the development and update of the ICP.

In addition, pursuant to *49CFR194.121* the Company will review its plan in full and resubmit its plan in full to PHMSA every 5 years from the date of last submittal or approval.

The Emergency Management Department is the ICP Administrator. All revision requests shall be forwarded to this Department. The revision request will be examined, prioritized and when the revision is integrated into the ICP electronic version, a communication of changes and request for approval will be sent to the document owner via the LP MOC tool (MAXIMO). Upon approval, the new version of the ICP will be uploaded to the Governance Document Library (GDL), electronic notifications will be sent to the Region(s), and updates will be mailed out to hard copy plan holders.

Record of Revisions

A simplified record of revisions can be found at the beginning of this document. A full detailed record of revisions for all Integrated Contingency Plans is kept with the Emergency Management Department.

1.0.3 Definitions

Crisis Management Team (CMT)	The executive group within the Company that functions away from the scene to support the Incident Management Team, facilitate planning, manage business recovery projects, and address the implications of the problems and the potential impacts on the Company's viability, operability, and credibility. Provides off-site strategic support.
Enbridge Enterprise Emergency Response Team (E3RT)	This is a business unit team, trained and organized similarly to regional IMTs (Incident Management Team). The purpose of the team is to augment and/or replace members of the IMT during complex and/or long responses. When activated, members of E3RT cease to report to their regular leader and will report to the Incident Commander. The E3RT remains in place until the Incident Commander no longer requires their services.
Emergency	An unforeseen combination of circumstances or a disruption of normal operating conditions that poses a potential threat to human life, health, property, and/or the environment if not contained, controlled, or eliminated immediately.
Field Response Team (FRT)	A team of tactical Enbridge responders who conduct prolonged response actions at an event scene including cleanup operations. This can include implementing containment & recovery measures, employing initial response actions, and initiating the use of facility fire equipment.
Incident Management Team (IMT)	A regionally based team that manages the overall response using the National Incident Management System (NIMS) Incident Command System (ICS), creating Incident Action Plans, and providing other support functions to coordinate the efforts of response personnel. The IMT functions near the event scene to support tactical response operations. The IMT is normally activated for Tier 2 and 3 responses (though an Incident Commander will activate it as they see fit) and operates in the "cold zone" at the Incident Command Post.
Incident Support Team (IST)	This is a team of pre-identified senior BU leaders and central function personnel capable of taking strategic actions at and/or away from the event scene to support the IMT, facilitate planning, and manage business recovery projects. The IST may be scaled appropriately to coordinate business upset conditions with or without an operational impact.
*National Response Team (NRT)	Response planning and coordination is accomplished at the federal level through the U.S. National Response Team (NRT), an interagency group co-chaired by the EPA and The U.S. Coast Guard. This team provides technical assistance, resources and coordination on preparedness, planning, response, and recovery activities for emergencies involving hazardous substances, pollutants and contaminants, oil, and weapons of mass destruction in natural and technological disasters and other environmental events of national significance.
*Natural Resource Damage Assessment (NRDA)	The process of collecting and analyzing information to evaluate the nature and extent of injuries resulting from an event and determine the restoration actions needed to bring injured natural resources and services back to baseline and make the environment whole for interim losses. (15CFR§990.30)
*Regional Response Team (RRT)	A U.S. Federal response organization, consisting of representatives from specific Federal and state agencies, responsible for regional planning and preparedness before an oil spill occurs and for providing advice to the Federal On-Scene Coordinator in the event of a major or substantial spill.

*Terminology specific to the U.S.

1.1 Operations and Maintenance

Enbridge operations and maintenance manuals (OMMs) are standards, procedures and preventative maintenance tasks that outline the requirements for pipeline operation and maintenance activities based on regulation, industry best practices, subject matter expert (SME) input and stakeholder input to ensure the safe and efficient operation and maintenance of the pipeline.

The Operations and Maintenance Manuals include:

- Book 1: General Compliance Reference - intended for use by stakeholder groups for OMM management and regulation-related information
- Book 3: Pipeline Facilities - intended for use by workers for planning, repairing, and maintaining the pipeline system
- Book 4: Welding - intended for use by welders for welding, fabrication, or hot work
- Book 5: Petroleum Quality & Measurement - intended for use by shippers and operations workers for quality and measurement of commodities
- Book 6: Equipment Maintenance - intended for use by workers for maintaining equipment
- Book 8: Environment - intended for use by workers for environmental protection during maintenance activities

The following sections outlining mitigation, public awareness, tank, and pipeline inspections, a further detailed on the Company Operations and Maintenance Manuals.

1.1.1 Mitigation Measures

The Company generally manages integrity hazards through operational controls associated with prevention, monitoring and mitigation. Examples of prevention include protective coatings, cathodic protection and cleaning and inhibitors. Monitoring controls include in-line inspection, hydrotesting, non-destructive examination, and sensors. Mitigation activities could include pressure reductions, repairs, replacement, maintenance, or remediation.
Several spill mitigation measures are built into the design of facilities and emergency shutdown procedures. The following spill mitigation measures are found in the current design, company standards:

- Gas and fire detection alarms announced in Control Center will require isolation and/or immediate shut down
- Remotely operated, electrically actuated isolation valves
- Releases resulting from pump seal failures are piped to sump tanks
- Above ground piping in stations to allow visual inspection and early detection of leaks; and
- In some regions, there are buildings over pumping stations to contain spills and any spray resulting from a release. On-site and on-call employees are trained as initial responders, and would focus on public/employee safety, isolation, and containment upon arriving at any spill

Pipeline operators are trained to respond to the various system alarms in order to identify and mitigate the consequences immediately. These systems include:

- Regularly scheduled visual and aerial monitoring and inspections
- Marker signs and signage with emergency contact number for the public

- System wide third-party prevention – line markers with emergency telephone line in the Control Center
- The Supervisory Control and Data Acquisition (SCADA) system
- Local Control System sensors and shutdown, isolation capability
- Scheduled line balance calculations
- Computational Pipeline Monitoring (CPM) Systems, based on DNV-GL SPS, Atmos Pipe and/or in-house developed software for leak detection and system protection
- Real-time Transient Model (RTTM) based CPMs
- Rupture Detection system (RDS)
- High- and low-pressure alarms
- Leak Prevention practices and procedures
- Leak detection equipment and procedures
- Pipeline and breakout tank inspection and testing procedures
- Recognition of emergency conditions and prediction of the consequences
- Leak response actions
- Safe fill and receipt monitoring
- Public Awareness and education

1.1.2 Public Awareness & Education

The safety of the public and employees and the protection of the environment are of the highest importance to Enbridge. A key component of the Company safety and community involvement program is an effective Public Awareness Program (“PAP”), which targets those stakeholders who live and work near our operations and share the Company’s goal of safe, reliable, and environmentally responsible operations. The goal of Enbridge’s PAP is to continually educate those who live, work, and play near our systems, as well as police and fire departments and other organizations/agencies about:

- Call or Click Before You Dig programs
- General location of the pipelines, facilities, or assets
- Safety procedures in the event of an emergency
- Products transported
- Safe working practices when working/excavating near the pipelines
- Description of how Enbridge personnel will work with local response agencies during an emergency to protect people, properties, and the environment
- Emergency and non-emergency contact information
- How to report unexpected situations related to the pipeline, including any contact with or damage to the pipeline
- Educate on signs of a leak

1.1.3 Prevention of Security Related Threats

Facility lighting is designed to illuminate tanks, loading racks, offices, and entrance/exit gates and to assist in the discovery of discharges that could occur through acts of vandalism. Security is considered with any event response for the protection of personnel, the public, and the environment. Enterprise Security (ES) will plan security responses to events and engage guard force vendors where appropriate, ES will be consulted and advise on event scene preservation and any relevant continuity of evidence issues. Enterprise Security should be immediately notified of any security related events or issues. Enterprise Security can also support a region’s

event response by activating the Intelligence Officer role of the Incident Command System or as part of the Incident Support Team.

1.1.4 Tank Fire Prevention Protection

Specific fire prevention measures that apply:

- Hazardous area designations, including safe work permit process to restrict hot work
- Fluid level monitoring with graduated low-level, high-level, low-low level, and high-high level alarm notification to remote Control Center
- Primary and secondary floating roof seals to reduce flammable explosive emissions
- Tank spacing, secondary containment and lot grading in accordance with NFPA 30
- Semi-fixed or fully fixed foam delivery systems for rim seal fires
- Automated roof-top fire detection
- Hydrant system (as required) for foam delivery or adjacent tank cooling

As terminal design standards have evolved over time, not all tanks are equipped with fire protection measures**;** however, a Pre-Fire Plan has been prepared for each individual terminal.

Inspections:

- High level alarms are tested routinely by simulating operating conditions to ensure that overfill during tank filling operation are detected
- Tank inspections are conducted, monthly, annually, every 5 years and 10-30 years
- Visual inspections are completed for breakout tanks and secondary containment systems (dikes or berms), specifically looking for:
    - Drips, discoloration of tanks, corrosion, cracks, localized dead vegetation
    - Condition of the foundation, platforms and ladders, condition of the roof legs, manholes, vents, drains and valves
    - Condition of rescue tank davt and seal gap measurements as required
    - Presence of stored materials (standing liquid)

1.1.5 Pipeline Inspections

The mainline pipeline system is monitored regularity, they are piggable to allow for the passage of cleaning tools and the use of in-line inspection tools to monitor and control line pressures and product flow rate, and operate remote controlled valves, operate pumps and engines. The control center operators monitor the lines. In the event of a pressure drop or suspected leak, the line will be shut down within 13 mins and field personnel will be dispatched to inspect the alarm.
Lines that are not connected to the SCADA System are generally smaller crude gathering pipelines. These lines are observed regularly by facility/pipeline maintenance personnel. In addition to these inspections, aircraft will fly along the pipeline on a regular schedule to inspect the lines.

1.2 Safety and Operational Reliability

1.2.1 Guiding Principles

This section of the document provides guidance on emergency response and management during an event. Enbridge will prudently over respond to any event with priorities in the following order:

Additionally, during a response, the following *objectives* (what you plan to do) and *strategies* (how you plan to accomplish objectives) should be considered. Not all objectives apply to all events:

Objectives	Strategies
1. Ensure the Safety of Citizens & Response Personnel	• Establish site control (hot zone, warm zone, cold zone, and security) • Consider evacuations, as needed • Establish vessel and/or aircraft restrictions • Monitor air in impacted areas • Develop Site Safety and Health Plan for response personnel • Ensure safety briefings are conducted • Manage medical emergencies/injuries
2. Control the Source	• Complete emergency shutdown • Initiate temporary repairs • Transfer product
3. Manage Coordinated Response Effort	• Complete or confirm notifications • Activate the Incident Command System and facilities (command post, etc.) • Ensure State/Provincial, federal and local, Indigenous officials are included in response organization • Initiate emergency response Incident Action Plan • Ensure mobilization and tracking of response resources and personnel • Complete documentation • Evaluate planned response objectives vs. actual response (debrief)
4. Maximize Protection of Environmentally Sensitive Areas	• Implement pre-designated response strategies • Identify resources at risk in impacted and potential impacted areas • Track pollutant movement and develop trajectories/plume modeling • Conduct visual assessments (e.g., over-flights) • Develop/implement appropriate protection tactics
5. Contain and Recover Spilled Material	• Deploy containment boom at appropriate spill source and collection areas
6. Recover and Rehabilitate Injured Wildlife	• Conduct injured wildlife search and rescue operations
7. Remove Oil from Impacted Areas	• Conduct clean-up efforts
8. Minimize Economic Impacts	• Protect public and private assets, as resources permit • Establish damage claims process • Consider tourism, vessel movements, and local economic impacts throughout response

Objectives	Strategies
9. Keep Stakeholders Informed of Response Activities	• Provide forum to obtain stakeholder input and concerns • Provide stakeholders with details of response actions, concerns and issues, and address as practical • Provide elected officials details of response actions
10. Keep the Public Informed of Response Activities	• Provide timely safety announcements • Establish a Joint Information Center (if applicable) • Conduct regular news briefings • Manage news media access to spill response activities • Conduct public meetings, as appropriate
11. Minimize Business Interruption	• Identify business interruption and potential business interruption issues • Conduct notifications of joint venture partners • Assist with internal/external investigations

1.2.2 Documentation

The TIS Corporate Records Management & Governance Department will advise of specific requests for document retention, including managing and classifying event emails per the Electronic Communication Standard. Data Management Procedures should also be followed for photos, forms, and email.

Standards for response documentation are illustrated below:

- Response documentation is a record of activities and not a place for analysis, conclusions, speculation, opinions, or comments
- Records will be complete to capture the whole sequence of events (notifications, response actions, internal and external communications, costs)
- Records will be clearly stated to support the recovery costs at a later date
- Records will include the name and position of the person who prepared the document
- Records will be managed and available throughout the response
- A scribe will be appointed to document if required
- All entries will include a time and date to reconstruct sequences of events at a later date
- Only relevant information will be recorded. Photos taken of the event site should capture the following conditions:
    - Containment and response activities (chronological progression)
    - Aerial photographs (if possible)
    - Overall “panoramic” view of the site to tie-in permanent features
    - Conditions at the end of the response operations
    - Recovery of the area over time

1.2.3 Incident Command System Forms

Emergency Response and Incident Command System forms can be found on the Governance Documents Library under Emergency Management Forms. The Incident Action Plan software is utilized in any emergency response (including drills and exercises) to develop an Incident Action Plan.

This is list outlines forms that may be filled out during a prolonged response

ICS 201-1	Incident Briefing Map/Sketch
ICS 201-2	Summary of Current Actions
ICS 201-3	Current Organization
ICS 201-4	Resource Summary
ICS 201-5	Site Security and Control Analysis
ICS 202	General Response Objectives
ICS 203	Organization Assignment
ICS 204	Assignment List
ICS 205	Communications Plan
ICS 206	Medical Plan
ICS 208	Site Safety Plan
ICP 209	Incident Status Summary
ICS 211p	Check In List (Personnel)
ICS 214	Unit Log
ICS 214a	Individual Log
ICS 221	Demobilization Check Out
ICS 233	Action Tracker Report

1.2.4 Documentation Requirement

Each group within the response organization is responsible for compiling and maintaining adequate records. If the Incident Command System has not been fully activated, the Initial Incident Commander should maintain and keep an accurate, chronological record of the key events related to the release.

1.2.5 Personal Protective Equipment

Appropriate personal protective equipment will be worn/used during response activities, meaning appropriate to the hazard and to the activities the responder will be undertaking. Responders will be trained and experienced in the use, care and maintenance of PPE and are responsible for personal items. The Safety Officer and/or Site Supervisor will determine the PPE requirement based on the work to be conducted and a documented hazard assessment. The following PPE may be required:

- Head, eye, hearing, hand, and foot protection
- High visibility safety apparel
- Enbridge worksite clothing requirements:
    - Full length pants and long-sleeved shirts will be worn at all time
    - Life jackets will be worn when working within 3m (10f) of open water
    - Flame resistant garments are required

* PPE maybe required based on hazard assessment. Refer to the LP Safety Standards on the Governance Documents Library for a more comprehensive list.

1.2.6 Conversion Table

Length	English to Metric	Length	Metric to English
1 inch (in)	2.54 centimetres (cm)	1 cm	0.393 in
1 foot (ft)	0.3048 meters (m)	1 m	3.28 ft
1 mile (mi)	1.609 kilometres (km)	1 km	0.621 mi
1 nautical mile (nm)	1. 852 kilometres (km)	1 km	0.540 nm
Area			
1 square foot (ft^2)	929 square centimetres (cm^2)	1 cm^2	0.0129 ft^2
	0.0929 square metres (m^2)	1 m^2	10.76 ft^2
1 acre (ac)	4.047 square metres (m^2)	1000 m^2	0.247 ac
1 square mile (mi^2)	2.59 square kilometres (km^2)	1 km^2	0.386 mi^2
Volume			
1 US Gallon (US gal)	3.785 litres (l)	1 l	0.264 U.S. gal
1 Imperial Gallon (Imp gal)	4.546 litres (l)	1 l	0.220 imp gal
1 Barrel	0.16 cubic metres (m^3)	1 m^3	6.29 bbl
	159 litres (l)	1 l	0.00629 bbl
Velocity			
1 mile per hour (mph)	1.609 kilometres/hr (kph)	1 km/h	0.621 mph
1 nautical mile per hour (knot)	1.852 kilometres/hr (kph)	1 km/h	0.54 knot
1 foot per second (fps)	0.3048 metre/second (m/sec)	1 m/sec	3.28 fps
	1.097 kilometres/hr (kph)	1 km/h	0.911 fps
Weight			
1 pound (lb)	0.454 kilogramme (kg)	1 kg	2.205 lb
1 short ton (st)	0.907 tonne (mt)	1 t	1.102 st
1 long ton (lt)	1.016 tonne (mt)	1 t	0.984 lt
Temperature			
$^oF = (^oC\ (9) \div 5) + 32$			
Pressure			
1 pound per square inch (psi)	0.0689 bar	1 bar	14.504 psi
	6.89 kilopascals (kPa)	1 kPa	0.145 psi
	0.704 metre (water column) (mwc)	1 m CE	1.42 psi
1 inch mercury (in Hg)	25.4 mm mercury (mm Hg)	1 mm Hg	0.0394 in Hg
1 atmosphere (atm)	1.033 kg/cm^2	1 kg/cm^2	0.968 atm
	760 mm mercury (mm Hg)	1 mm Hg	0.00132 atm
Flow			
1 gallon per minute (gpm)	0.227 $metre^3$ per hour (m^3/hr)	1 m^3/h	4.403 gpm
1 cubic foot per minute (cfm)	1.699 cubic meters per hour (m^3/hr)	1 m^3/h	0.5886 cfm
1 barrel per day (bph)	0.1104 litres per minute (lpm)	1 lpm	9.057 bpd
Power			
1 horsepower (hp)	0.746 kilowatt (kw)	1 kw	1.341 hp

1.3 Regulatory Compliance

The Plan has been developed to allow assimilation of applicable Federal, Provincial and State regulations.

1.3.1 Canada

The Plan is designed to fulfill the requirements set forth by regulatory agencies, which mandate the establishment of written procedures to address planning and response to emergencies, including:

Alberta Energy Regulator (AER)	• Pipeline Act, RSA 2000, c P-15, Section 35 • Pipeline Rules, AR 91/2005, Sections 8, 76 and 77 • AER Directive 071: Emergency Preparedness and Response, February 2023 – Sections 5.1, 6.1 • AER Directive 056: Energy Development Applications and Schedules
Government of Alberta	• Forest and Prairie Protection Act, RSA 2000, c.F-19, Sections 10-23-30-41-42 • Forest and Prairie Protection Regulation, AR 60/2017 – Sections 15 • Dangerous Goods Transportation and Handling Act, RSA 2000 c. D-4 – Section 13 • Oil and Gas Conservation Alberta Regulation 151/1971 – Section 8.050, 8.051
Alberta Environment and Parks (AEP)	• Environmental Protection and Enhancement Act, RSA 2000, c E-12, Sections 110-111-112 • Release Reporting Regulation, AR 117/1993 – Section 3
Canada Energy Regulator (CER)	• Canada Energy Regulator Onshore Pipeline Regulations SOR/99-294, Sections 6.1---6.4, 32--36, 39, 46, 47, 52, 53, 55, 56 • Canada Energy Regulator Event Reporting Guidelines
Department of Fisheries and Oceans Canada	• Fisheries Act, R.S.C. 1985, c. F-14, Section 38.
Environment and Climate Change Canada	• Canadian Environmental Protection Act 1999, SC 1999, c. 33, Sections 95, 169, 201, 212 • Environmental Emergency Regulations, 2019, SOR/2019-51 – Sections 4, 10, 11
Department of Justice Canada	• Transportation of Dangerous Good Regulation, SOR/2001-286 – Part 8 – Section 8.1—8.8
Manitoba Environment, Climate and Parks	• The Environment Act, CCSM, c. E125, Section 30.1 (1-3-4) • The Dangerous Goods Handling and Transportation Act, C.C.S.M. C. D12, Section 3, 28 • Environmental Accident Reporting Regulation 439/87, Section 3 (1-2-3)
Northwest Territories Environment and Natural Resources	• Forest Protection Act, R.S.N.T. 1988, c.F-10 – Section 6(1) • Environmental Protection Act, R.S.N.W.T. 1988, c.E-7, Section 5.1 • Spill Contingency Planning and Reporting Regulations, N.W.T. Reg 068-93, 9—11
Northwest Territories government	• Transportation of Dangerous Goods Act, R.S.N.W.T. 1988, c.81 (Supp.) – Section 34 • Northwest Territories Land Use Regulations, N.W.T. Reg 012-2014 – Section 19
Ontario Ministry of the Environment, Conservation and Parks	• Environmental Protection Act, R.S.O. 1990, c. E.19 – Sections, 6, 13--15, 91.1, 92, 194

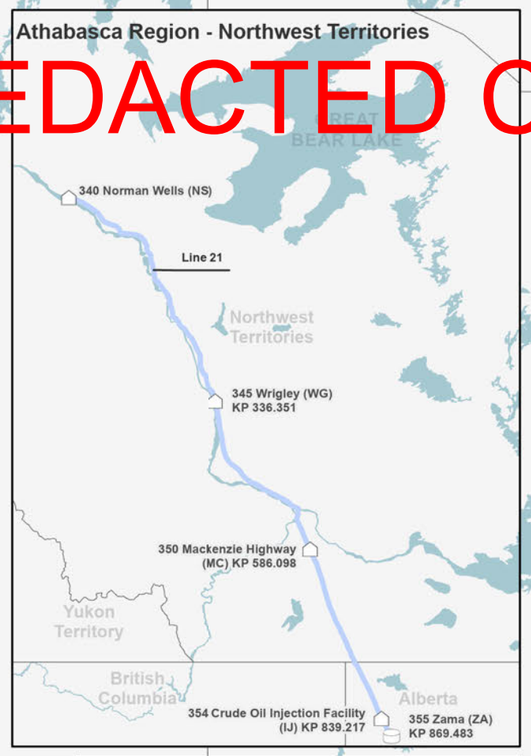
Ontario Government	• Ontario Water Resources Act, R.S.O. 1990, c. O.40 – Section 30 • Ontario Regulation 210/01 Oil and Gas Pipeline Systems – Section 14
Quebec Ministry of Sustainable Development, Environment, and Fight Against Climate Change	• Environment Quality Act, CQLR, c. Q-2, Sections 20-21 • Regulation Respecting Hazardous Materials, CQLR, c. Q-2, r. 32, Section 8---14
Quebec Ministry of Public Security	• Act respecting civil protection to promote disaster resilience - chapter S-2.4 - 2024, c. 18, s.1
Quebec Government (Plan endorsed by Enbridge)	• Cadre de Référence - Intervention Pipelines (CRIP) – Government of Quebec, 2021
Saskatchewan Ministry of Environment	• The Environmental Management and Protection Act, 2010, c E-10.22, Sections 9-10 • Saskatchewan Environmental Code Adoption, Chapter B.1.1 (1-1---1-7) • Saskatchewan Environmental Code Adoption, Chapter E.1.1 (1-1, 1-2, 1-7)
Saskatchewan Government	• The Dangerous Goods Transportation Act, S.S. 1984-85-86, c. D-1.2 – Section 8 and 9
Transport Canada	• Transportation of Dangerous Goods Act, 1992, SC 1992, c. 34, Section 18 • Transportation of Dangerous Goods Regulations, SOR/2001-286 Part 8
Transportation Safety Board (TSB)	• Transportation Safety Board Regulations, SOR/2014-37, Section 4

1.3.2 United States

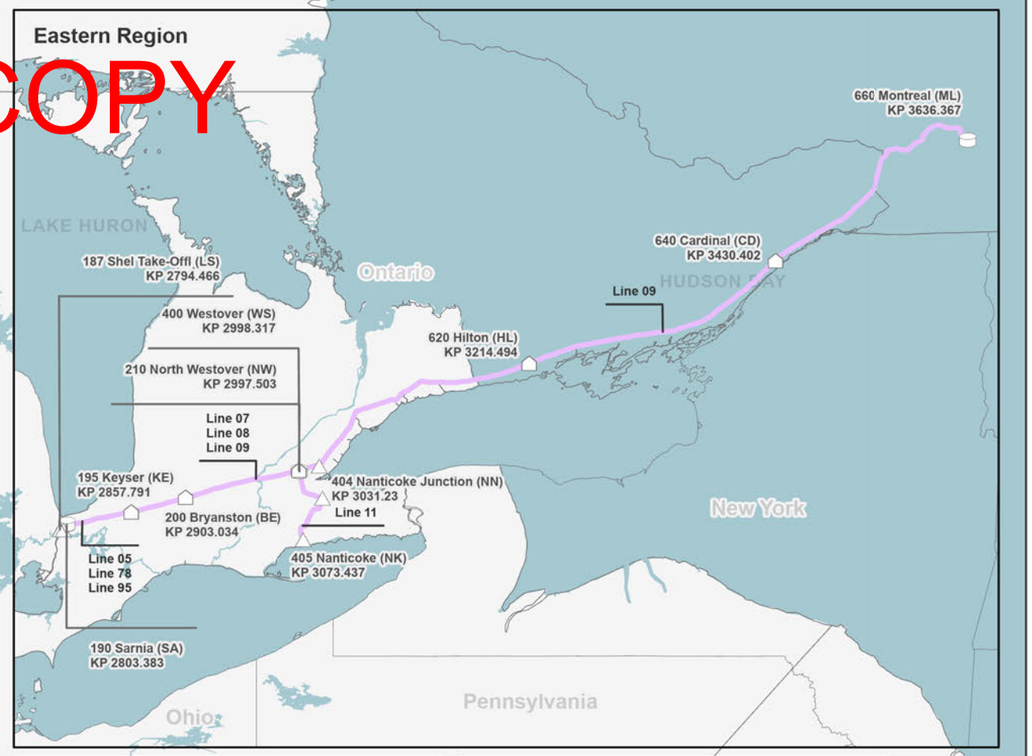
The Plan is designed to fulfill the requirements set forth by regulatory agencies, which mandates the establishment of written procedures to address planning and response to emergencies, including:

Oil Pollution Act	• Oil Pollution Act of 1990 *OPA 90*, *33USC§40*
The Department of Transportation	• The Department of Transportation's (DOT) regulations as defined in *49CFR§194*, *49CFR §172.600, 602, 604 and* similar regulations issued by the state agencies
The Occupational Safety and Health Administration	• The Occupational Safety and Health Administration (OSHA) regulations contained in *29CFR§1910*
U.S. Coast Guard	• Company has opted to follow the U.S. Coast Guard PREP Guidelines for exercise/drilling purposes
U.S. Environmental Protection Agency	• U.S. Environmental Protection Agency's (EPA) Oil Pollution Prevention Regulations, *40CFR§112*, that requires a Non-Transportation Related Facility Response Plan • The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) as set forth in *40CFR§300* and the applicable Area Contingency Plans (ACPs) as set forth in The U.S. Environmental Protection Agency (EPA)
American Petroleum Institute (Plan endorsed by Enbridge)	• American Petroleum Institute (API) Recommended Practice 1162 for Public Awareness Programs • American Petroleum Institute (API) Recommended Practice 1174 Onshore Hazardous Liquid Pipeline Emergency Preparedness and Response
U.S. Federal Regulations	• *DOT/PHMSA 49 CFR PART 191 – 191.5 (a-b-c)* • *DOT/PHMSA 49 CFR PART 194 – 194.103 (a), 194.105 (a-b), 194.107 (a-b-c), 194.109 (a-b), 194.111 (a-b), 194.113 (a-b), 194.115 (a-b), 194.117 (a-b-c), 194.121 (a-b)* • *DOT/PHMSA 49 CFR PART 195 – 195.402 (a-c-e), 195.403 (a-b-c), 195.52 (a-b-c-d)* • *OSHA 29CFR§1910.120* - Hazardous Waste Operations and Emergency Response *(q)*
Other Regulatory References	• Worst Case Discharge Methodology
State Requirements and Legislation	• Applicable State and local requirements – see Annex 4 • Minnesota Statutes, Environmental Protection, Chapter 115E Oil and Hazardous Substance Discharge – Section 115E.04 Subd 1, 3, 4 • Michigan Administrative Code, Environment, Great Lakes and Energy - Water Resources Division, Water Resources Protection, Part 5 Spillage of Oil and Polluting Materials - R 324.2006 Pollution indecent prevention plan – Rule 6 • Texas Administrative Code, *Title 31, Part 1, Rule 19.3* • Texas Administrative Code, *Title 16, Part 1, Rule 8.301* • Texas Railroad Commission has adopted, *49CFR§194* – Response Plans for Onshore Pipelines

Athabasca Region - Northwest Territories



Eastern Region



Athabasca Region

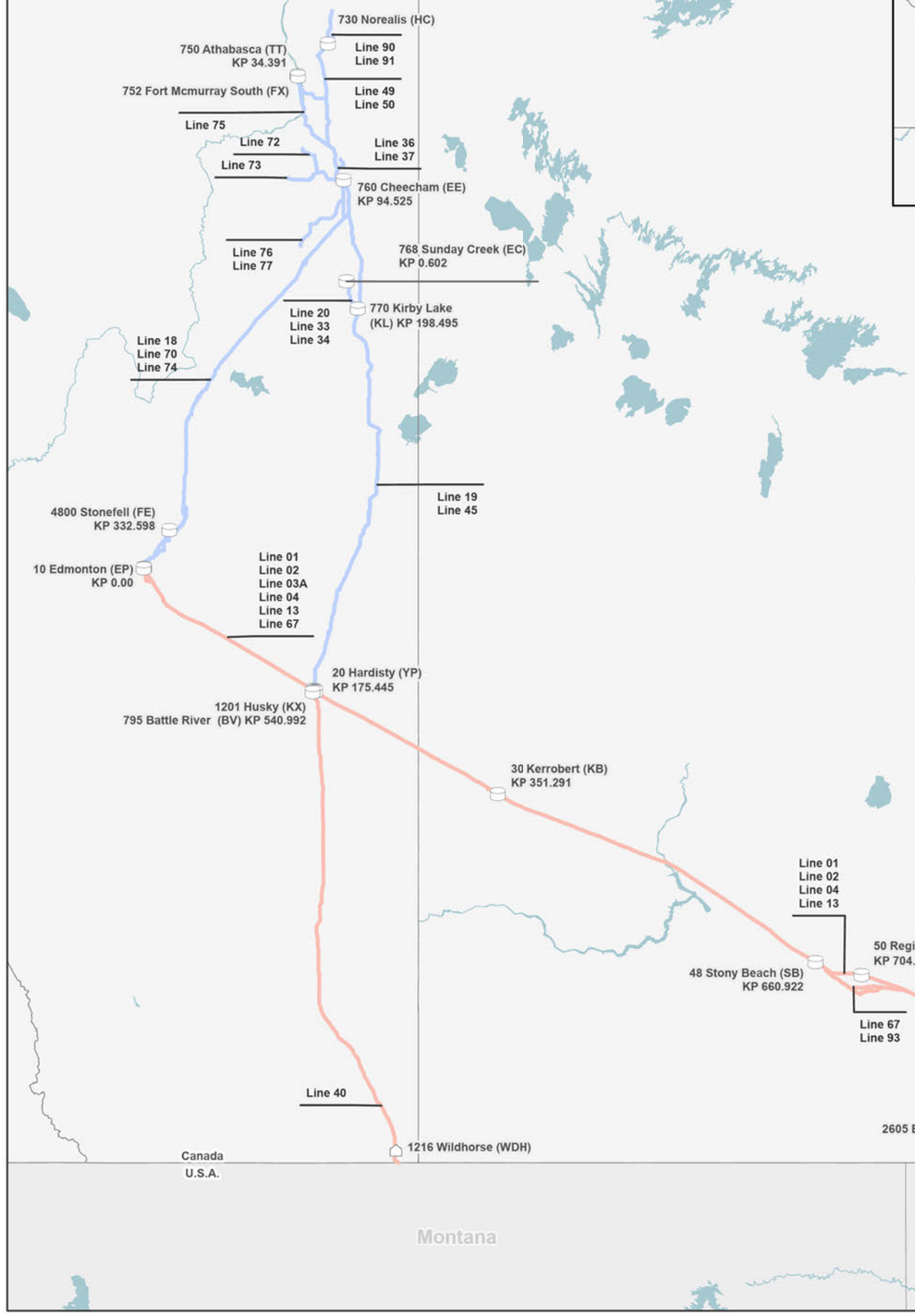
NORMAN WELLS TO ZAMA TERMINAL
LINE 21 - 12"
ATHABASCA TERMINAL TO CHEECHAM TERMINAL
LINE 19 - 30"
LINE 75 - 30"
WOODLAND TO CHEECHAM TERMINAL
LINE 49 - 36"
HANGINGSTONE TO CHEECHAM TERMINAL
LINE 72 - 16"
JACOS TO CHEECHAM TERMINAL
LINE 73 - 12"
LONG LAKE TO CHEECHAM TERMINAL
LINE 36 - 10" REVERSED FLOW
LINE 37 - 12"
LEISMER TO CHEECHAM TERMINAL
LINE 76 - 8" REVERSED FLOW
LINE 77 -12"
HUSKY TO NOREALIS TERMINAL
LINE 90 - 10" - REVERSED FLOW
LINE 91 - 20"
NOREALIS TERMINAL TO CHEECHAM TERMINAL
LINE 50 - 24"
CHEECHAM TERMINAL TO EDMONTON TERMINAL
LINE 18 - 30"
CHEECHAM TERMINAL TO EDMONT TERMINAL SOUTH
LINE 70 - 36"
CHEECHAM TERMINAL TO BATTLE RIVER TERMINAL
LINE 19 - 30"
LINE 45 - 36"
KIRBY LAKE TO CHRISTINA LAKE
LINE 33 - 8"
LINE 34 - 8"
STONEFELL TERMINAL TO FORT MCMURRAY SOUTH
LINE 74 - 24"

Prairie Region

EDMONTON TERMINAL TO KP 1245.182
LINE 1 -20"
LINE 2 -24"/26"
LINE 3A -34"
LINE 4 -36"/48"
LINE 13 -16"/18/20" REVERSED FLOW
LINE 67 -36"
HARDISTY TO KP 435.489 (CAN/USA BORDER)
LINE 40 - 24"
HARDISTY TO KP 1245.128 (CAN/USA BORDER)
LINE 93 - 36"
CROMER TO KP 1245.182 (CAN/USA BORDER)
LINE 65 - 20"
CROMER TO N7.0 (CAN/USA BORDER)
LINE 26 - 12"/16"

Eastern Region

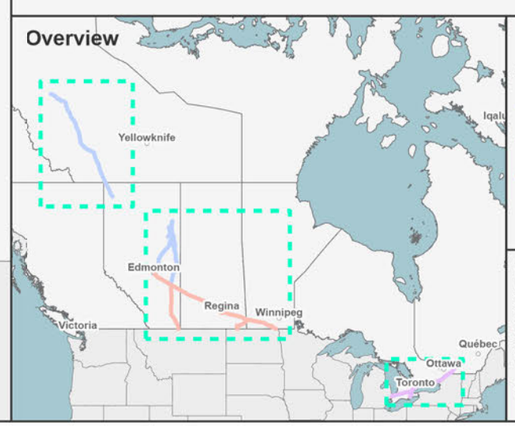
KP 2792.726 (CAN/USA BORDER) TO SARNIA
LINE 5 - 30"
LINE 78 - 30"
SARNIA TO SHELL TAKE-OFF
LINE 95 - 20"
SARNIA TO WESTOVER
LINE 7 - 20"
SARNIA TO MILLGROVE JUNCTION TAKE-OFF
LINE 8 - 20"
SARNIA TO MONTREAL
LINE 9 - 30"
WESTOVER TO NANTICOKE
LINE 11 - 16"/20"



ENBRIDGE

Pipeline System Map
CAN Region Boundaries

0 95 190 380 Miles



Terminal

Enbridge Liquid Pipeline
Athabasca
Eastern
Prairie

Date: 2/26/2025
Map ID: 01-2023-01

Great Lakes Region

M.P. 345.88 (STATE LINE) TO GRIFFITH TERMINAL
LINE 6 - 34"
M.P. 345.75 (STATE LINE) TO MOKENA
LINE 14 - 24"
M.P. 344.97 (STATE LINE) TO M.P.449.00 (COUNTY LINE)
LINE 61 - 42"
M.P. 345.24 (STATE LINE) TO MANHATTAN
LINE 13 - 20" REVERSED FLOW
M.P. 70.63 (COUNTY LINE) TO MP 751.48 (CANADA/USA BORDER)
LINE 78 - 36"/30"
HARTSDALE TERMINAL TO STATE LINE
LINE 62 - 22"
GRIFFITH LATERAL TAKE-OFF TO GRIFFITH TERMINAL
LINE 64 - 24"
M.P. 1189.32 (STATE LINE) TO MP 1735.32 (CANADA/USA BORDER)
LINE 5 - 30"
STOCKBRIDGE TERMINAL TO FREEDOM JCT.
LINE 17 - 16"
FREEDOM JCT. TO OREGON METERING
WOLVERINE - 16" Leased from Wolverine Pipeline
STOCKBRIDGE TERMINAL TO SCHNEIDER ROAD JCT.
LINE 79 - 20"
SCHNEIDER ROAD JCT. TO VAN BUREN METERING
WOLVERINE - 16" Leased from Wolverine Pipeline

Southwest Region

MP 0.00 (CANADA/USA BORDER) TO CASPER
LINE 40 - 24"
CASPER TO WOOD RIVER
LINE 41 - 20"
M.P. 449.00 (COUNTY LINE) TO FLANAGAN TERMINAL
LINE 61 - 42"
STATE LINE TO FLANAGAN TERMINAL
LINE 62 - 22"
FLANAGAN TERMINAL TO M.P. 70.63 (COUNTY LINE)
LINE 78 - 36"
FLANAGAN TERMINAL TO CUSHING TERMINAL
LINE 55 - 22"/24"
LINE 59 - 36"
FLANAGAN TERMINAL TO PATOKA
LINE 63 - 24"

Midwest Region

MP 773.72 (CANADA/USA BORDER) TO SUPERIOR TERMINAL
LINE 1 - 20"/18"
LINE 2 - 26"
LINE 4 - 36"/48"
LINE 13 - 18"/20" REVERSED FLOW
LINE 65 - 20" TO CLEARBROOK TERMINAL
LINE 67 - 36"
LINE 93 - 36"
SUPERIOR TERMINAL TO M.P. 345.88 (STATE LINE)
LINE 6 - 34"
SUPERIOR TERMINAL TO M.P. 345.75 (STATE LINE)
LINE 14 - 24"
SUPERIOR TERMINAL TO M.P. 344.97 (STATE LINE)
LINE 61 - 42"
SUPERIOR TERMINAL TO M.P. 345.24 (STATE LINE)
LINE 13 - 20" REVERSED FLOW
SUPERIOR TERMINAL TO M.P. 1189.32 (STATE LINE)
LINE 5 - 30"
GRENORA TERMINAL TO BEAVER LODGE TERMINAL
LINE 83 - 10"
ALEXANDER TERMINAL TO TRENTON TERMINAL
LINE 84 - 8"
TRENTON TERMINAL TO BEAVER LODGE TERMINAL
LINE 84 - 8"
LINE 86 - 10"
LITTLE MUDDY TERMINAL TO EAST FORK STATION
LINE 88 - 10"
BEAVER LODGE TERMINAL TO BERTHOLD TERMINAL
LINE 82 - 12"
LINE 87 - 16"
BERTHOLD TERMINAL TO MINOT TERMINAL
LINE 82 - 16"
BERTHOLD TERMINAL TO N7.0 (CANADA/USA BORDER)
LINE 26 - 12"
MINOT TERMINAL TO CLEARBROOK STATION
LINE 81 - 16"

Gulf Coast Transmission Region

VIOLA STATION TO ENBRIDGE INGLESIDE ENERGY CENTER TERMINAL
Line 42 -20"
CONAN STATION TO WINK TERMINAL
Line 1002 - 20"
WINK TERMINAL TO CRANE TERMINAL
Line 1003 - 20"
CRANE TERMINAL TO CENTRAL JUNCTION TERMINAL
Line 1004 - 30"
CENTRAL JUNCTION TERMINAL TO INGLESIDE GRAY OAK TAKE-OFF
Line 1005 - 30"
HWY 99 TERMINAL TO CENTRAL JUNCTION TERMINAL
Line 1006 - 8"
EOG SOUTH TAKE-OFF TO CENTRAL JUNCTION TERMINAL
Line 1007 - 16"
CENTRAL JUNCTION TERMINAL TO SWEENY JUNCTION TERMINAL
Line 1008 - 20"
SWEENY JUNCTION TERMINAL TO SWEENY REFINERY TAKE-OFF
Line 1009 - 12"
HELENA TERMINAL TO CENTRAL JUNCTION TERMINAL
Line 1010 - 16"
TAFT TERMINAL TO CORPUS CHRISTI VALERO TAKE-OFF
Line 1011 - 20"
ZENA TERMINAL TO MENTONE TERMINAL
Line 1018 - 12"

Pipeline System Map
U.S. Region Boundaries

0 125 250 500 Miles

Ingleside Inset

Terminal

Enbridge Liquid Pipeline
- Great Lakes Region
- Gulf Coast Transmission Region
- Midwest Region
- Southwest Region

MAP DISCLAIMER:
This map has been compiled from the best existing sources available at the time of preparation. However, Enbridge Inc., Enbridge Energy and/or its affiliates and/or subsidiaries do not guarantee the accuracy of the map or assume responsibility/ of liability for any reliance thereon.

Date: 2/26/2025
Map ID: 01-2023-01

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SECTION 2 – TABLE OF CONTENTS PAGE

SECTION 2 – TABLE OF CONTENTS PAGE

2.0 Discovery/Detection/Confirmation

2.0.1 Observation, Discovery & Detection

The detection of a discharge from the Company pipeline system may occur in a number of ways, including discharge detection by Company personnel, pipeline patrols, or the public. Discharge detection by the SCADA system and or controller at the Control Centre which monitors flow and pressure on most lines as well as tank oil levels.

Company personnel may notice the following if leak has occurred:

- Generally, a product release is very dark in color and not translucent
- Very defined edges of the oil patch when on soil
- Many crude oils will have a strong odor; those with 'sour' designation will have an H2S or 'rotten egg' smell
- If the leak migrates to a water body, the surface will have a shiny, rainbow-like appearance
- Leaks can migrate underground along fissures, faults, and along the pipeline, therefore, may not be observed directly over the line
- Dead and dying vegetation may be present where the leak is older than one day

2.0.1.1 Flow - Pressure Rates

Flow/pressure rates are monitored by Facility Management and Control Center Operations to ensure maximum operating pressure is not exceeded.

2.0.1.2 Leak Detection System

The pipelines are monitored for possible leaks using multiple methods, each with a different focus and each using different technology, resource, and timing. Together, these methods provide overlapping and layered leak detection capabilities.

2.0.1.3 Pressure Alarm

In the event of a change in pressure beyond a specified range, the operator will be signaled by an alarm which may result in the operator shutting down the associated pipeline or process equipment. Control Center Alarm Procedures:

- Ensure the pipeline/terminal is in a safe state
- Notify Regional Management/ Regional on-call of any abnormal operation
- Once a shutdown decision has been made, personnel will be dispatched to assess the situation
- If a release is detected, personnel are directed to notify the proper authorities
- In the event a release is not found, an investigation into the cause of the pressure change will be completed

2.0.1.4 Discharge Mitigation

The Field Response Team has been trained to respond to abnormal pipeline/facility operations. Source control will be maintained with the following systems and procedures:

- Automated Emergency Support Systems (e.g., sumps, safety control valves, emergency shutdowns, etc.).
- Control Centre operators close individual valves or the entire pipeline/facility.
- Manually activating shutdown devices or closing valves, etc.

2.0.2 Emergency Definition / Confirmation

Not all events, will result in an activation of the Emergency Response Plan for Enbridge Liquids Pipelines. An Emergency is defined as an unforeseen combination of circumstances or a disruption of normal operating conditions that poses a potential threat to human life, health, property, and/or the environment if not contained, controlled, or eliminated immediately. Emergency could include but not limited to:

- Death or injury requiring hospitalization
- Explosion or fire
- Leak, rupture, or spill
- Any significant event such as a natural disaster impacting operations that may threaten people, environment, assets, or relationship.

Once an emergency has been confirmed, activate the Plan, and implement the appropriate notifications and response actions.

2.0.3 Emergency Response Phases

Emergency response can be divided into three distinct phases:

Activation → Operations → Demobilization

Activation	
Control the Event Site	The event scene should first be controlled to ensure a safe and effective response to any event: • Don't rush in; hazards should first be fully assessed • Conduct vapour monitoring and confirm levels (H2S, LEL levels) are safe as approaching the event site • Establish and maintain an isolation perimeter, with hot, warm, and cold zones • Establish communications with the Control Centre; request information regarding the situation (e.g., alarms, product, pipeline readings, shutdown actions and other relevant information) • Establish an Incident Command Post, either at the event scene location or, if necessary, at a remote location • Establish staging area(s)
Size up the Situation	A site assessment will identify the scope and nature of the event, as well as any potential hazards to responders: • Assess whether visual alarms have been activated • Recognize and identify any hazardous materials involved • Identify source of any releases • Potential exposures

Activation	
Evaluate the Hazards and Risks	An assessment should be conducted to evaluate the level of risk to responders and the public: • Assess health, physical and chemical hazards • Gather technical data (SDSs, etc.) • Conduct vapour monitoring
Select and Don Personal Protective Equipment (PPE)	All incident responders should be protected with the appropriate PPE of the identified hazards. PPE includes but not limited to: • Approved Fire-Resistant Coveralls • Hard Hats (where overhead hazards are present) • Gloves • Rubber Steel-Toed Boots • Also: ○ All responders leaving the *Hot Zone* should go through a decontamination zone *(Warm Zone)* to ensure that contamination is not spread into the *Cold Zone*.
Operations	
Manage Information and coordinate Resources	It is essential that information flows quickly and freely to all resources to ensure a safe and coordinated response: • Expand the Incident Command System as needed • Ensure that all (internal and external) notifications are made • Conduct briefings • Confirm all communications to ensure that they are fully understood and implemented
Implement Response Objectives	Once initial objectives have been established, it will be possible to develop, and implement, strategies and tactics to achieve these objectives. These may be: • Offensive (i.e., emergency rescue, spill source control) • Defensive (i.e., protecting the public, spill response) • Non-intervention (protecting the public)
Manage the Event	On larger events, it will be necessary to operate over a number of Operational Periods. In these cases, it will be necessary to fully-staff the Incident Management Team, especially the Planning Section: • Establish Incident Objectives for each Operational Period • Conduct Tactics and Planning Meetings • Develop and approve Incident Action Plans • Conduct Operations Briefings
Demobilization	
Terminate the Event Response	Once the response phase of the emergency is over, the Incident Commander will stand down the Incident Management Team and ensure that all post-incident activities are completed: • Transition to, the recovery phase of the response • Conduct an incident debrief • Ensure that all event documentation is completed • Ensure that all equipment, and response management supplies are replenished • Transition from Response Phase to Project Phase with adequate documentation and continue any required project phase activities, i.e., site remediation, repair to terminal assets

2.1 Notification and Communication

The notification process is triggered by an emergency or suspected emergency that is detected by, or reported to, the Control Center, either by the public, or contractors, or external first responders, or by an employee. The purpose of the notification process is to:

- Protect the safety of the public and responders
- Control potential environmental effects as effectively and quickly as possible
- Meet regulatory requirements

General guidelines on the procedures and sequence for making the various internal and external notifications following any type of product release or other emergency event can be found in this Plan in Annex 2.

2.1.1 Emergency Notifications Action Plan and Guidance Documents

Event Observer	
Overview	Event can be observed through *Any person, who observes or becomes aware of a release, shall immediately report the event to the Control Center*
Description | Responsibilities	• Trigger could be an odor compliant • Notification from public on potential loss of containment • Notification from local response agency • Control Center alert (Leak detection alarm, volume imbalance) • Initial discovery by an employee

Control Center Operations	
Overview	*Any abnormal operating condition detected by the Control Center, or any reported or observed emergency or possible emergency, will be given an emergency status until the report is confirmed or negated. Follow up investigation and confirmation of a spill, or threat of spill, will be done immediately.*
Description | Responsibilities	• Document incoming call from the event observer • Contact Regional on-Call personnel to dispatch company first responder • If directed by Regional Management, alert external first responder agencies • Initiate Control Center notifications and procedures to mitigate hazards • Others identified in the Control Center operations procedures • The Municipal/Community emergency services will be notified unless directed otherwise by regional personnel

Enbridge First Responder / Field Response Team / Initial Incident Commander	
Overview	*Any field responder, who observes or becomes aware of a release, shall immediately report the event to the Control Center and Regional Management/Regional On-Call*
Description | Responsibilities	• Call the Control Center to isolate the system • Assess situation and activate this plan if an event is confirmed • Activate the Incident Command System, assume Incident Commander position and designate a Safety Officer. • Update Regional Management/Regional On-Call regarding the status

Enbridge First Responder / Field Response Team / Initial Incident Commander	
	• Request Regional Support Services: Compliance, Safety, Public Awareness, Environment, Emergency Management, and other groups as required to review and identify required actions • Verify the Control Center has been informed / support ongoing communications with the Control Center and Regional On-Call • Complete proper documentation for assessment of emergency (Safe Work Permit, FLHA, 214a) • Coordinate on-scene activities • Set up perimeter control and site access • Include emergency response agencies as appropriate • If applicable, direct all media to the Public Information Officer, if not available, provide the media hot line • Transfer command once the Incident Command System is stood up

Regional Management / Regional on- Call	
Overview	*As the scope of the event requires, Regional Management/Representative/On-Call Representative will:*
Description | Responsibilities	• Dispatch Enbridge First Responder or follow up with the field if already on site • Update the Control Center, establish a future communications plan • Notify Regional Director / Qualified Individual, review resource requirements and activate required roles from the Incident Management Team • Alert emergency response agencies (Police/Fire/911) if appropriate • Notify government agencies and complete regulatory reporting in conjunction with Regional Compliance • Notify Local Emergency Management Agencies if affected area is beyond Enbridge property line, contact Regional On-call Public Information Officer • Notify Support Services (Safety, Compliance, Public Awareness, Environment, and Emergency Management) in the reactive phase of Incident Command System • Support an assessment of resource requirements, provide either standby notice or activation of Incident Management Team prior to Incident Commander transition from Enbridge First Responder, engage Pipeline Integrity to support repair, re-start plans if required • Utilize the Enbridge Alert System (MIR3) if the need arises • Consider if Enbridge Response Teams, such as the Incident Support Team, E3RT and Crisis Management Team should be activated • Ensure regulatory notifications have been conducted with support from Compliance • Call response agencies/oil spill removal agencies (Annex 2) as required; and • Depending on the circumstances of the emergency, consider requesting aircraft deployment for situational awareness

Incident Management Team / Incident Support Team / Crisis Management Team	
Overview	*As the scope of the event requires, additional Emergency Response Teams will be activated*
Description | Responsibilities	• Place Incident Management Team Members on standby as event assessment and resource requirements are established (can use notification tool). • Consider activating LP Emergency Management, Enterprise Security as appropriate for the event. Identify resourcing shortfalls and request support from other Enbridge Incident Management Teams or Incident Support Team

2.1.2 External Notifications

The Initial Incident Commander/Enbridge First Responder is responsible for assuring that all required notifications/reports are completed in a timely manner for all events until a transfer of command to Regional On-Call occurs.

The Control Center, Liaison Officer and On-Call Public Information Officer will confirm that additional required notifications are completed:

- Government Representatives (elected and public service, various jurisdictions)
- Local authorities/Community Leaders
- Regulators
- Landowners
- Response contractors
- Indigenous groups and Tribes
- Stakeholders

All public statements should be pre-approved by the Public Information Officer if appointed, the Legal Officer, and approved by the Incident Commander.

Local fire, police, and emergency medical service officials will be requested to communicate the emergency to those in proximity to the event. The Liaison Officer role (which may be filled by groups such as Compliance, Community Relations, Stakeholder Relations and Indigenous Relations representatives or Land Agents for the area) will also ensure contact/follow up with local landowners, municipal representatives, government, regulators, Indigenous groups and other groups, holders.

2.1.3 Crisis Communications

The Crisis Communications and Response Team is aligned with the Incident Command System and is designed to help keep the public informed by establishing the Company as an early, credible source of information, reducing speculation and inaccuracies in reporting, and ensuring consistent messaging and information flow, regardless of medium or audience. The Crisis Communications and Response Team may be activated to support the strategic internal and external communications response and relationship management to operational and non-operational crises.

This team reports to the Public Information Officer and supports the Incident Management Team, as well as the Liaison Officer based on the nature of the event, with the following as required:

Assist with Emergency Services and Public Health Communications

- If an evacuation or shelter-in-place order is necessary, the Public Information Officer and Liaison Officer will support public safety officials in disseminating information and may assist with coordination under the direction of that authority, (e.g., Lands & Right-of-Way Agents (Land Agents) could assist by notifying the public and adjoining facilities)
- If a public warning system or Emergency Alert System is present and accessible, it may be used by local authorities to communicate emergency information and actions to the public. The Public Information Officer and Liaison Officer would support local authorities by ensuring they have accurate information and necessary details to define clear public emergency actions
- The Liaison Officer works with local public safety officials and emergency organizations (i.e., Red Cross) to establish and furnish shelters to house and feed evacuees; the Public Information Officer assists in disseminating this information as needed
- The Public Information Officer, via the Senior Communications Officer; notifies Executive Leadership (Incident Support Team and if activated the Crisis Management Team) of any evacuation or shelter-in-place messaging
- In the event of an extended evacuation, the company provides daily updates to those impacted to explain what is being done to return evacuees to their homes and to discuss and accommodate their needs. This messaging is coordinated with the applicable local authorities
- In the event of potential impact to public health due to extended exposure to air or waterborne substance, generally a notice is distributed by the local public health department, followed by notification to residents and then a media release

Manage Ongoing Crisis Communications Activities

- The Incident Commander, Public Information Officer and Liaison Officer coordinate internally, and then reach out to local emergency service officials, emergency management agencies, government officials, regulatory agencies, and local First Nation and/or Tribal groups regarding notifications and ongoing updates
- The Public Information Officer, with authorization from the Incident Commander, gathers information to develop a communications plan and messaging and, if appropriate may:

☐	Deploy additional public information support to establish a Joint Information Center
☐	Release a statement to media, consider hosting a media briefing and develop a schedule to ensure ongoing, timely updates are communicated
☐	Establish an event -specific website to post public statements and additional information products
☐	Establish a hotline or call center and document all public and media inquiries regarding the event, allowing the Company to ensure responses are made in a timely manner
☐	Activate media and social media monitoring, identifying, and correcting inaccurate information as needed
☐	Work with the Liaison Officer to develop messaging for communication with stakeholders and support outreach/delivery of messages, including notifications and ongoing updates to local First Nations and Tribal groups
☐	Establish a community center to address questions, comments, and concerns from the public.
☐	Work with the Liaison Officer and Operations teams to coordinate and facilitate site tours as needed.
☐	All information products should be reviewed by the Legal Officer (or Legal Services department) prior to being communicated as there may be legal implications for the Company

Manage Ongoing Crisis Communications Activities	
☐	As safe access permits, the Liaison Officer team and/or Land Agents, in coordination with local public safety officials: • Gather emergency contact information from the database of all property owners, residents, and tenants along the pipeline system • Go door-to-door to notify landowners of the possible impact on their property and gather additional contact information, as needed, including names, addresses (and GPS coordinates), phone numbers (home and mobile), and email • Obtain area map(s) indicating location of the pipeline and nearby residences and workplaces

See the Crisis Communications Plan on elink for additional details.

2.2 Initial Response

Initial command actions are those taken by local personnel immediately upon becoming aware of a release or emergency event. The Enbridge first responder assumes the role of the Incident Commander under the Incident Command System until a transfer of command occurs or the event is stood down. The Incident Command System is scalable and will be stood up for both small and large emergencies in order to maintain a coordinated response.

Immediate actions are required at the onset of an emergency response to mitigate the extent of a release, minimize the potential hazard to human health and the environment, as well as implement an effective response. It is also important to act decisively and in doing so, create a professional working atmosphere among the Company and regulatory authority personnel and public officials.

Immediate actions will be taken at the onset or discovery of an event to mitigate the effects and carry out an effective response. Under no circumstances will personnel place themselves in harm's way or be directed to do so by others when performing response activities. All personnel who are initial responders shall be fully trained prior to being dispatched to site.

2.2.1 Priorities

The Enbridge first responder assumes the role of the Incident Commander until a transfer of command occurs or the event is stood down.

These initial response priorities are to be front of mind when an event is observed or confirmed:

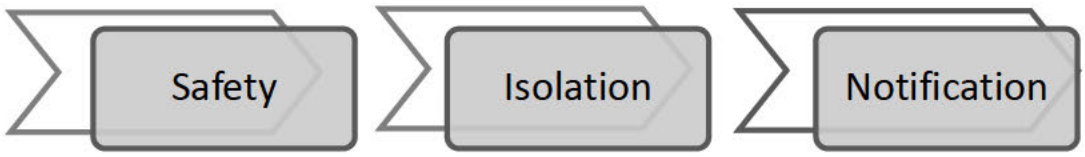


Figure 1: Safety, Isolation, Notification

2.2.2 Emergency Shutdown

Upon verification of an emergency, shut down of assets is required until deemed safe for restart. Ensure the following actions are completed:

- Verify with the Control Center the line is shut down and isolated
- If the exact location of the release is unknown, the immediate supervisor will request an aerial patrol, or if conditions are favorable, a foot patrol, manpower might be used to walk the line

Once a leak site has been located, the following information is to be confirmed:

- Eliminate ignition sources
- Assess if water intakes are at risk
- Assess if public evacuation is required
- Restrict access to site:
  - Request support from law enforcement agencies
- Inform local response agencies and advise of the product characteristics and handling; precautions are described in the Safety Data Sheets
- Notify railroads or utility companies in the area

2.2.3 Responsibilities

Enbridge First Responder/Initial Incident Commander responsibilities:

Internal Actions	
☐	Contact Control Center to isolate the system
☐	Contact Regional Management and People Leader, see Regional Manager On Call Schedule if after hours.
☐	Assume the role of Initial Incident Commander and assign a Safety Officer
☐	Request support from other groups as required (Safety, Compliance, Public Awareness, Environment, Pipeline Integrity, and Emergency Management) to assist prior to the Incident Command System structure being stood up
☐	Activate the Emergency Response Plan(s): • *Integrated Contingency Plan* • *Field Emergency Response Plan* • Any other relevant company documents (*OMMs: Safety Procedures* etc.)
☐	Take measures to reduce the impact of the event
☐	If applicable, lock culverts/sewers, dam ditches, shut down ignition sources and maintain the safety of personnel involved in these activities

External Actions	
☐	If applicable, work with the external first responding agency on scene to ensure a coordinated response
☐	If applicable, direct all media to the Public Information Officer, if not on site, see *Regional Communications* for actions

2.2.4 Response Considerations

The level of response is dependent upon few factors:

- severity of the release
- the size
- potential environmental, social, and economic impact
- the expected public interest in the event

Where response activities will require Ground Disturbance (defined as any work, operation or activity that results in the penetration of the ground to any depth), ensure that an Emergency One Call notification is placed to the applicable One Call Center and that all Ground Disturbance requirements are met for the duration of the response.

2.2.5 Emergency Classification and Tiered Response

The Response Organization is based on a three-tiered response structure. Not all criteria are required to determine a specific level. However, there may be instances where an aspect of the emergency is so significant, that it would result in an increase in the response level. The Incident Commander or designate is responsible for determining the level of the emergency. The decision to downgrade the emergency level will be made once the situation improves. The decision may be based on monitoring data, control/containment of the situation or reduced risk to the public or environment.

Where appropriate, the Incident Commander will invite the participation of Federal, Provincial/State, and local Agencies to form a Unified Command.

2.2.6 Emergency Classification and Tiered Response Chart

Condition	Alert Event	Level 1	Level 2	Level 3
General criteria	The Company investigates abnormal operating condition detected by the Control Center, or any reported or observed emergency or possible emergency, will be given an emergency status until the report is confirmed or negated	The Company has the capability to manage and control a Level I emergency using company resources available within the area. The First Responder will assume the Initial Incident Commander position until a transfer of command occurs.	The Company has the capability to manage and control a Level 2 emergency using company resources and expertise, with some assistance from local contractors. The Regional Director or alternate Qualified Individual will assume the Incident Commander position.	The Company may request assistance from other Industry, Municipal or State/Provincial Agency personnel to support the response to the event. The Region Director or alternate Qualified Individual will assume the Incident Commander position.
Threat to people / environment	• No threat to people • Minimal area impact	• No immediate threat to people • No threat to facility infrastructure, no effects outside company property, very limited effects on pipeline right-of-way • Minimal impact on company property and no impact on public property • Minimal environmental impacts (including wildlife, ecosystems)	• Potential exists for injury/ threat to people • Offsite impact possible • Potential threat to company facility infrastructure, no immediate threat outside company property, moderate effect on pipeline ROW • Moderate environmental impacts	• Fatality/ serious injury or illness and/or ongoing threat to public safety • Ongoing threat to facility infrastructure • High environmental impact • Potential for long-term or significant impact to operations (or no indication of how long impact may last)
Containment & control	• Immediate control at hand • Restricted to site • Low probability of escalation • No immediate impact to operations	• Control of released product pending • Minimal impact to operations • Typically, respond with existing resources • External resources may be required	• Limited or short-term impact to operations • External resources may be required	• External resources required
Response actions	• May complete 3rd party / regulatory notifications • Handled through normal operating procedures under the direction of the supervisor or senior worker on site o Pressure drops, pipeline shut in, field dispatched to investigate o Pressure safety relief valve discharge, field cleanup activities	• Complete 3rd party / regulatory notifications • The Incident Command System is activated • Response control at hand and can quickly move to Tier 2 as situation warrants • Local resources / contractors and response organizations may be required • Response activities under direction of Incident Commander • Response personnel: Initial Incident Commander and Safety officer at a minimum	• Complete 3rd party / regulatory notifications • The Incident Command System activated • Actions taken to ensure public safety • Support personnel/equipment from neighboring region activated and awaiting notice of deployment as needed • Broader range of response activities • Local resources / contractors and response organizations required and sourced	• Complete 3rd party / regulatory notifications • Actions taken to ensure public safety • Support personnel/equipment from neighboring region deployed • Immediate multi-agency involvement required; Unified Command established • Local resources /contractors and response organizations required and sourced
Response personnel / team(s)	• Field Responder(s) • Regional Management / Regional On-Call / Regional Operations Teams	• Field Response Team(s) • Incident Management Team staffed as required o one position may assume many responsibilities o at minimum, the Incident Commander and Safety Officer will be staffed	• Field Response Team(s) • Incident Management Team to manage reactive and proactive phases • Incident Support Team activated to support if required • Crisis Management Team notified if emergency warrants	• Field Response Team(s) • Full Incident Management Team activation • Crisis Management Team notified • Incident Support Team • Enbridge Enterprise Emergency Response Team (E3RT) activated to support longer term events if required
Documentation	• If possible, complete ICS 214a Individual Log to capture initial response actions	• Complete ICS 214a Individual Log to capture initial response actions • Incident Command System 201 packet completed (reactive phase of the response)	• Complete ICS 214a Individual Log to capture initial response actions • Incident Action Plan required for multiple operational periods (proactive phase)	• Complete ICS 214a Individual Log to capture initial response actions • Detailed Incident Action Plan created for each operational period
Notes	1. Regulatory classification levels may not align with Enbridge classifications 2. In Eastern Region, 3rd party notifications will be reported for alert level events 3. Event records are required for post incident / lessons learned	4. Scale response actions / levels to meet the needs of the emergency 5. Additional guidance documents may be activated and implemented to meet the needs of emergency	6. Gulf Coast Terminals Region: Field Responder / Field Response Team actions are primarily performed by Miller Environmental (on-site OSRO) 7. Local resources Miller Environmental (On-site), Marine Spill Response Corporation (OSROs) and RTFC Industrial Response Contractor for large scale, fire events.	

2.3 Spill / Site Assessment / Product Information

The primary purpose of a site assessment is to evaluate the presence of risk to both incident responders and the public. However, if it is safe to do so, information about the event should be gathered as quicklyas possible in order to evaluate the situation and develop an initial action plan.

When conducting the site assessment, note the following:

- Identify and evaluate the immediate risks to and impacts on the environment, human health, and infrastructure
- Classify the spill according to the following factors:
  - Substance spilled
  - Quantity of the substance spilled
- The location and circumstances of the spill
- Assess:
  - What is to be done to protect the safety of response personnel and the public
  - Whether or not an evacuation is necessary

2.3.1 Hazardous Product – Site Assessment

A description of some conditions that should be watched for during a site inspection of the surface is provided below:

2.3.1.1 Crude Oil Leaks

All leak sites should always be approached upwind, uphill and/or upstream, following company guidelines to ensure personal safety.

- Oil releases will generally be very dark in color and not translucent
- Very defined edges of the oil patch when on soil
- Many crude oils will have a strong odor; those with 'sour' designation will have an H2S or 'rotten egg' smell
- If the leak migrates to a water body, the surface will have a shiny, rainbow-like appearance
- Leaks can migrate underground along fissures, faults, and along the pipeline, therefore, may not be observed directly over the line
- Dead and dying vegetation may be present where the leak is older than one day

2.3.1.2 NGL Leaks

All leak sites should always be approached upwind, uphill and/or upstream, following company guidelines to ensure personal safety.

- NGL requires heat to vaporize and, as a result, will have a refrigeration effect on the surrounding environment as it turns from liquid to a vapor
- Any atmospheric water vapor will be condensed producing a fog-like cloud in the area.
- There may be an ice dam built up around the leak, and ice built up on exposed pipe
- Yellow-stained snow may indicate NGL accumulation under the snow
- In windless conditions, NGL vapor is heavier than air and the vapor cloud may be visible close to the ground

- The cloud will also collect in depressions and/or follow low spots of the ground contour
- In windy conditions, the cloud will tend to dissipate and to be pushed further away
- NGL liquid has a slight odor of gasoline. Odorant is not added to the material
- Dead and dying vegetation may be present where the leak is older than one day
- Brown vegetation indicates soil saturation

2.3.1.3 Refined Products and Condensates

All leak sites should always be approached upwind, uphill and/or upstream, following company guidelines to ensure personal safety.

- Translucent appearance
- On water, the material will have a similar appearance to crude.
- The odor will be that of whatever product is in the line at the time (i.e., gasoline, diesel, JetB)
- Vegetation will be dead or dying

2.3.1.4 Natural Gas

All leak sites should always be approached upwind, uphill and/or upstream, following company guidelines to ensure personal safety.

- It is lighter than air; therefore, the vapor will rise
- If a rupture takes place at the time of the leak, there will likely be a crater at the leak site along with pieces of pipe strewn throughout the area.
- If ignition takes place, a large fireball will initially be seen followed by a prolonged burn
- If in water, either bubbles or mist spray will be present. Ignition is also possible in this situation
- Loose soil may result in a dust cloud being present
- Natural gas is not odorized until it gets close to the consuming public. Therefore, it may not have an odor to it

2.3.2 Site Assessment Checklist

Site Assessment Checklist	
☐	Conduct air monitoring (refer to the LP Safety Standards for Gas Monitor Alarm Set Points)
☐	Complete safe work permit
☐	Remove all non-intrinsically safe equipment (radio's etc.)
☐	Maintain regular communications with the control Centre
☐	Obtain information regarding the situation
☐	Establish communications procedures
☐	Don appropriate PPE
☐	Refer to SDS
☐	Determine wind speed and direction
☐	Determine current direction
☐	Approach spill from upwind, uphill and/or upstream, / up current if possible

In case of Natural Gas Liquids (NGL) release	
☐	Follow the site assessment checklist in the previous table
	Assess the site for potential impacts:
☐	Electrical lines down or overhead
☐	Unidentified visible liquid or solid products.
☐	Visible vapors
☐	Odors or breathing hazards
☐	Fire, sparks or other ignition sources
☐	Holes, caverns, deep ditches, fast water or steep slopes nearby
☐	Local traffic
☐	Ground conditions (dry, wet or icy
	Control ignition sources:
☐	Smoking or open flames
☐	Vehicles or garage door openers
☐	Doorbells or burglar alarms
☐	Telephones or pagers
☐	Light Switches or flashlights
☐	Heating system or internal combustion engines and motors

2.3.3 Event Details Checklist

Event Details Checklist	
☐	Assess safety of personnel, determine if there are injured
☐	Determine source of release
☐	Determine if source is isolated, if not, isolate. Close all valves
☐	Estimate spill volume
☐	Determine if the product has or will reach the water
☐	Determine if the product has escaped local containment
☐	If required, evacuate personnel

2.3.4 On-Water Spill Surveillance

The following guidelines should assist in spill surveillance:

- Spill surveillance should begin as soon as possible to aid response personnel with assessing spill size, movement, and potential impact locations
- Cloud shadows, sediment, floating organic matter, submerged sand banks, or wind-induced patterns on the water may resemble an oil slick if viewed from a distance
- It is difficult to adequately observe oil on the water from a boat, dock, or shoreline
- Spill surveillance is best accomplished using helicopters or small planes
- Helicopters are preferred due to their superior visibility and maneuverability characteristics
- If fixed-wing planes are used, high wing types provide better visibility than low-wing types
- Flights should minimize impact to wildlife where possible
- Document all observations in writing and with photographs and/or videotapes
- Describe the approximate oil slick dimensions based on available reference points (i.e., vessel, shoreline features, facilities, etc.).
- Use aircraft or vessel (if safe to do so) to traverse the length and width of the slick while timing each pass.
- Calculate the approximate size and area of the slick by multiplying speed and time

- Record aerial observations on detailed maps
- In the event of reduced visibility, such as dense fog or cloud cover, boats may be used for patrols and documenting the location and movements of the spill
- Boats will only be used if safe conditions are present, including on-scene weather and product characteristics
- Surveillance is also required during spill response operations to gauge effectiveness of response operations, to assist in locating skimmers and to continually assess size, movement, and impact of spill

2.3.5 Spill Volume Estimation

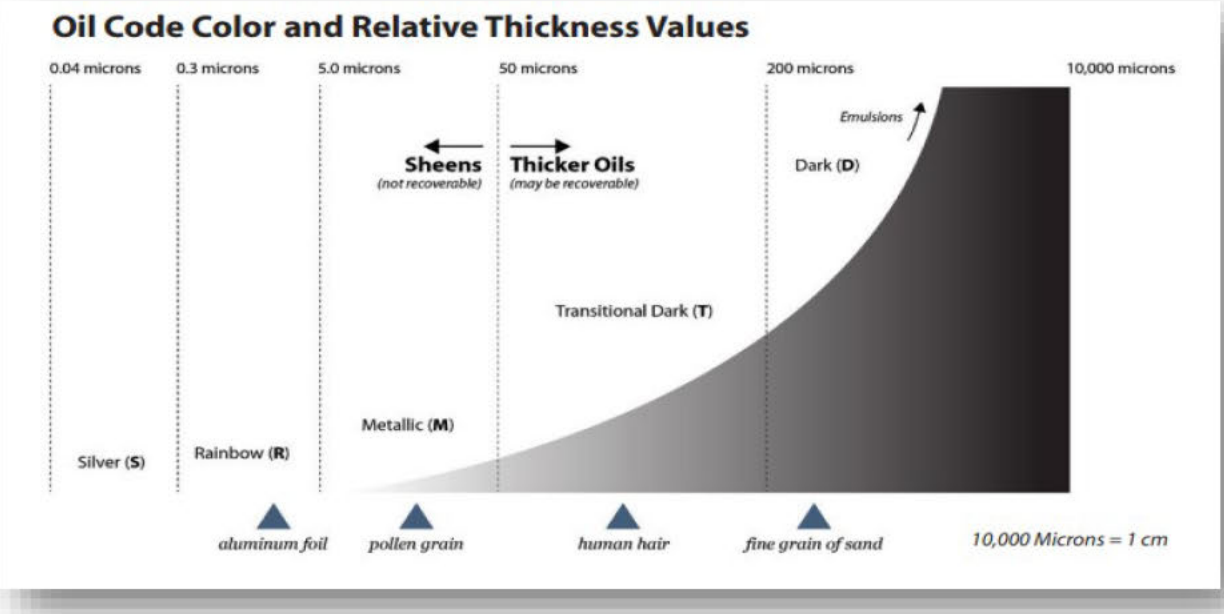
Early along in the response, estimation of spill volume is required to:

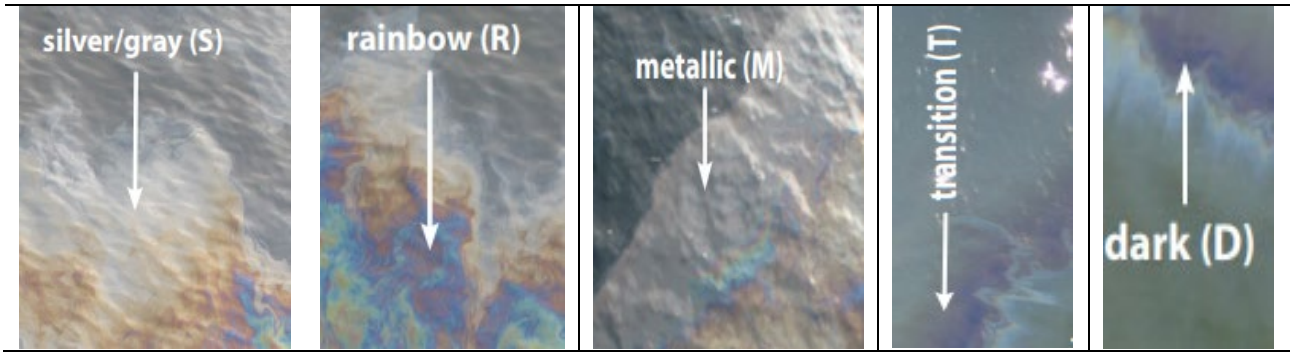
- Report to agencies
- Determine liquid recovery and containment requirements
- Determine disposal and interim storage requirements
- In the event that actual spill volumes are not available, it may be necessary to estimate volume

Visual assessment of the surface area and thickness (note that this method may yield unreliable results):

- Interpretation of sheen color varies with different observers
- Appearance of a slick varies depending upon amount of available sunlight, sea-state/turbulence, and viewing angle
- Different products may behave differently, depending upon their properties

Oil volumes can be estimated by multiplying the area of the slick by the average estimated thickness. The following chart applies when the oil is on water. In the case of an impoundment area the spill can be estimated by multiplying the thickness by the area covered.





*Graphics are from NOAA's Open Water Oil Identification Job Aid

Volume calculations for surface spill, pipeline calculator and dispersant can be done online by visiting The Response Group website https://www.responsegroupinc.com/pipeline-volume-calculator.

2.3.6 Methods for Estimating Spill Size

Inventory Estimate	If available, information provided from the control center can be used to provide an initial estimate of the spill volume. The volume should match the change in a cutoff inventory measurement
Tanks	If the leak source can be isolated to a tank, an initial leak volume estimate can be determined as: • Volume = change in height of the tank x the volume per inch as found on the tanks strapping table An initial release volume can be calculated as: • Volume = (mainline flow rate x time to isolate) + volume of drain-up from the release site • See OMM Book 3: 06-02-15 Drainup and Linefill for the calculation The volume release estimate can be verified by the mismatch in injection and delivery flow meters of tank volume change. In systems monitored by a leak detection system (LDS), imbalances or estimates reported by the LDS may be useful for estimating spill volumes
Land	The following is a list of possible tools that can assist with determining a spill volume on land • Transportation Spill to Land Estimation Tool • SCADA (Control Center calculation) • Tank Data Program In systems monitored by a leak detection system (LDS), imbalances or estimates reported by the LDS may be useful for estimating spill volumes
Leak on Land – Field Measurement	To estimate the volume of a spill in a field location, the spill is segmented to a summation of area calculations. The volume of each area is calculated as the length x the width x the depth: • 1 m3 = 6.29 bbls - 1 ft3 = 0.178 bbls • 1 in = 0.0254 meter - 1inch = 0.0833 ft Length and width should include any soil staining in addition to areas where free product is observed. Depth estimates should consider the following: • Estimate depth of free product penetrating surface as well as depth of staining in soil • Estimate depth of free product sitting on top of the surface at the location where this appears to be deepest • Depth for free product and staining in soil should be taken at a location nearest to the release point • Total depth used for volume estimates should include all depth estimates

Oil Thickness Estimation Chart

Appearance	Approximate Quantity of Oil in Film	
	Inches in Thickness	Gallons/mile2
Barely visible	0.000002	25
Silvery	0.000003	50
Trace of Colors	0.000004	100
Bright Colors	0.00001	200
Dull Colors	0.00004	666
Dark Colors	0.0001	1,332
Thickness of light oils: 0.0010 inches to 0.00010 inches		
Thickness of heavy oils: 0.10 inches to 0.010 inches		

2.3.7 Spill Volume Estimates Checklist

The following checklist is used with hard to quantify leak volume identified in the field:

Volume Estimates Checklist	
☐	Leak with hard to quantify volume identified in the field
☐	Is volume estimate available from leak detection system? • If yes, estimate using imbalances reported by leak detection system • If no, estimate using SCADA and metering info
☐	Can volume be estimated using pipeline hydraulic calculations combined with SCADA data • If yes, estimate using pipeline hydraulic calculations • If no, conduct Environmental Assessment
☐	Can the potential for product migration into the subsurface be ruled out? • If yes, is the release primarily in the form of pooled product on the surface? • If no, consult with internal departments (Control Center, Measurement Operations, Environment) to determine potential spill parameters
☐	Can volume be estimated with reasonable uncertainty using operational data? • If yes, review estimate with Regional Management and internal stakeholders • If no, conduct Environmental Site Assessment to facilitate volume estimation
☐	Conduct Environmental Site Assessment to facilitate volume estimation • Review volume estimate for reasonableness
Note	• Estimates should take uncertainties (such as extent of subsurface contamination, duration of leak, etc.) into account • This checklist provides guidance but is not intended to exclude using multiple approaches to estimate spill volume • When multiple methods are available to estimate spill volume, they can be complementary and may together provide a better estimate of the possible spill volume than a single method • Make initial regulatory notifications as required using best available (qualify as preliminary estimate that requires further assessments) • Once more detailed volumes are estimated, conduct follow up notifications to regulatory agencies and other stakeholders, if required

2.3.8 Site Security and Control

Security is necessary to protect the public and responders, prevent any additional damage due to sabotage, protect the equipment, and eliminate congestion at the work site due to unauthorized personnel. If there is a security event, notify Enterprise Security.

The priority of all Enbridge personnel in any emergency is protecting the public and responders. The public will be prevented access to an emergency site while there is any danger of explosion, fire, hazardous vapors, or other hazardous condition.

Security measures need to be established early in the event to provide the following:

- Protect personnel from loss or damage and protect assets
- Ensure the safety of the public
- Establish a perimeter (zone of safety) around the site
- Ensure the public does not interfere with response and clean-up operations
- Ensure access for personnel and equipment to the access point, staging area and Incident Command Post

[redacted]

2.3.9 Setting Up 'On-Site' Work Areas

Set up an Incident Command Post, Staging Areas, and Decontamination Stations as necessary for the circumstances.

2.3.9.1 Protective Zones

Establish initial control perimeters based on the following guidelines:

Protective Zones	To minimize spreading contamination from an emergency site to unaffected areas, the Safety Officer should record protective zones (see Figure 2) on the ICS 201-5 Site Safety and Control Form. Protective zones should identify, the Hot Zone, Warm Zone, Cold Zone
Hot Zone	The hot zone is the release site or site of clean-up operations. Any area that requires respiratory protection should be within the boundary of a designated hot zone. Access to the hot zone is restricted to trained and properly equipped emergency response personnel only. Personnel not involved in emergency operations should be prevented from entering and escorted off the site if necessary
Warm Zone	The warm zone is a transition zone where equipment may be cleaned, and contaminated clothing removed, before leaving the site. Follow the established Decon plan. Appropriate PPE is required. Could initially be consider a containment area
Cold Zone	The cold zone is the largest zone and includes all areas not immediately involved in the emergency. Take all possible efforts to ensure contamination does not spread to this area. Air monitoring delineates the perimeter where air contaminants and combustible vapors cease to be detected. The cold zone should be established outside of this perimeter. Locate the Incident Command Post and staging area (pre-deployment staging area for equipment arriving on site) in the cold zone. For large events, ensure that the Incident Command Post is not positioned near the event.

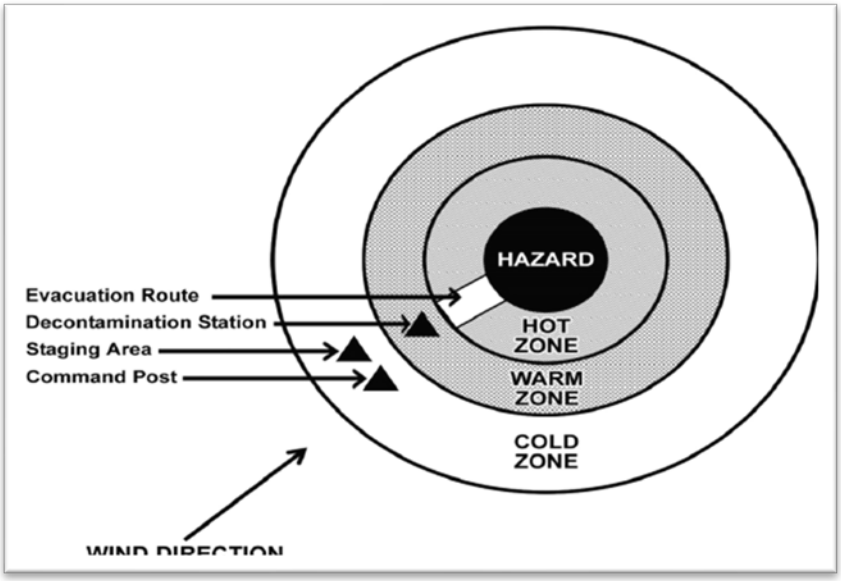


Figure 2: Protective Zones

2.3.9.2 Isolation Distance

The following table depicts safe distancing as recommended by the latest edition of the Emergency Response Guidebook (ERG), by the Department of Transportation, and Transport Canada. Reference to the latest edition of the Emergency Response Guidebook is further recommended to confirm safe distancing relative to the site-specific conditions.

Product	Guide No	ID No	Immediate Precautionary Evacuation Measure	Large Spill Evacuation	Evacuation in the Event of a Fire
Condensate (Diluent), Natural Gas, Butane, Ethane, Methane, Propane, Natural Gas Liquids	115	1971, 1011, 1075, 1035, 1978, 1971, 1075	100 meters (330 feet)	800 meters (½ mile)	1,600 meters (1 mile)
Naphthalene Crude	133	1334	25 meters (75 feet)	100 meters (330 feet)	800 meters (½ mile)
Petroleum Crude Oil, Petroleum products, Pentane, Hexane, Heptane, Octane, Nonane, Decane	128	1270, 1267, 1265,1268, 1208, 1206, 1262, 1920, 2247	50 meters (150 feet)	300 meters (1,000 feet)	800 meters (½ mile)
Petroleum sour crude oil, flammable, toxic	131	3494	60 meters (200 feet)	800 meters (½ mile)	800 meters (½ mile)
Benzene, Toluene, Xylene	130	1114, 1294, 1307	50 meters (150 feet)	300 meters (1,000 feet)	800 meters (½ mile)
Hydrogen Sulfide Gas	117	1053	100 meters (330 feet)	300 meters (1,000 feet)	1,600 meters (1 mile)

Consider the hazards associated with the hazard categories:

Flash Fire and Vapor Cloud Explosion	Should be considered potential hazards in structurally condensed areas (heavy urban areas) especially under low wind, stable weather conditions
Pool Fires	Should be considered potential hazards in structurally condensed areas (heavy urban areas) especially if wind speed is high and ignition is delayed (product has pooled significantly). These hazards may result in a travelling flame front, damaging overpressure, or exposure to thermal radiation; therefore, responders should use the distances identified for "Evacuation in the Event of a Fire" even if no fire is present. In a full-bore rupture where there is a risk of Flash Fire or Vapor Cloud Explosion, these distances should be doubled.
Vapor Cloud Explosion	These distances should be doubled. • Additional conditions that should be considered when determining an evacuation zone include weather, full bore rupture, wind speed, overcast/clear sky and day/night • These substances may also present a Toxic Inhalation Hazard (TIH) and nighttime distances will defer from above

2.3.10 Safety Data Sheets

Safety Data Sheets can be accessed through the 3E Protect application available on Enbridge computers and mobile phones.

SDS on elink or Enbridge apps	Safety Data Sheets are maintained in the 3E Protect SDS Database and can be accessed through a single sign-on process for Enbridge employees.	
SDS app on mobile phones	Scan this QR code to visit or download the 3E Mobile site [redacted]	[redacted]
SDS by phone 1-800-451-8346 1-760-602-8703	Employees can use this 24/7 service to contact 3E and request an SDS(s), or any related information such as PPE, fire fighting, etc… The numbers can also be used as a poison control number.	

2.3.11 Evacuation / Shelter in Place

2.3.11.1 Personnel Evacuation

Evacuation plans are located in the applicable facility. All evacuation directives will be communicated through an audible signal, either through voice by the designated Individual, or by the activation of an alarm system.

The evacuation plans provide guidance in the event of shutdown and evacuation.

- In the event of an event, the facility operator will stop the flow of product by normal operating procedures
- All facility personnel should evacuate except for any individuals designated to remain on site (refer to the LP Safety Standards for further details)
- The Fire Department will be notified if there is a fire
- Arriving personnel, equipment and fire resources will be met at the main gate or muster point of the facility, unless deemed unsafe to do so
- Tactical deployment of arriving resources will depend on the current situation

Evacuation Checklist	
☐	Immediately stop work activities
☐	Check the wind direction
☐	Move upwind or cross wind
☐	Check the wind again
☐	Conduct a head count to account for all personnel known to be at the facility,
☐	Assist in alerting and escorting personnel, including visitors and contractors to the appropriate muster point
☐	Notify the Control Center
☐	Shut off running equipment if safe to do so
☐	Assist in hazard control activities as requested
☐	Check in at muster point for accountability

Evacuation Checklist	
☐	Assist in search and rescue of missing persons
☐	Injured personnel will be transported to the nearest emergency medical facility. All other personnel will remain at the evacuation point until the "All Clear" signal is given.
Note:	Evacuation should be carried out in an orderly manner. Personnel should walk, NOT run or panic.

2.3.11.2 Community Evacuation

In planning an evacuation, the following should be considered:

- The size and expected duration of the release
- Egress routes
- Current and expected meteorological conditions
- The potential for unexpected ignition

A recommendation to evacuate should be made by a Qualified Individual/Incident Commander based on LEL monitors and or air quality monitoring. If public safety is impacted, carry out the following actions:

- Evacuation of the public should only proceed when it is safe to do so and ONLY in cooperation and coordination with Local Emergency Services as identified under community emergency response plans. The decision to evacuate is a community responsibility
- Support the evacuation and cover the cost of the response
- Evacuation is recommended for events in which the plume is visible, and egress can occur in any direction away from the plume
- If the public should be evacuated before external response agencies arrive or if these agencies are not available, the Incident Commander should take all steps necessary to ensure public protection (e.g., assigning Company employees to begin a door-to-door evacuation), then turn over these duties to community agencies as soon as possible
- Provide a clear recommendation to evacuate the public should the Company become aware of an immediate threat to life and safety that may not be under action by first responders
- Enbridge will serve only in an advisory capacity during an evacuation order and may assist with the logistics of an evacuation

2.3.11.3 Shelter in Place

Sheltering is the primary public protection measure for high vapor pressure products and when the hazard is of limited duration. This creates an indoor buffer to protect affected individuals from higher (more toxic) concentrations that may exist outdoors. The goal is to reduce the movement of air into and out of the building until either the hazard has passed, or other appropriate emergency actions can be taken (such as evacuation).

Sheltering indoors is a viable public protection measure in circumstances when:

- There is insufficient time or warning to safely evacuate the public
- Residents are waiting for evacuation assistance
- The release will be of a limited size and /or duration
- The location of the release has not been identified
- The public would be at a higher risk if evacuated
- Stopping traffic (e.g., on roads, rail lines, bridges), as required

For long-term releases, evacuation is preferred to sheltering if public safety can be assured during the evacuation process. Evacuation is a viable public protection measure in circumstances when:

- The location of the plume is known, and safe egress routes can be assured
- The release will not likely be contained in the near future
- Visibility and road conditions are good
- The residents clearly understand their directions
- Residents should also be evacuated during ongoing emergency flaring or burning if their health and safety could be affected by the operation

A natural gas release may be ignited at the source in order to reduce public exposure to the hazard. If an immediate threat to human life exists and there is not sufficient time to evacuate the hazard area the Incident Commander is authorized to ignite the release.

2.4 Response Operations

2.4.1 Enbridge's Response Management System

Enbridge's Emergency Response is structured to ensure that appropriate resources and support are deployed to suit the complexity and severity of the emergency, from the initial response through the duration of the event. Both tactical and strategic response and support have been considered. Depending on the scale and scope of the event, multiple teams will be activated.

Enterprise Crisis Management Team – Strategic (EXTERNAL TO Emergency Management Program)

As identified in the Enterprise Crisis Management Plan (external to this framework and Emergency Management Program): Responsible for "Actions taken away from the scene to support and assist the Incident Support Team and [Incident Management Team] in planning, business recovery projects and address the implications of the problem and its potential on the Company's viability, operability, and credibility"

LP Incident Support Team - Strategic

This is a team of pre-identified senior BU leaders and central function personnel capable of taking strategic actions at and/or away from the event scene to support the IMT, facilitate planning, and manage business recovery projects. The IST may be scaled appropriately to coordinate business upset conditions with or without an operational impact.

Incident Management Team – Tactical & Strategic (Regional)

A regionally based team that manages the overall response using the National Incident Management System (NIMS) Incident Command System (ICS), creating Incident Action Plans, and providing other support functions to coordinate the efforts of response personnel. The IMT functions near the event scene to support tactical response operations. The IMT is normally activated for Tier 2 and 3 responses (though an Incident Commander will activate it as they see fit) and operates in the "cold zone" at the Incident Command Post.

LP Membership – Enbridge Enterprise Emergency Response Team

This is a business unit team, trained and organized similarly to regional IMTs (Incident Management Team). The purpose of the team is to augment and/or replace members of the IMT during complex and/or long responses. When activated, members of E3RT cease to report to their regular leader and will report to the Incident Commander. The E3RT remains in place until the Incident Commander no longer requires their services.

Full Membership – Enbridge Enterprise Emergency Response Team

At the request of the Regional Director, the full membership of this cross-business unit team of individuals, who are specially trained to support significant events, will fill roles in the Incident Management Team.

Field Response Team - Tactical

A team of tactical Enbridge responders who conduct prolonged response actions at an event scene including cleanup operations. This can include implementing containment & recovery measures, employing initial response actions, and initiating the use of facility fire equipment.

2.4.2 Incident Command Structure

Enbridge utilizes the Incident Command System for response management:

- Enables a well-managed response and limits the effects of an emergency through the rapid, effective, coordinated response of resources
- Clarifies the roles of personnel involved in emergency response
- Allows for essential information and resources to be organized into a logical structure for planning and implementing the required actions
- Provides a flexible preplanned emergency response organizational structure for any type or size of event
- The structure of the Incident Command System required depends on the nature and complexity of the emergency, and is based on need

2.4.3 Incident Management Handbook and Job Aids

The Incident Management Handbook incorporates core Incident Command System principals noted above and reflects Enbridge-specific processes and procedures while remaining consistent with NIMS ICS. The handbook consists of:

- Planning cycle process – initial response phase
- Planning cycle process – proactive phases
- Guidance documents – detailed Incident Action Plan

Section specific job aids outline responsibilities for the following response management roles:

- Incident Command Section
- Operations Section
- Planning Section
- Logistics Section
- Finance Section

The Incident Management Handbook and associated Job Aids for specific sections is located on the Governance Documents Library.

2.4.4 Operational Period Planning Cycle

In accordance with the Incident Command System, Enbridge follows the “Planning P” model for event response. The Planning cycle and associated meeting schedule can be found in the Incident Management Handbook on the Governance Documents Library.

2.4.5 Incident Command Posts

The Operations Section Chief, Incident Commander, or designate, select the location of the Incident Command Post based on factors such as:

- Wind direction, areas of high ground and site access
- The potential for plume development/migration, explosion and toxic effects of a spill should be taken into account
- Input from the Communications Unit Leader should be sought for advice on radio and information technology connectivity

If a vapor cloud is present or imminent, adapt the location of the Incident Command Post to the specific circumstances of the emergency. For example:

- In isolated areas, it may be more appropriate to set up several miles from the emergency site
- In populated areas, it may be more appropriate to set up close to the emergency site
- Refer to the ER guidebook for guidance on safe distance

The Incident Command Post:

- Should be clearly illuminated and identified by signage at the emergency site entrance (or just inside), visible to all entering the site
- Always attended
- Depending on the security situation in the area, seek advice from the Intel Advisor and/or Security Manager and/or Enterprise Security)
- For evolving events, the Incident Command Post may need to be moved to allow for expanding activities. This may include moving to a community center, hotel conference room or other location
- The ICS 208 Site Safety Plan posted on the situation status board
- Will have the following minimum materials, maps, control points, situation status boards, response plans, communications systems

2.4.6 Response Facilities

Depending on the scale of the emergency, a Forward Operating Base may be established to support tactical operations. Typically, used to support tactical operations.

- Staging sites
- Decontamination and temporary waste handling sites
- Accommodations
- Incident Command Post
- Joint Information Center
- Forward Operating Bases
- Heliport

Depending on the complexity of response and the amount of resources, personnel and management required, multiple or expanded facilities may be required.

2.4.7 Expanding Events / Unified Command

When an emergency crosses geographic areas, political boundaries or government departments, the Incident Commander may establish a unified command group that includes a representative from each jurisdiction (Federal, Provincial/State, Tribal/Indigenous Communities and local). In Canada and The U.S., Federal and State agencies have the authority to exercise overall responsibility during a response. The designated federal monitoring officer monitors response operations undertaken by the Incident Management Team. The designated Federal On Scene Coordinator/federal monitoring officer may monitor the event, or actively participate in the Incident Management Team as part of a Unified Command construct. Unified Command will develop objectives, priorities, and strategies.

The Federal On Scene Coordinator provides federal resources and technical assistance and coordinates monitors or directs response efforts and serves as the point of contact for all federal efforts related to the emergency. State On Scene Coordinator essentially provides the same type of assistance but from a State perspective.

When federal and/or state agencies arrive on-scene to participate in managing a response, the agencies and Enbridge will utilize a Unified Command structure to jointly manage the emergency. In the Unified Command, decisions with regard to the response will be made by consensus and documented through a single Incident Action Plan for each operational period.

2.4.8 On-Site Coordination – Province of Québec

In Quebec, an on-site Emergency Operations Center (EOC) will be established to coordinate the response to major events in collaboration with municipal, provincial, federal governments, as well as other command posts.

This on-site EOC will serve as the operational and tactical coordination hub at the disaster site, bringing together leaders from various responding organizations to coordinate operations with the support of the site coordinator.

Emergency responders assigned to the on-site EOC by their respective organizations will maintain direct communication with their on-site command posts, ensuring that the on-site EOC's coordinated action plan aligns with the realities and actions of responders at each organization's command post. Additionally, each command post representative at the on-site EOC will have links to their organization's off-site emergency operations centre.

2.4.9 Cross Border Response

For a larger scale event, employees may be required to cross the border to support and/or relieve Incident Management Team members.

- Contact [redacted] at least one business day prior to traveling across the border
- Employees should provide a photocopy of their valid passport, resume, and a high-level job description of the work they will be completing during the response
- This information is to assess eligibility for cross-border travel and to issue required support documents

2.4.10 Natural Resource Damage Assessment – U.S.

Under the provision of CERCLA, the Oil Pollution Act of 1990, and numerous state statutes, cost recovery can be obtained from industry for natural resource damage caused by the release of oil or hazardous substances to the environment (land, air, biota, groundwater, and surface water). A Federal or State government entity, Indigenous groups or another nation acting as a public trustee of a natural resource may file claims for damages to natural resources.

An assessment is often conducted by a third party used to determine damages for residual natural resource injuries. This assessment is often conducted by the public Trustee, the potential responsible party or both. During the assessment, the injured natural resources are identified, the extent of the injury is quantified and the extent of the economic damage resulting from the

loss of services provided by the resources is determined. In addition, the assessment also determines the cost of restoration or replacement of the injured natural resource.

Listed below, in descending order of importance, are locations typically sampled after a hydrocarbon release:

- River reaches immediately downstream (ahead) of the product plume (water and sediment samples)
- Wetlands and backwaters adjacent to and downstream of the product plume
- Areas freshly affected by the release
- The area adjacent to the release location (source area samples)
- Upstream areas unaffected by the release

Over the course of the response, locations may be re-sampled to evaluate the following:

- Changing extent and severity of impacts
- Fate and degradation of the hydrocarbon product over time/Changing site conditions

2.4.11 Volunteer Plan

Normally, the Company will not hire and/or train volunteers for work on an oil spill response event. Consequently, the Company will refer volunteers to appropriate provincial/state and/or local agencies or organizations that are set up to handle volunteers.

If the scale of the event requires, the Company will confirm status of volunteer use under provincial/states legislation as some jurisdictions afford the same protections and regulations to volunteers as workers under Labour codes and regulations. Volunteers are the responsibility of the company and as such are to be afforded the same level of health and safety training, tools, and protective equipment in accordance with provincial/states legislation.

2.5 Hazard Specific Response Scenarios and Actions

Enbridge uses an all-hazards approach to mitigate and respond to a variety of hazards and threats. The Field Response Team will consider the impacts to *people, environment, assets,* and the *relationship* of the company as response actions are carried out.

General Initial response actions bellow will be carried out, and following sections is additional guidance for hazard specific response situations. Ensure to document actions as required.

Initial Response Actions (summary)	
☐	**S** – safety first and always • Ensure health and safety of self and others at all times • Assign a Safety Officer
☐	**I** – isolate and deny entry • Stop work • Contact the Control Center to shut down and isolate the system • Secure and restrict access to the site • Evacuate upwind to muster point (on foot)
☐	**N** – notifications • Contact Regional Management and People Leader (Regional On-call) • Verify the Control Center has been informed • Support ongoing communications with Control Center and Regional On-Call

*See Annex 2 for the detailed Initial Response Checklists.

2.5.1 Facility Hazards

Initial containment actions will focus limiting the environmental impact to the immediate spill area.

The containment of spilled oil will:

- Reduce the spread of slicks and their impacts beyond the property
- Reduce potential impacts to the surrounding environment
- Reduce potential economic impacts
- Maximize the thickness of floating slicks
- Maximize the effectiveness of mechanical counter measures (i.e., skimmers and sorbents)

Selection of the appropriate location and containment and recovery tactic method will depend upon:

- Length of time since the spill occurred
- Amount and type of spilled material
- Area of coverage
- Environmental factors such as wind speed and direction

The following sections outline spill mitigation procedures, and response options for containment and recovery of spilled oil. Refer to the Inland Spill Tactics Guide and Tactical Control Point sheets for detailed information on response tactics.

2.5.1.1 Pipeline Release / Line Strike

In the event of a pipeline release, carry out and document the following actions (if qualified and/or safe to do so):

Pipeline Release	
☐	If CCO operating procedures did not require immediate shut down, provide consultation and direction on this decision
☐	If shut down was required, confirm with CCO that all potentially affected lines have been shut down
☐	Isolate leaking section of piping
☐	Contain in a safe fashion
☐	Control drain-up of isolated piping
☐	Periodically confirm with CCO that sectionalized pipeline system is holding pressure
☐	If spill in water: Consult Control Point(s) and Environmentally Sensitive Area maps for appropriate response strategies
☐	Consult Inland Spill Response Tactics Guide for recommended equipment and tactics
☐	Gather data for Pipeline Integrity to assess the line
☐	Initiate recovery / repair / clean-up actions with the support of Pipeline Integrity

2.5.1.2 Equipment Failure

In the event of equipment failure, carry out and document the following actions (if qualified and/or safe to do so):

Equipment Failure	
☐	Shut off the flow and transfer pumps. Close header & tank valves
☐	Evacuate the area as necessary
☐	Drain remaining contents to containment tanks
☐	Secure area if safe to do so
☐	Tighten leaky valve or fitting, if safe
☐	Eliminate sources of vapour cloud ignition by shutting down all engines and motors
☐	Initiate response actions

2.5.1.3 Piping Rupture / Leak

In the event of if piping rupture/ leak, carry out and document the following actions (if qualified and/or safe to do so):

Piping Rupture / Leak	
☐	Shut off the flow and transfer pumps. Close header & tank valves
☐	Shut down pumps. Close the closest block valves on each side of the rupture
☐	Drain the line back into contained areas (if possible). Alert nearby personnel of potential safety hazards
☐	Shut down source of vapour cloud ignition by shutting down all engines and motors
☐	If piping is leaking and under pressure, relieve pressure by draining into a containment area or back to a tank (if possible). Then repair line according to established procedures

2.5.1.4 Tank Failure

In the event of a tank failure, carry out and document the following actions (if qualified and/or safe to do so):

Tank Failure	
☐	Evacuate nonessential personnel or personnel at high risk
☐	Shut down or divert source of incoming flow to tank
☐	Transfer fluid to another tank with adequate storage capacity (if possible)
☐	Shut down source of vapour cloud ignition by shutting down all engines and motors
☐	Ensure that containment bay discharge valves are closed
☐	Monitor containment area for leaks and potential capacity limitations
☐	Begin cleaning up spilled product as soon as possible

2.5.1.5 Fire or Explosion

In the event of a tank fire/explosion, carry out and document the following actions (if qualified and/or safe to do so), noting: large or fully involved fires are to be fought by professional firefighters or tank fire specialists, refer to Terminal Pre-Fire Plan on the Governance Document Library for further details.

Fire / Explosion	
☐	Evacuate nonessential personnel or personnel at risk of injury
☐	Notify local fire and police departments
☐	Attempt to extinguish fire if it is in incipient (early) stage Small Fire: Dry chemical, CO2, water spray or regular foam
☐	Shut down transfer or pumping operation. Attempt to divert or stop flow of product to the hazardous area (if it can be done safely)
☐	Eliminate sources of vapour cloud ignition shutting down all engines and motors
☐	Control fire before taking steps to contain spill
☐	Large Fire – use defensive tactics only: • Water spray, fog, or regular foam • Do not use straight streams • Move containers from fire area if you can do so without risk
☐	Fire involving Tanks or Car/Trailer Loads – use defensive tactics only: • Fight fire from maximum distance or use unmanned hose holders or monitor nozzles • Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. • ALWAYS stay away from tanks engulfed in fire • For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn

2.5.1.6 Manifold Failure

In the event of a manifold failure, carry out and document the following actions (if qualified and/or safe to do so):

Manifold Failure	
☐	Evacuate nonessential personnel or personnel at risk of injury
☐	Terminate transfer operations immediately
☐	Isolate the damaged area by closing block valves on both sides of the leak/rupture
☐	Shut down source of vapour cloud ignition by shutting down all engines and motors
☐	Drain fluids back into containment areas (if possible)

2.5.1.7 Radioactive Source Emergencies

In the event of an accident (e.g., fire, explosion), damage or any other event that may affect the integrity of a radiation source (e.g., nuclear densitometers, either portable or fixed):

Radioactive Source Emergencies	
☐	Stop all activity in the immediate area
☐	Evacuate the immediate vicinity of the source head and clear personnel within a 6-meter radius perimeter around the source head
☐	Notify local Operations personnel and/or call the 24-hour emergency number shown on the warning sign
☐	Consult Site Safety Plot Plans/Evacuation Plans for the locations of radioactive sources for facilities
☐	Do not allow workers to re-enter the area until a radiation survey is completed by a radiation specialist
☐	If the device has sustained physical damage, contact a radiation specialist to leak test the device
☐	Follow company procedures for required initial notifications
☐	Notify the CNSC 24-hour Duty Officer and inform them of the event at 613-995-0479 or 1-844-879-0805
☐	Contact Enbridge's Radiation Safety Officer as outlined in the Canada Event Reporting Guide located on the Governance Document Library (GDL)

2.5.1.8 Overhead Power Line

In the event of a line fall or is contacted carry out the following actions (if qualified and/or safe to do so):

Overhead Power Line	
☐	Keep everyone at least 100 ft (30 m) away
☐	Use red "Danger" tape to keep others away
☐	Do not attempt to move the wire(s)
☐	Do not touch anything that is touching the wires
If a person becomes energized	
☐	Do not touch the person, or anything in contact with the person
☐	Rescue is to be undertaken only after all hazards have been removed and verified by a utility company representative

If energized conductors contact a vehicle	
☐	Turn off the vehicle, remain inside the vehicle and wait for rescue
☐	If it becomes necessary to exit the vehicle: • Jump clear of the vehicle without touching it • Maintain balance and keep feet together • Shuffle or bunny-hop away from the vehicle at least 30 ft of 10 m
☐	Do not return to the vehicle or allow anyone else near it until the utility company representative has de-energized and removed power lines and confirmed that the vehicle is no longer in contact with the power lines
☐	Quarantine rubber-tired vehicles for 48 hours (to address the hazards of pyrolysis)

2.5.1.9 Natural Gas Liquids Event

If there is an event involving natural gas liquids release, remember the following safety precautions:

- Most NGL vapors are heavier than air
- Time is critical in the decision to ignite large leaks
- NGLs expand 300 times when changing from liquid to vapor

Assess the leak and controlling measures, taking into account:

- Whether the leak will continue to spread if it isn't ignited
- Whether residents are safe or should be evacuated
- What toxic conditions and topography are doing to the vapor cloud
- Whether ignition will cause additional fire hazards
- Whether personnel can ignite the leak safely
- Whether the subsequent fire can be controlled
- Monitor wind direction, speed, and ambient temperatures

Natural Gas Liquid	
☐	Discovery / Investigation For the initial action it is important to remember: • Don't try to control more area than can be effectively isolated and controlled • The more time, distance and shielding between the Enbridge Responder and the released product, the lower the risk • Designate an emergency evacuation signal and identify muster points if emergency evacuation is necessary
☐	Management of Release Small Release • If the released NGL is creating a local safety hazard, the NGL may then be ignited following the procedure for igniting NGL • Where available, water fog may be used to break up and disperse small vapor clouds • Air movers are also an effective method of providing air circulation in confined areas or in buildings • Ensure they are safe (intrinsically safe) to use in that environment
☐	Large Release • If the NGL release is large or the NGL batch cannot be pumped past the release site, ignite the NGL following the standard procedure • If the vapor plume is moving toward a populated area the area will be evacuated • If the vapor cloud cannot be ignited and repair procedures should begin, all equipment and vehicles will be located a minimum of 0.5 mi (0.8 km) upwind of the leak site • Continuously monitor the perimeter of the vapor cloud to detect any shift in the vapor cloud
☐	Isolating the Pipeline Section When NGL is escaping uncontrolled, the affected pipe section will be immediately isolated by closing the appropriate sectionalizing valves
☐	Relieving Pressure Use one of the following methods to relieve pressure at a pipeline section releasing NGL: • If NGL is present at the blowdown valve, install a pipe discharge line and flare the NGL • Transfer the product to a properly rated pressure containment vessel • Install a pump complete with a discharge check valve to pump across the downstream sectionalizing valve • If elevation does not provide a standing head in the isolated section, a transfer pump connected to the blowdown valve will be needed to fill a properly rated pressure containment vessel
☐	Evacuation/Site Security • Establish roadblocks if release is near roads • Due to the high flammability of NGL and the possibility of a vapor plume forming, it may be necessary to evacuate workers and visitors from the area, and to secure the site to protect the public and property
☐	Digging out a Release Site • Repair operations involving NGL are difficult, slow, and hazardous • Pockets of gas may be trapped in the ground • If NGL has been leaking for some time, the condensate portion may have saturated the soil for a considerable distance around the site • Before beginning excavation or line repairs, active NGL releases are ignited or left burning • Ensure liquid has replaced the NGL at the release site • Follow appropriate Company standards on pipeline excavation • Ensure fire extinguishing equipment is immediately at hand • Consider obtaining external firefighting services and equipment • If no wind is blowing, use air movers to keep air moving across the worksite and away from workers • Continuously monitor air using a gas detector; and • Constantly monitor wind direction

2.5.2 Natural Hazards

The pipeline passes through a variety of landscapes each with theirown diverse geographic features and climates. As the pipeline passes through each local environment, it may be exposed to a range of natural and human induced hazards each with the ability to negatively impact operations and personnel. The following section aims to describe hazards that could negatively impact the system and workers in order to provide both hazard context and to outline actions that may be undertaken in order to mitigate and/or respond to such events.

2.5.2.1 Wildfire

In the event of wildfire, carry out and document the following mitigation and response actions (if qualified and/or safe to do so):

Wildfire – Mitigation Actions	
☐	Continuously manage vegetation in and around facilities
☐	Identify evacuation staging areas in evacuation plans for use during a wildfire event
☐	Set up triggers for evacuation
☐	Ensure air quality is monitored at all manned facilities that are, or may be impacted
☐	Decrease the number of personnel onsite during a wildfire event
☐	Stay tuned to local media for update on the wildfire conditions

Actions that can be taken during a wildfire to mitigate a release include:

Wildfire – Response Actions	
☐	Discuss requirement before shutting down the line(s) as the product movement can reduce the heat flux on the system, if appropriate: • Shut down the line • Isolate energized system
☐	Continually manage vegetation in and around the facilities and cut it back further if required
☐	Conduct fly-over patrol for fire behavior impact in coordination with local authorities and respecting any NOTAMs (notice to airmen)

2.5.2.2 Earthquake

In the event of an earthquake, carry out and document the following mitigation and response actions (if qualified and/or safe to do so):

Earthquake	
☐	Isolate and/ or shut down energized systems to anticipate aftershock and/ or additional tremors
☐	Shut down the lines
☐	Check for secondary hazards
☐	Extinguish small fires, shut of the water supply if broke pipes are leaking, shut off the electricity when damaged wiring threatens to spark fires, shut off the gas if you suspect a leak
☐	Monitor site for evidence of leaks from pipelines and tanks
☐	Access to buildings that have sustained structural damage should be prohibited until they can be assessed by a structural engineer
☐	Evacuate building(s) when any of the above hazards are present or if there is structural damage
☐	Engage Facilities Integrity to support and determine fitness for service

2.5.2.3 Flooding/Hurricane

In the event of a flood or hurricane, carry out and document the following mitigation and response actions (if qualified and/or safe to do so):

Flooding/Hurricane	
☐	Watch for high water, be aware of sudden changing water conditions and/or increased flow rates (monitor the StormGeo's Trigger Report, Probability of Wind Impact (Phases 1-5) during hurricane season to prepare for threats or impacts to the system)
☐	Shut down the lines
☐	Isolate the system
☐	Deploy personnel so that they will be in position to shut down, isolate, contain, or perform any other emergency action on an affected pipeline
☐	Fill all tankage to a minimum of 6 feet to prevent floating tankage
☐	Perform visual inspection to determine if facilities that are normally above ground (e.g., valves, regulators, relief sets, etc.) have become submerged and are in danger of being struck by vessels or debris and, if possible, mark such facilities with Coast Guard approval and an appropriate buoy
☐	Perform frequent patrols, including appropriate overflights, to evaluate right- of-way conditions at water crossings during flooding and after waters subside. Report any flooding, either localized or systemic, to integrity staff to determine if pipeline crossings may have been damaged or would be in imminent jeopardy from future flooding
☐	Have open communications with local and state officials to address their concerns regarding observed pipeline exposures, localized flooding, ice dams, debris dams, and extensive bank erosion that may affect the integrity of pipeline crossings
☐	Engage Facilities Integrity to support and determine fitness for service

The Saffir-Simpson Hurricane Scale is a 1-5 rating based on the hurricane's present intensity. This is used to give an estimate of the potential property damage and flooding expected along the coast from a hurricane landfall. The Scale or Category of hurricanes is as follows:

Speed	Wind Damage	Storm Surge	Water Effect	CAT
Minimal Hurricane 74-95 mph 64-82 knots 119-153 kph	No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Some damage to poorly constructed signs.	4-5 ft above normal	Low-lying coastal roads inundated, minor pier damage, some small craft in exposed anchorage torn from moorings.	1
Moderate Hurricane 96-110 mph 83-95 knots 154-177 kph	Some roofing material, door, and window damage of buildings. Considerable damage to shrubbery and trees with some trees blown down. Considerable damage to mobile homes, poorly constructed signs, and piers.	6-8 ft above normal	Coast roads and low-lying escape routes inland cut by rising water 2 to 4 hours before arrival of hurricane center. Considerable damage to piers. Marinas flooded. Small craft in unprotected anchorages torn from moorings. Evacuation of some shoreline residences and low-lying areas required.	2
Extensive Hurricane 111-130 mph 96-113 knots 178-209 kph	Some structural damage to small residences and utility buildings with a minor amount of curtainwall failures. Damage to shrubbery and trees with foliage blown off trees and large tress blown down. Mobile homes and poorly constructed signs are destroyed.	9-12 ft above normal	Low-lying escape routes are cut by rising water 3-5 hours before arrival of the hurricane center. Flooding near the coast destroys smaller structures with larger structures damaged by battering of floating debris. Terrain continuously lower than 5 ft above mean sea level may be flooded inland 8 miles (13 km) or more. Evacuation of low-lying residences within several blocks of the shoreline may be required.	3
Extreme Hurricane 131-155 mph 114-135 knots 210-249 kph	More extensive curtain wall failures with some complete roof structure failures on small residences. All signs are blown down. Complete destruction of mobile homes. Extensive damage to doors and windows.	13-18 ft above normal	Low-lying escape routes may be cut by rising water 3-5 hours before arrival of the hurricane center. Major damage to lower floors of structures near the shore. Terrain lower than 10 ft above sea level may be flooded requiring massive evacuation of residential areas as far inland as 6 miles (10 km).	4
Catastrophic Hurricane >155 mph 135 knots 249 kph	Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. Complete destruction of mobile homes. Severe and extensive window and door damage.	>18 ft above normal	Low-lying escape routes are cut by rising water 3-5 hours before arrival of the hurricane center. Major damage to lower floors of all structures located less than 15 ft above sea level and within 500 yards of the shoreline. Evacuation of residential areas on low ground within 5-10 miles of the shoreline may be required.	5

2.5.2.4 Tornado

In the event of a tornado, carry out and document the following mitigation and response actions (if qualified and/or safe to do so):

Tornado	
☐	Shut down the line
☐	Isolate the system
☐	If appropriate, use of the emergency shutdown system for the terminals
☐	Check for secondary hazards
☐	Extinguish small fires, shut of the water supply if broke pipes are leaking, shut off the electricity when damage wiring threaten to spark fires, shut off the gas if you suspect a leak.
☐	Evacuate the building when any of the above hazards are present or if there is structural damage.
☐	Engage Facilities Integrity to support and determine fitness for service

2.5.2.5 Medical Emergencies

The basic steps to follow in a medical emergency are as follows:

Medical Emergency	
☐	Don't attempt a rescue from a confined space or a toxic atmosphere unless you have appropriate breathing protection and a backup
☐	Check the person: • Assess the situation, don't move the person unless leaving them will cause further injury • Administer required first aid in the following order: o Give artificial respiration (victims of H2S exposure require resuscitation within three minutes). o Control bleeding o Treat for physical shock o Treat open wounds, burns and fractures o Arrange for transportation
☐	Call for assistance/additional resource, inform Regional Management / Regional On-call of the situation and ask for help
☐	Care for life-threatening conditions first: Reduce the risk of disease transmission by using protective equipment such as disposable gloves and a barrier device
☐	Take charge of the site and organize others to assist

2.5.3 Security Hazards

Security hazards present themselves in a variety of ways including bomb threat, cyber-attack, active assailant, workplace violence, suspicious packages, suspicious activities, protestors activity, security events. The objective of these actions can be to halt or disrupt normal operations. For these reasons, Enbridge has established security protocols contained in the Operations Security Response Plan where security protocols and response actions are detailed.

Enterprise Security focuses on direct and/or impending threats to ongoing operations and in most instances resolves issues without concern. However, in the event that a substantial security event results in an impact to operations, there is a strong likelihood that the Incident Management Team and Emergency Response Plans will be activated. As outlined, procedures for dealing with specific events can be found in the Operations Security Response Plan (OSRP). Consideration should also be given to completing the Security Threat Checklist information gathering. Regions will also be required to input initial details of a security incident into Encompass and complete the Incident Learning and Prevention fields.

The Operations Security Response Plan (OSRP) contains procedures for the following event types

- General Security Response Procedure Steps
- Response to an Intruder Alarm at an Unattended Facility
- Response to a Person(s) Considered to be a Threat at an Attended Facility
- Bomb Related Response Procedures
  - Response for Bomb Threat from a Telephone Call
  - Response for Receipt or Discovery of Suspicious Mail, Parcels, or Packages
- Cyber Attack Response
- Active Assailant Response
- Workplace Violence Response
- Protest Activity Response

2.5.3.1 Security Threat Levels

The Operations Security Response Plan (OSRP) contains procedures for the Security Threat Response Plan (STRP) which is the process for escalating and deescalating the security threat level for Enbridge facilities.

Security Threat Levels	
Baseline	Provides guidelines on minimum requirements for facilities. These include access control, fencing, gates, security guards, employee awareness, communications, facility lighting, intrusion detection, closed-circuit video, and general policies/practices
Elevated	Provides direction in the event security measures require elevating. Changes typically include tighter perimeter control, visitor restrictions and increased perimeter checks
Imminent	Provides direction in the event that security measures require elevation based on a credible, imminent threat information. Changes typically include Elevated Security measures plus further personnel and vehicle restrictions, the use of security guards, more frequent and random perimeter checks, work restrictions and potentially operational restrictions. Although most anonymous security threats are hoaxes intended to create an atmosphere of anxiety and panic in order to interrupt normal operational activities, all threats should be taken seriously

2.5.3.2 Threat Level Escalation Process

The process for changing the security threat levels is as follows.

Step	Description
1	The BU/CF, TIS and Enterprise Security monitor the security threat advisory systems and other forms of intelligence.
2	ES and TIS should assess emerging threats and notify the appropriate BU/CF Directors or VPs with recommendations to escalate the STRP level, if warranted.
3	With VP or Director, Operations approval, the Operations Directors should notify Local Management of the effected facilities that the STRP level has changed and instruct them to implement the security measures associated with the new STRP level.
4	Local Management should instruct their staff to implement the appropriate security measures.

2.5.3.3 STRP Threat Level Implementation

In the event of a change in the Security Threat Response Plan (STRP) threat level, the security measures listed in the Operations Security Response Plan (OSRP) Appendix D: STRP Security Measures by Threat Level should be implemented.

- Base Level
- Elevated Level
- Imminent Level

2.5.3.4 General Security Response procedures

Please refer to the Operations Security Response Plan (OSRP) for the most current security response procedures.

- General Security Response Procedure Steps
- Response to an Intruder Alarm at an Unattended Facility
- Response to a Person(s) Considered to be a Threat at an Attended Facility
- Response for Bomb Threat from a Telephone Call
- Response for Receipt or Discovery of Suspicious Mail, Parcels, or Packages
- Cyber Attack Response
- Active Assailant Response
- Workplace Violence Response
- Protest Activity Response

2.6 Environmental Response

In the event of a release that requires an environmental response, the Environment Unit Leader and Safety Officer will immediately mobilize a preferred consultant if necessary.

As a precaution, ensure the applicable Federal and Provincial/State Environmental Regulatory Agencies have been contacted.

2.6.1 Air and Groundwater Monitoring

If the spilled material is not readily identifiable, conduct sampling activities for laboratory analysis. As petroleum products react and change (e.g., weather) when exposed to the environment, the laboratory data may not be representative of "real-time" conditions; rather the data may reflect the chemical characteristics of the spilled material(s) at the time of sample collection depending on the nature and location of the release:

Air Monitoring	Air monitoring will be set up to assess real time hydrocarbon related compound concentrations and background air quality conditions as needed
Groundwater	Groundwater samples will be collected as necessary from onsite public and private wells (residential, public utility, commercial and industrial) within a specified potential receptor zone around the site
Surface Water	Surface water sampling and monitoring procedures will be utilized to assess visible product and/or hydrocarbon sheen that may affect navigable waterways as well as to document background conditionswithin the waterways.
Sediment	Sediment samples will be collected periodically to provide a baseline evaluation of current conditions and confirm the presence or absence of hydrocarbon impacts

Community Air Monitoring will be completed by a qualified third party based on an assessment that it is required.

2.6.2 Oil Sampling Activities

Collect product samples as soon as possible after a spill in order to fingerprint the product.

2.6.3 Wildlife Management

In the event of a release where impacts to wildlife are present or suspected, consult with the Environment Unit immediately. Environment Unit will mobilize a preferred wildlife response consultant or consultants. A site-specific wildlife management and response plan may be developed for the site. A toll-free number would be set up if required. If set up, report all impacted wildlife sightings to the established toll-free report phone line.

Dead and injured wildlife found during response operations should be collected by trained and authorized personnel and properly documented. Untrained employees shall not handle wildlife. An inventory of dead, injured, rehabilitated, and released wildlife needs to be maintained as a component of the U.S. Natural Resources Damage Assessment.

2.6.4 Site Investigation and Remediation

Site investigations will generally include determining the horizontal and vertical extent of the impacts. Equipment used to complete site investigation activities may include hand tools, drilling equipment and earth-moving equipment. Soil sampling for field screening and laboratory analysis may also be required.

Based on the results of the site investigation, a site-specific remedial action plan may be prepared to address the impacts.

2.6.5 Waste and Disposal

The management of the waste generated in clean-up and recovery activities should be conducted.

2.6.6 Waste Management Plan

Waste disposal methods vary depending on the type of waste, release location, regulatory requirements, etc. These disposal options will be dependent upon laboratory analysis per current Federal, Provincial, State, and local regulation. In Canada the Company would use the services of a spill cooperative.

In the U.S., Enbridge has contracted with USCG Certified third party contractors for waste and cleanup activities ensuring planned temporary storage and waste disposal activities are accomplished within the appropriate response times. They will provide sufficient temporary storage to ensure sufficient capacity is available to respond to a significant release, or a Worst-Case Discharge. See Annex 2 for contractor information.

Temporary Storage Methods:

Product								
Containment	Oil	Oil/ Water	Oil/ Soil	Oil/ Debris (Small)	Oil/ Debris (Medium)	Oil/ Debris (Large)	Capacity (Imperial)	Capacity (Metric)
Drums	X	X	X	X			0.2-0.5 yd^3	0.15 - 0.38 m^3
Bags			X	X	X		1-2 yd^3	0.76 - 1.52 m^3
Boxes			X	X	X		1-5 yd^3	0.76 - 3.82 m^3
Open Top Roll off	X	X	X	X	X	X	8-40 yd^3	6.11- 30.58 m^3
Roll Top Roll off	X	X	X		X	X	15-25 yd^3	11.47 - 19.11 m^3
Vacuum Box	X	X					15-25 yd^3	11.47 - 19.11 m^3
Frac Tank	X	X					500-20,000 gal	1892.7 - 75708 litres
Poly Tank	X	X					200-4,000 gal	757.08 - 15142 litres
Vacuum Truck	X	X	X				2,000-5,000 gal	7570.8 - 18927 litres
Tank Trailer	X	X					2,000-4,000 gal	7570.8 - 15142 litres
Barge	X	X					3,000+ gal	11356+ litres
Berm,4 ft	X	X	X	X	X	X	1yd^3	0.76 m^3
Bladders	X	X					25-1,500 gal	94.63 - 56778.1 litres

2.6.7 Site Safety and Health Plan

The Site Safety and Control Analysis and the individual Site Safety Plan (ICS 208) are designed to comply with regulations. The Site Safety Plan (ICS 208) form is intended to describe the health and safety guidelines developed for the Response Operations to protect personnel, visitors, and the public from physical harm and exposure to hazardous materials or wastes.

Enbridge staff and contractors should also complete a Safe Work Permit and Field Level Hazard Assessment. Specifically, this plan provides procedures and information for program administration, safety and health considerations, PPE, medical surveillance, training, site control, industrial hygiene monitoring programs, personal hygiene, sanitation, housekeeping, and the decontamination of both PPE and equipment utilized during the response.

2.6.7.1 Visitor Policy

All visitors should provide all required training documentation prior to arrival on-site, if applicable. The Incident Commander and/or Operations Section Chief and the Public Information Officer should approve the site visit and shall coordinate visitor tours with the Operations Section. The SSHP shall designate a safe route through the site and away from the on-going operations and provide for visitor escorts. The Operations Section Chief and applicable Branch or Group Supervisors should be notified when the visitor approaches. The Operations Section Chief and applicable Branch or Group Supervisor shall acknowledge visitor arrival onsite and communicate approval of the visit and acceptable duration for the visitor onsite.

2.7 Protection, Containment and Recovery

Protection refers to the action of preventing harm and/or suffering from someone or something. Containment and recovery refer to the techniques or methods that can be employed to contain and recover petroleum spills on water or the containment of petroleum spills flowing overland. Recovery of terrestrial spills is often very similar or uses the same techniques as shoreline clean-up. Other techniques, such as ice tactics and open water recovery, are covered in the Inland Spill Response Tactics Guide; the techniques described in the Integrated Contingency Plan are most commonly used.

Consider the following when planning or implementing containment and recovery operations:

- Containment is most effective when conducted near the source of the spill where the oil has not spread over a large area and the contained oil is of sufficient thickness to allow effective recovery and/or clean-up
- Feasibility of containment is generally dependent on the size of the spill, available logistical resources, implementation time, environmental conditions, and the nature of the terrain in the spill area
- Aquatic (water) containment is primarily conducted using oil spill containment booms (this is a key tactic to control the water discharged from upstream impoundments)
- Skimmers are usually the most efficient means of recovery of aquatic spills, although pumps, vacuum systems, and sorbents can also be effective, particularly in smaller waterways
- Terrestrial (land) containment typically involves berms or other physical barriers
- Recovery of free petroleum from the ground surface is best achieved by using pumps, vacuum sources, and/or sorbents

2.7.1 Control Points

Control Points contain detailed site-specific information including recommended tactics for spill response actions to provide the highest probability for properly establishing containment/recovery and to ensure that sensitive resources are protected. The tactics are flexible to accommodate for varying conditions. The types of tactics that may be used can be found in the Inland Spill Response Tactics Guide. The Control Point viewer is accessible on EMap from company computers and mobile phones.

Control point site sheets contain:	During an Event:
• Latitude and longitude information • Valve information • Watercourse information • Logistical information • Safety concerns • Implementation details • Environmental areas • Closest equipment location and recommended equipment • Site images / diagrams	• Refer to Control point for guidance on protection, containment and recovery locations and strategies • Contact an Environment representative for detailed screening of the site during a response • If required, assess site for hazards • Prepare site prior to beginning tactics (grading/clearing) • Seek permission if not already secured for any of the following: o highways and secondary roads, bridges, campgrounds, public boat launches, private access points, cut lines or remote access trails

2.7.2 Inland Spill Response Tactics Guide

The Inland Spill Response Tactics Guide is a Company document that can be used as a quick reference by Enbridge first-on-scene responders to select and implement containment and recovery tactics with Enbridge-owned oil spill response equipment during the first 72 hours of the response. It illustrates a collection of inland spill tactics that can be applied using obtainable resources to a liquid product release until additional resources and personnel arrive on site. Consult the guide for more details on Inlands Spill Control Tactics for:

- Land with the use for berms and trenches
- Small watercourses with the use of dams, weir, culvert blocks, filter fence, siphon dam, sorbent boom
- Larger watercourse with the use of containment boom, shore seal boom, deflection/exclusion booming
- Open water using current busters, oil boom and arctic brush bucket system
- Cold weather, ice assessments and tactics with the use of oil detection under ice, trenching on ice sheets, and ice slotting

Consult the guide for the following tactical information:

- Purpose (of the tactic)
- Application
- Environmental considerations
- Equipment required
- Operation (description regarding tactic)
- Tips regarding execution

The guide also contains specific response equipment and diagrams for material recovery or alternative removal. The Inland Spill Response Tactics Guide can be found on the Governance Document Library.

The objective of mechanical recovery is to collect contained and concentrated oil and to transfer the oil to temporary storage for subsequent disposal. Spills that have been contained by a boom, a berm or in slots cut into the ice can be skimmed and pumped into storage containers.

2.7.3 Submerged Oil Content

Enbridge's tariff restricts products on the system to those with a density of no greater than 940 kg/m^3 at 15˚C. Most products shipped on the Enbridge system are floating oils, including dilbit and synbit. Enbridge acknowledges that, under certain environmental conditions, some fraction of oil released into a water body may become entrained in the water column, submerge or sink, in freshwater environments. This is the case irrespective of whether the product is diluted bitumen, synthetic crude, or conventional crude oil. This is not an issue that is limited to diluted bitumen.

Enbridge considers the potential for sinking and submerged oil as part of our Emergency Response plans and in the execution of such plans. In the unlikely event of a spill, Enbridge would work with regulatory agencies to determine the appropriate response and remedial actions given the specific circumstances of the event. This would include decisions regarding the short-term emergency response as well as subsequent clean-up of residual amounts of submerged oil. More details regarding the Submerged Oil Management Program can be found on the Governance Document Library.

2.7.4 Shoreline and Terrestrial Operations

In the event that soils do become oiled or that petroleum contacts and becomes stranded on a shoreline, clean-up operations should be undertaken to minimize the environmental effects of the petroleum. In this case, clean-up operations should be implemented immediately.

- Documentation of the location, degree and/or extent of oil conditions
- Evaluation of all environmental, cultural, economic, and political factors
- Clean-up technique selection
- Mitigation of physical and environmental damage associated with clean-up technique implementation
- Cost-effectiveness

Contractors are capable of being on site and ensuring spill recovery activities are accomplished within the appropriate tiered response times. They will provide sufficient recovery equipment to ensure enough capacity is available to respond to a Worst-Case Discharge.

Non-mechanical response options that could be used in responding to a spill include:

- Chemical treatment
- Bioremediation
- In-situ Burning

When non-mechanical methods can result in reduced human hazard or environmental damage, consideration of their use is appropriate, but will require regulatory approval.

- In Canada, chemical treatments / dispersants are not a commonly used tactic on inland waters and would only be considered after consultation and approval from the Department of Fisheries and Oceans and other applicable regulatory stakeholders.
- In the U.S., the request to use dispersants as a tactic is requested through Unified Command to the appropriate Federal On-Scene Coordinator.

2.7.5 In-Situ Burning

If mechanical recovery is not best option, In-Situ Burning may be considered with the approval from appropriate regulatory agencies as there are potential safety and air pollution hazards to the surrounding area.

In-situ burning alters the composition of the spilled oil by eliminating anywhere from 90 to 99 percent of the original volume of oil provided it is controlled within a fire-resistant boom or other containment system. A portion of the original oil is released into the atmosphere as particulate and gaseous emissions. Solid or semi-solid residues typically remain following a burn, but are relatively easy to retrieve. They can be further reduced in volume through repeated burns, and ultimately are collected and removed from the environment.

2.7.5.1 Evaluation

The potential for implementing a successful burn depends upon the knowledge and experience of those responsible for the assessment of the spill situation. Review of the spill conditions, together with the spill checklist below, will ensure that the safety issues, the benefits, and the environmental impacts will have been examined carefully. While steps may be taken to move critical equipment into position for a possible burn, there should be no attempt to ignite spilled oil without prior authorization from federal, provincial, state, and local authorities.

Decisions to burn or not to burn oil in areas considered case-by-case are made on the basis of the potential for humans to be exposed to the smoke plume, and pollutants associated with it.

- Regulatory permits and approvals specific to the jurisdiction
- Appropriate monitoring is in place to limit particulate matter (PM-10) exposure to 150 micrograms per cubic meter
- Smoke plume modeling is done to predict which areas might be adversely affected
- Aerial surveys are also conducted prior to initiating a burn to minimize the chance that concentrations of wildlife are in the operational area and affected by the response
- Sampling should be conducted for particulates at sensitive downwind sites prior to the burn (to gather background data) and after the burn has been initiated.
- The following data on particulate levels need to be recorded along with recommendations to the Incident Commander:
    - Oil type, amount, and condition
    - Environmental conditions
    - Availability of personnel and equipment
    - Timing
    - Human safety
    - Danger of fire spreading
    - Presence of explosive vapors
    - Damage to nearby habitats that may prolong natural recovery

2.7.5.2 Request Process and Approval Procedure

When requesting approval for an in-situ burn, carry out the following actions:

Request Process	
☐	Complete In-Situ Burn Template (location on the Governance Document Library, ER Forms)
☐	The burn should be outside the corporate city limits, except as deemed necessary by the local fire department
☐	Wind direction should move the smoke away from the city and/or populated areas
☐	Burning should be at least 300 feet (91.44 meters) from any adjacent properties
☐	Burning should commence during daylight, typically between the hours of 9:00 am and 5:00 pm
☐	Wind speed should be between 5 mph (8.052 km/h) and 20 mph (32.19 km/h) (IAW SMART recommendations) during the burn period
☐	Burn should not be conducted during persistent atmospheric thermal inversions

Approval for the burn should be obtained from regulatory bodies and other stakeholders. The approval required to conduct a burn will vary in each jurisdiction.

Approval Procedure	
☐	Document the need to carry out a burn is to be documented in the Incident Action Plan during the Planning Cycle process
☐	Incident Commander reviews and approves the request
☐	The request is presented to the Federal On-Scene Coordinator for approval
☐	The Federal On-Scene Coordinator will submit the burn plan to Federal, State, and local regulatory entities/stakeholders for review and approval
☐	Communicate with the National Response Center 1-800-424-8802

2.7.5.3 Plume Dispersion Modeling

If necessary, conduct a plume trajectory assessment to determine public health safe distances for the following reasons:

- Regulatory requirements – obtain approval to burn
- Local terrain not (relatively) flat
- Winds exceed 18km/hr (11mph)
- Close proximity of populated areas (safety considerations)
- The presence of unusual meteorological consideration (temperature inversions)
- Wind speed of 35 km/hr (21 mph) is established upper limit at which fire behavior can be predictably managed

2.7.5.4 Monitoring

Due to these potential affects monitoring before, during and after a burn may be required.

- Of these smoke constituents, small particulates less than 10 microns in diameter, known as PM-10, are considered to pose the greatest risk to humans and nearby wildlife
- Monitoring should be conducted when the predicted trajectory of the smoke plume indicates that the smoke may reach population centers, and the concentrations of smoke particulates at ground level may exceed safe levels
- When impacts are not anticipated, monitoring levels will be decided by the federal, provincial, state, and local authorities
- In-situ burning generates a thick black smoke that contains primarily particulates, and various gases (carbon dioxide, carbon monoxides, water vapor, nitrous oxides, and Polycyclic Aromatic Hydrocarbons (PAHs))
- Deploy monitoring teams at designated areas of concern to assess ambient concentrations of particulates before the burn starts
- During the burn, sampling and continuous readings are recorded both in the data logger of the instrument and manually in the recorder data log
- After the burn has ended and the smoke plume has dissipated, the teams remain in place for some time (15-30 minutes) and again sample for and record ambient particulate concentrations

2.7.5.5 Product Characteristics and Considerations

Consider the following characteristics when conducting a burn:

- Refined product or light to medium crude will burn more efficiently and leave less residue to recover compared to heavier product
- Heavy oil requires longer heating times and a hotter flame to ignite than lighter oils
- Product that is relatively fresh (less than 3 days of exposure to the elements) will burn more efficiently than weathered product
- Burn duration can be estimated based on known burn rates for different product types (e.g., 2.54 mm [1/10 in.] of depth per minute for medium crude)
- Dense wetland vegetation can slow evaporation and prolong the opportunity for conducting an efficient burn
- A layer of water at least 2.5 mm to 10 mm (1 in. to 4 in.) under the burning product will provide protection to vegetation root systems from heat stress
- Burned areas should not be flooded with high water levels shortly after the burn
    - The remaining root systems require oxygen from the air or soil until new vegetation emerges

2.7.5.6 Ignition Considerations and Procedure

After completing all the pre-burn requirements, determine the appropriate time and conditions for igniting the spill:

Ignition Considerations and Procedure	
☐	Determine the appropriate time and conditions for igniting the spill: • Use experienced personnel to oversee the burning activities and monitor the burn plan • The area around the spill site should be monitored using an explosive / toxic gas meter to determine any explosive / toxicity hazards • The spill should be approached from upwind during all phases of the operation by personnel who are properly equipped and trained to monitor the conditions
☐	Continually monitor weather conditions: • burning should occur only when wind conditions are low • weather should be stable
☐	Ignition should not occur until entire area is secured
☐	Ensure there is a sufficient supply of the following on-site (actual numbers will be determined based on the individual spill conditions): • fire-fighting equipment • personnel (workers and emergency staff) • water supplies
☐	If potential exists for secondary fires, ignition should take place during low burning period, between 9:00am-5:00pm
☐	If the product is heavy oil, or it is severely weathered, it may be advantageous to burn during the heat of the day in order to assist with ignition, if safe to do so
☐	Determine what method of ignition will work the best while still allowing for safe implementation • Ignition procedures should be designed to allow the response team to be well back of the site when the spill is ignited. Individual companies may have their own ignition procedures based on the type of product and ignition devices available • Ensure the oil at point of ignition is between 2-3 mm thick to create a sustained burn. Ignition source should generate sufficient heat long enough to cause the oil to ignite • Spills that contain light ends will probably ignite without the assistance of an auxiliary fuel source. A flare shell propelled from a safe distance should be adequate • Spills that contain a high percentage of heavy ends may require the use of an auxiliary fuel or ignition promoter • Auxiliary fuel usually consists of diesel, kerosene and gasoline but can also be in the form of dry straw, etc. • Diesel and kerosene are considered to be the best ignition promoters as the flame temperature is higher • Lighter products, such as gasoline, evaporate much faster than diesel which results in faster cooling of the slick • Dry straw can be effective, but application should be able to be done in a safe manner • Ignite the outer edge of the spill and allow the fire to burn from the outside in (helps to reduce chances of fluid migration) • Use multiple ignition points, where possible, to encourage the spreading of flames throughout the spill area and improve burn efficiencies • Ignition devices may include: o flare shells o gelled gasoline o diesel or kerosene o mixtures of gasoline and diesel fuel o crude oil

Ignition Considerations and Procedure	
	○ organic matter such as peat moss or straw ○ canister igniters ○ aerial ignition devices ○ dry straw ○ propane torches
☐	Ignite the spill • Determine flammability / toxicity around the spill using an explosive / toxic gas meter • Apply the auxiliary fuel agents (if necessary) to the determined ignition areas • Approach the ignition points from upwind • Ensure ignition workers are in a safe zone by continuously monitoring for explosive / toxic mixtures • Ignite all sites of the spill at the same time, using the selected method • Allow initial burn to complete without adding any additional fuel.
☐	Monitor the spill site during the burn period to ensure that no hazards exist • Monitor the weather conditions on a regular basis • Be prepared to implement the emergency plan should the conditions change for the worse • Ensure the workers are in a safe area • Monitor the success of the burning procedures as they are implemented and at completion of the burn • For larger spills, burning may continue over an extended period of time, involving night-time conditions • Maintain security until the hazards have been totally eliminated • Utilize a fire guard crew on the entire perimeter to ensure no secondary fires occur • Monitor the site for black smoke • Ensure that regulatory agencies, landowner(s), stakeholders, the public, and media are kept informed • Ambient air monitoring programs should be implemented as required

2.7.5.7 Igniting an NGL Plume

Before ignition of an NGL plume:

- Ensure the area where people are congregating is and remains a Cold Zone by the use of gas detectors;
- Ensure proper permits for firearm and ignition if applicable;
- The area of the vapor plume is maintained clear of people and vehicles and people are prevented from going near the area;
- The potential impact on adjacent facilities is evaluated;
- Every attempt to obtain clearance from Regional Management and the municipal fire chief has been made;
- Stage fire extinguishers nearby;
- Review flare shotgun safe handling procedures (jurisdictional firearm rules apply); and
- Confirm that the available pistol is in working order, verify the number of flares available and ensure that they are the correct type for the firearm.

If contact with the QI/IC cannot be obtained quickly (e.g. no cell phone communication in area or no definite answer given) and there is an immediate risk to the public, the Enbridge Responder or a designee trained in NGL ignition may proceed with ignition.

If applicable, have local fire department on-scene prior to any attempt at ignition.

Consider the Impact on People, the Environment and Property

Assess as follows:

If the plume remains un-ignited or the wind direction changes:

- ☐ Are the responders or the public at risk?
- ☐ Is there a greater potential for property and/or environmental damage due to accidental ignition or explosion?

No

Continuously review:

- ☐ Employee and public safety considerations.
- ☐ Existing site conditions and changes.
- ☐ Site Control procedures.
- ☐ Monitoring of the Emergency Hazard Area.

Yes

Review pre-igition considerations:

- ☐ Consider safer alternatives (i.e. close valves, ventilate, etc.)
- ☐ Assess the area/permiter of impact
- ☐ Proximity to residences, public facilities, towns or urban centers.
- ☐ Status of evacuations.
- ☐ Wind conditions and genral topography.
- ☐ The potential for changes in weather and its implications.
- ☐ Transition from daylight to night darkness.
- ☐ Fire hazard after igition in relation to adjacent area.
- ☐ Safety of all personnel in the Hazard Area
- ☐ The presence of other underground or overhead utilities. De-energize if possible.
- ☐ Will the situation worsen by burning seals out of adjacent valves or by starting pumps on fire?
- ☐ Controlled depressurization at other locations in the damaged section will reduce down time.

IS IGNITION THE MOST FAVOURABLE CONTROL POINTS TO MINIMIZE HAZARDS?

No

- ☐ Continue with release control procedures onsite.
- ☐ Review alternative control procedures.

Yes

- ☐ Is there time to discuss the igition decision with Regional QI/ IC, Regional On-Call or Supervisor?

No

- ☐ Go to Igition Procedures Flowchart.

Yes

- ☐ Review decision to Ignite with Regional QI/IC, On Call or Supervisor
- ☐ Determine post-ignition emergency services requirements.
- ☐ Assemble and brief Ignition Team.
- ☐ Go to the next page for ignition procedure flowchart.

ENBRIDGE

Onsite Personnel will coordinate and lead the safe ignition of gas release

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PREPLANNING

Prior to igition the Operations Section Chief will:

- ☐ Ensure all nonessential personnel are evacuated.
- ☐ Isolate the hazard area using manned roadblocks.
- ☐ Assemble the Igition Team (2 people).
- ☐ Ensure the Igition Team is protected with personal protective equipment, clothing and breathable apparatus (cover exposted skin).
- ☐ Erect windsock and streamers (if time permits).
- ☐ Monitor the area for combustible gas.
- ☐ Fully discuss ignition procedures.
- ☐ Check radio communications.

APPROACH

Select a position to attempt safe ignition which will:

- ☐ Allow for safe retreat.
- ☐ Provide cover from the initial flash.
- ☐ Be upwind of the gas leak 250m (820ft) minimum from edge of identified vapor plume for first attempt - this may be reduced in subsequent attempts as long as it is safe to move forward).
- ☐ Be in an area where no combustible gas is deteced.
- ☐ Shoot for the outer edge of the cloud.

ATTEMPT IGNITION

- ☐ Aim for the outer edge of plume. The center of the plume is too rich to ignite. Arcing shots or bounce shots can be used.
- ☐ Turn away from target to avoid heat flash.
- ☐ Lay down if possible to minimize percussion to body.

PLUME IGNITED?

No

Yes

REPEAT IGNITION

- ☐ Continue approach inwards using chart distances and repeat (as long as safe to do so) until sucessful. Do not go closer than 100m (330 ft) from plume.

POST IGNITION

- ☐ Advise Regional Management.
- ☐ Continue to monitor downwind for gas accumulations.
- ☐ Maintain security around immediate area.
- ☐ Assist emergy service crews with any fire control measures needed.

2.7.6 Bioremediation

Consider Bioremediation when mechanical disturbance is not warranted or would cause additional damage based on a Net Environmental Benefits Analysis.

- Apply nutrients (fertilizer containing nitrogen and phosphorus) or genetically engineered bacteria to oiled terrestrial or shoreline areas to accelerate the natural biodegradation process
- During this process, micro-organisms (bacteria) oxidize hydrocarbons, ultimately converting them to carbon dioxide and water
- Biodegradation occurs primarily at the oil/water or oil/air interface and is limited by oxygen, moisture, and nutrient availability. It is also sensitive to temperature. The lower the ambient temperature, the lower the rate
- If nutrients are used, they should be supplied in such a way that they will not be washed away by tides or any water runoff

2.7.6.1 Bioremediation Evaluation

- The Incident Commander will be responsible for providing event specific information needed to approve the use of bioremediation operations.
- Generally, the physical containment and recovery of oil is preferred to bioremediation
- The decision to use bioremediation treatment should be based on the type of spill, the character of the area impacted
- In some cases, other forms of clean-up may be required in conjunction with nutrient addition to achieve the desired enhancement rate
- Oil spill response chemicals, approval should be obtained from The U.S. Federal On-Scene Coordinator and U.S. State On-Scene Commander or applicable Canadian regulatory stakeholders before the nutrients are applied, and the products should be listed on government product schedules where required to determine authorization/preauthorization requirements for approval
- The U.S. Regional Area Contingency Plan and National Contingency Plan contains options for the authorization of biological agents for use under certain conditions and in certain locations

2.7.7 Freshwater Biological Disinfection

Biological disinfection is the systematic reduction in the probability of spreading invasive biological organisms between freshwater environments.

Determine if equipment needs to undergo disinfection, either prior or post deployment, a full inspection of the equipment is needed:

- Inspection any attached mud, plants, and other organisms
- If debris is found, the equipment should undergo disinfection procedures
- All inspections should be documented on the Enbridge Invasive Species Inspection and Certification Form. Further information on how inspection should be conducted can be found in the Emergency Response Aquatic Invasive Species Inspection Procedures

General guidelines that will assist with the implementation of the plan:

- Use a tagging system to identify infected from disinfected equipment
- Look in cracks/crevices that may otherwise go unnoticed and hide unwanted organisms

- Use rubber waders, gloves, and boots where possible, as neoprene waders and gloves as well as felt soled boots retain moisture and organism such as Rock Snot and whirling disease. Neoprene and felt soles are also harder to disinfect
- Allow equipment to dry completely and for the recommended times between uses
- To help prevent transfer of aquatic invasive species, in addition to the above-mentioned disinfection methods, where possible efforts should be made to designate equipment and personal gear to a single waterbody
- When using chemicals, the appropriate PPE is to be used (e.g., appropriate gloves, safety glasses and clothing) and the SDS are to be reviewed and available

General guidelines for setting up disinfection stations:

- Consider weather conditions
- Proximity to water bodies or means by which water and cleaning solutions could enter water bodies
- Disinfection stations will be constructed with secondary containment to collect wash water. Wash water will be collected and disposed of as per the site-specific waste management plan
- Wherever possible, draining water from equipment (e.g., bilge water) should be done in the waterbody in which work was conducted
- Type and quantity of PPE, clothing, heavy equipment, and vehicles to be disinfected
- Once items are disinfected, they should not encounter infected waters or other material.
- Avoid touching absorbent materials with other absorbent materials during disinfection

2.7.7.1 Disinfection Procedures

Disinfection methods should be matched to best suit the type of equipment being used. Disinfection procedures may vary depending on whether particular organisms are being targeted, as well as what may be most suitable, based on what the equipment is made of, how readily some supplies are, and the feasibility of obtaining large enough quantities of cleaning solutions in the field.

Disinfection Procedures:	
☐	Use drying as a disinfection process if the following procedure can be followed: • Some aquatic invasive species can survive out of water for more than two weeks. It is important to know potential species to which equipment may have been exposed. Equipment should be dried before transporting to another body of water, according to the site-specific species of concern • If targeting adult zebra mussels, 30 days may be required to kill organisms in cool or humid weather • If targeting *Didymosphenia geminate* (commonly referred to as Didymo or Rock Snot), equipment should be dried completely inside and out, and then for an additional 5 days. Freezing items solid will also kill Didymo cells. Freezing overnight should work in most instances • Porous materials should be soaked in cleaning solutions for a minimum of 30 mins while non-porous materials need to be scrubbed for a minimum of 10 mins. Materials should be dry to the touch both inside and out, and allowed to dry for at least an additional 48 hours prior to entering a different waterway
Note:	If drying cannot be implemented, an active cleaning method of disinfection will be required to limit the potential of transporting biological organisms from one freshwater environment to another

Disinfection Procedures:	
☐	Soak and scrub non-absorbent items for 10 minutes and absorbent items for 30 minutes (otherwise specified below) in one of the following solutions: • 5% solution of dishwashing liquid (500 mL or 2 cups and water added to make 10 liters). • 2% solution of bleach (200 mL and water added to make 10 liters).5% solution of salt (500 ml or 2 cups and water added to make 10 liters) • 5% antiseptic hand cleaner (500 mL or 2 cups and water added to make 10 liters). • A dilute solution of 7% hydrogen peroxide mixed in a 64 ml (hydrogen peroxide):1litre (water) ratio. Can be applied using spray equipment. Infected equipment should be completely covered with the solution and allowed to sit for approximately 60 minutes before rinsing with clean water. • Iodophor solution of 100 mg/L for moving equipment out of Viral Hemorrhagic Septicemia (VHS) management zones • Vinegar Dip (100% vinegar for 20 minutes) • 1% salt solution in place of the vinegar dip for 24 hours • Full strength cleaning agents with quaternary ammonium compound alkyl dimethyl benzyl ammonium chloride (ex Parvasol ®and Kennelsol ®or Formula 409® and Fantastic ®) • These can also be used in a 2:1 water to disinfectant ratio • Soak all equipment for a minimum of 10 minutes
☐	Consider the following when deciding on the appropriate active cleaning methodology for nonabsorbent items: • Disinfection with chemicals is not effective against killing spiny water fleas resting eggs • Disinfection with chlorine or iodophor should be used if fieldwork is conducted within and outside of the VHS management zones • Water-based solutions should be at least 60ºC (140ºF) and soaked for at least 20 minutes in hot water kept above 45ºC (113ºF) • For equipment that cannot be submerged, solutions may be applied by either washing with a pressure washer, or with a pressurized garden hose. Pressure washers should reach at least 250 pounds per square inch (psi). Pressure washers may not be appropriate for all equipment
☐	Absorbent items (e.g., felt-soled waders and diving suits) will require longer soaking times than non-absorbent items, to allow thorough saturation. Soak absorbent items in the following solutions: • At least 40 minutes in hot water kept above 45ºC • At least 30 minutes in hot water kept above 45ºC containing a 5% dishwashing detergent solution • For SCUBA gear, the following solution and soak times may also be used: • Submerge and wash the suit and equipment (including inside of buoyancy compensator with hot water that is at least 40ºC (or 104ºF) • Submerge/wash suit and equipment in a tub/tote with a salt solution (1/2 cup salt dissolved in 3.4 liters of water), then rinse with clean water
☐	Contain and store materials and solutions used in the disinfection process for appropriate disposal

2.7.8 Decontamination

All personnel and equipment should go through a decontamination process to ensure spilled material does not contaminate a larger area than needed. An event specific decontamination plan will be developed to support the Incident Action Plan based on these principles:

Establish a decontamination corridor based on the established work sites outlined in the Site Safety Plan. As workers exit the hot zone, they should go through the decon procedures at stations within the warm zone.

To determine the scope of decontamination stations needed, consider:

- Weather conditions
- Site conditions
- Size of the emergency
- Quantity of PPE
- Amount of tools and equipment
- Sensitive areas
- Natural drainage patten
- Logistics of decon and waste disposal

To prevent spreading contamination from equipment and tools outside the Warm Zone:

- Remove contaminated soil caught in tires and the undersides of equipment and vehicles as much as possible
- Use pressure washers to clean the outsides and undersides of vehicles, boats (protection from invasive species and contamination) and equipment. When pressure washers are not feasible, use brushes and buckets with a cleaning solution
- Ensure containers for storing contaminated materials are available
- Dispose of all waste generated by cleaning equipment in an acceptable manner
- Build bermed or lined areas to contain runoff or surface water
- Minimize waste generated from cleaning equipment as much as possible but not to the extent that it compromises adequate decontamination
- If large equipment should be moved offsite or from one location to another for more thorough cleaning, inspect the equipment to ensure contamination will not occur during transport and ensure the alternate location is pre-approved by the Incident Commander

2.7.8.1 Decontamination Procedures

All emergency response personnel will be briefed on decon procedures before entering the decon corridor:

Decontamination Procedures	
☐	Clearly identified the area by yellow tape or other highly visible method with clearly identifiable entry and exit points
☐	Established upwind of the Hot Zone or in a location where vapors from the Hot Zone will not significantly impact the corridor
☐	If possible, set up close to services (water, electricity, road access, etc.)
☐	Cover the floor with PVC sheets/10 mil poly to prevent contamination of the soil. The rest of the decon corridor will be lined with non-slip sorbent surface and bordered with sorbent rolls, pylons and barrier tape
☐	Identify decon corridor entry and exit will be located within the Warm Zone
☐	Contained runoff water will be removed either by portable pump or buckets into drums or other suitable containers for subsequent hazardous waste removal
☐	Set up tents or plastic barriers for protection from inclement weather and also for privacy during disrobing, establish separate disrobing tent/ barrier stations per gender
☐	Set up chairs where needed to assist in PPE removal and boots/booties
☐	Set up decon pools for primary wash/rinse and wading pools for secondary wash/rinse
☐	Set up a tool drop just outside the decon corridor entry point (wading pool and/or other suitable containment)
☐	All water used in the Hot Zone will be treated as hazardous waste (minimize water use as much as possible)
☐	Dispose of heavily contaminated PPE, clothing/equipment considered to be a hazardous waste, discard without decontamination as required
☐	Ensure cleaning solutions have adequate grease cutting properties and be evaluated by the degree of hazard for workers and the environment, (reference the Waste Management Plan). Brushes should be effective in removing contamination, but not damage clothing or PPE or cut/injured personnel
☐	Personnel wipe down will always be done in a downward motion, away from the facial area (goggles should be left on until personnel enter the Cold Zone). Gloves off last
☐	Ensure adequate hazardous waste containment is on hand and set up along the corridor. Once filled, containers will be closed, sealed, and marked as hazardous waste before being removed to a collection area
☐	Collect hazardous waste disposed in plastic (garbage) bags, and stored in a marked waste bin or other protective secondary containment
☐	Collect PPE items that may be reused after decontamination (e.g., rubber suits, rubber boots) and store near the Cold Zone and made available to responders as required
☐	Ensure a supply of fresh respirator cartridges will be available to responders
☐	Collect used contaminated cartridges and store in an identified container
☐	Ensure there is a supply of facial wipes, paper towels and clean water maintained outside the Cold Zone for final, personal cleaning. A shower facility (if possible) should be available at this location
☐	All materials used in the decon corridor will be marked and placed in suitable containment, including inner packaging and outer packaging, as required for further decontamination before final storage
☐	Any tools and equipment that can be decontaminated will be decontaminated to allow future use and to reduce replacement cost
☐	Any tools and equipment considered of no further use will be properly disposed of

2.7.8.2 Decontamination Corridor Set Up

See the diagram below for setting up a decontamination area:

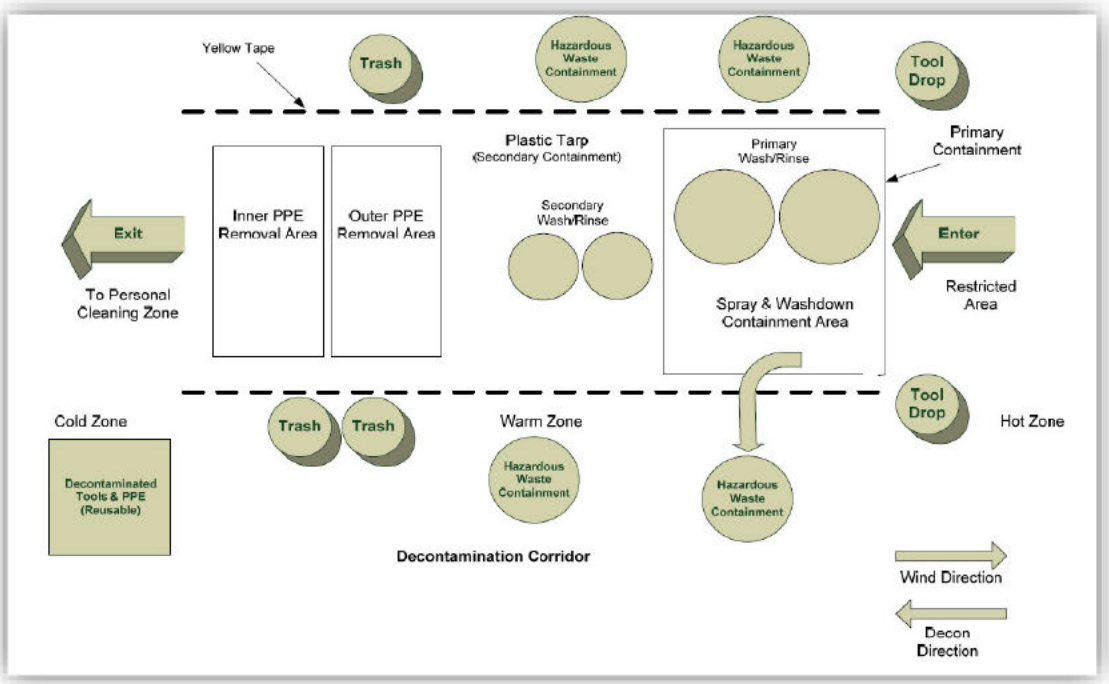

Figure 3: Decon Corridor

2.7.8.3 Decontamination Trailers

When using a decon trailer:

- Fill freshwater tanks onsite
- Do not tow the trailer with full water tanks
- A licensed contractor should pump wastewater tanks onsite, and wastewater should be disposed of in an acceptable manner
- Ensure the trailer is located on firm stable surface
- Fill fuel tanks onsite, and maintain a generator onsite, if needed
- Organize electric and water hookups, if available
- Arrange for laundering clothing offsite
- Level the trailer to ensure its components function properly.
- Stock with personal hygiene articles (e.g., soap, shampoo, towels)
- Complete and record trailer maintenance

Personnel –Decontamination Trailer Procedure	
☐	Follow decontamination procedure
☐	Enter decontamination trailer and remove all other personal clothing
☐	Place clothing into designated area
☐	Shower
☐	Redress in designated area
☐	Exit decontamination area without passing through the undressing area

2.8 Demobilization

The decision to downgrade an emergency level(s) is made by the Incident Commander. This decision may be based on monitoring data, control/containment of the situation, or reduced risk to the public or environment.

Before demobilization of the Incident Management Team can occur, the following should be done:

Demobilization Triggers	
☐	Event has been contained (the threat has been removed)
☐	Incident Command System resources needs have been assessed and scaled back
☐	Containment in place and effective
☐	The visual extent of impact has been identified
☐	Clean up resources are in place
☐	Internal and external stakeholder notification conducted (including Indigenous representatives)
☐	Other plans have been considered and drafted: e.g., monitoring and sampling plan, remediation plan, wildlife mitigation plan, communications plan, and waste management plan
☐	Transition Plan developed and agreed on by Incident Command/Unified Command
☐	Moved from the proactive phase into project phase

The demobilization should consider both the priority of release, and how activities will be transferred fully and effectively to regional operations, project teams, and/or other supporting business departments. Resources no longer required for the response to the event will be demobilized as rapidly as is feasible. Enbridge staff, contractors and sub-contractors are required to go through the demobilization process.

Employees are required to contact Human Resources (if present) or their event leader upon safe return to their home residence and provide their preferred contact method prior to departure from their event response work location so that Human Resources (if present) or their event leader can follow-up if a callback has not been received.

2.8.1 Equipment Inventory, Return and Restock

Enbridge owns and maintains spill response equipment, which is listed in Annex 1. Periodic inspection and maintenance are performed on each piece of equipment in accordance with recommendations from the manufacturer and the LP Equipment Management Program. After an equipment deployment exercise, or actual response, each piece of deployed equipment is inspected to assess the condition and determine if any repairs need to be made. Equipment found to be defective will be repaired or replaced. Inspection and maintenance activities are tracked and scheduled in Maximo and after a deployment.

Refer to Book 6: Equipment Maintenance for Emergency Response Preventative Maintenance. The job plan contains the following details:

- Frequency regarding the inspection activity
- Expected duration of the inspection activity
- Asset classification

Equipment Considerations following an emergency response or equipment deployment:

- Contractor equipment, as required, will be decontaminated at the appropriate Decon facility
- Once Decon is completed the equipment will be returned to the contractor/owner
- Local equipment will be the responsibility of the contractor to remove from the site
- Resources requiring transport to other locations will be coordinated through Operations and Logistics
- Agency equipment, as required, will be decontaminated at the appropriate Decon facility
- Agency equipment will then be returned to the appropriate agency and transportation support will be provided by logistics as necessary

2.8.2 Post Incident Analysis – Incident Investigation

An investigation of the response effectiveness should be conducted for all regulatory reportable events as outlined in the Canada Event Reporting Guide located on the Governance Document Library (GDL), and in OMM Book 1 - General Compliance Reference Event Reporting Standards B1_02-02-02 Event Reporting_USA. These standards provide guidance on regulatory and internal reporting and notification requirements.

The Event Analysis Management Process is used to determine causal factors and implement controls to prevent recurrence. Complete the Incident Learning and Prevention field in EnCompass.

2.8.3 After-Action Review

An After-Action Review will be conducted as soon as practical after the emergency response phase of the event is completed. The extent, detail and complexity of the review will vary depending on the nature of the Incident and the relative significance with respect to risk to people, impact on the environment, impact to property and operations, and Enbridge's relationship.

Less complex responses and exercises may only require a hot wash to evaluate overall effectiveness. More complex responses, that result in an Incident Command System activation will require an After-Action meeting with a formalized After-Action Review/Improvement Plan Report to evaluate the effectiveness of the emergency response procedures i.e., Notification Procedures.

This is a valuable tool following an emergency response event; that may prevent similar events by identifying:

- Procedures and Guides requiring modification
- New procedures
- Equipment needs
- Training needs for emergency response personnel
- Additional exercises focusing on specific exercise objectives

The Incident Command System Technical Specialist, Regional Emergency Response Specialist and LP EM Department should be consulted in the review. The review should also include input from a broad representation of key responders.

The following represents potential persons that should be considered for participation in the review:

- Key members of the workforce involved in the emergency response
- Contractors or consultants used in the response
- Public officials
- Government representatives
- Stakeholders

Areas of improvement that are applicable to a specific operating region will be managed through the After-Action review improvement plans.

2.8.4 Lessons Learned

Actions that apply or need to be addressed LP wide will be managed through the LP Emergency Management Lessons Learned Program.

In order for the lesson learned to be included in the *Emergency Management Lesson Learned Program*, the lesson learned should be significant in that it meets the following criteria:

- The issue relates to emergency management and the lesson learned is the responsibility of Emergency Management;
- Has an impact on the Emergency Management Program;
- Identifies a systemic LP Emergency Management issue; and,
- Will improve the efficiency, effectiveness or efficacy of an activity, document, or procedure.

Improvements that have been made program wide, applicable to all Operating Regions in the U.S. and Canada, include:

- The implementation of an Enterprise-sponsored notification system (Enbridge Alert System using the MIR3 software). This system allows an automated, mass notification system to company employees
- Increased training on the Incident Support Team and additional Incident Command System role specific training
- Improvements to the LP Emergency Management Exercise Program to provide guidance in incorporating the company's top operational risks into exercise planning
- Performance of in-line inspection determined by regulation, technology availability and risk assessments conducted on a regular basis

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3.0 Emergency Response Training

Emergency Response is essential in the execution of safe and effective response. While this Plan focuses specifically on ER training, all Company employees attend other training that is a requirement to operate safely and effectively.

This includes training provided by Liquid Pipelines Safety, Environment, Damage Prevention, Public Awareness, etc. The ER training and exercises include guidance on how to contact the Enbridge Control Centre and the regulatory agencies, in both Canada and The U.S.

3.0.1 EM Training & Exercise Program

The EM Training & Exercise Program document (published on the Governance Documents Library (GDL); along with the EM Training Course Syllabi provides a description on courses and their alignment with competencies. The Operations Training Program holistically describes the technical, emergency response, health and safety, and environmental training requirements that apply to LP Operations employees. The ER competencies are considered part of the technical training program.

The EM Training & Exercise Program document and EM Training Course Syllabi provides further guidance on the following:

- Information on competency-based training
- Courses in the Syllabi that contribute to competency development. This includes:
  - HAZWOPER (important so that employees understand the hazards in which they may be expected to operate. HAZWOPER is explained later in this plan.)
  - Tactical Operations courses (for control, containment and recovery of a release, and Initial Response)
  - Tank Fire Awareness (on site fire control/mitigation)
  - Incident Management (Enbridge employs NIMS ICS)
  - Centralized training records location and responsibilities
- How LP grants credit for training prior to the introduction of competency-based training (Prior Learning Recognition [PLR] - Procedure document, on the GDL)

The Training Advisors, with the advice from ER Specialists and relevant staff, devise a training plan, and schedule training sessions in response to governmental regulations and to other specific requirements in this Plan. The regional training plan will include Individual Learning Plans that satisfy knowledge, skills and behaviours associated with ER competencies. The regional training and exercise plans should be implemented in cooperation with local oil spill response co-ops and selected contractors, when applicable. Representatives of governmental agencies and other interested parties may be invited to observe or participate in these activities as determined appropriate.

3.0.2 Response & Competency-Based Training

LP Operations Training Program holistically describes the technical, emergency response, health and safety, and environmental training requirements that apply to LP Operations employees. The employment of competency-based training ensures a systematic application of knowledge, skills, problem-solving and behaviors/attributes that are included in how LP conducts training. This includes the use of On-The-Job Training, formalized Task Assessment, and a procedure to grant credit for previous training (LP EM Prior Learning Recognition procedure document found on the GDL).

There are three (3) ER Competencies, each with four (4) proficiency levels (Novice, Fundamental, Skilled and Expert), as follows:

- Respond to a Release Emergencies
- Respond to a Tank Fire Emergencies
- Response Management & Coordination (NIMS ICS)

See the LP EM Training & Exercise Program document for a description of competency-based training, proficiency levels, Learning Program Plans per competency, as well as OJT and Task Assessment templates.

The following table provides guidance on assigning ER competencies to employees based on their ER function/requirements. Regional Operations includes PLM, Terminal staff, Electricians, Maintenance Techs, Crossing Techs, Pump Station Staff, and Gaugers.

ER Function/Requirements	Regional Job Descriptions that may be applicable	Corresponding ER Competency(s)
Initial response, notifications, hazard identification, site delineation, implement initial containment tactics, develop a 201 pack, stand-up tactical ICS, NGL Ignition. Contain and Recover a Release of product	Regional Operations/Field	Respond to a Release Emergency
Respond to a tank fire, understand hazard, understand terminal fire equipment including activation, notifications & communications including with fire departments, implement the Incident Command System	Regional Operations/Field	Respond to a Tank Fire Emergency
Manage a response, develop an Incident Action Plan	Regional Management, Regional Operations/Field, All LP Offices	Response Management & Coordination

Regional Training Advisors and Emergency Response Specialists are responsible for the planning and coordination of emergency response training as part of the competency-based training program.

This includes the following responsibilities listed in the Emergency Response Training Coordination Process:

Regional ER Specialist	
☐	Responsible for annually updating the TEP in collaboration with Regional Training Advisor and People Leader
☐	Reviews ER ILP from the People Leader and forwards it to RTA for entry into the LMS
☐	Coordinates any ER training that has a hands-on practical component outside of the classroom, with support from the RTA
☐	Responsible for reviewing ER Competencies assigned to IMT and FRT members and ensuring they are accurate and up to date in LMS
☐	Participate in quarterly review of training records to identify and address any training gaps with IMT and FRT members and work with People Leaders and Regional Training Advisors to close gaps
☐	Assigns ER mentors and assessors, reviews completed OJT and TA forms

Regional Training Advisor	
☐	Responsible for reviewing the TEP with the ER Specialist and making updates to the LMS as required
☐	Responsible for scheduling and communicating classroom-based ER training.
☐	Responsible for assigning ER Competencies in LMS
☐	Responsible for updating and entering ER training records into the LMS and Record Retention

Regional Training Advisors will retain training records in accordance with the Operations Training Record Entry and Retention Standard.

3.0.3 Incident Command System

LP adheres to the National Incident Management Systems (NIMS) - Incident Command System (ICS), as an acknowledged/accredited program. The training requirements are indicated in the Response Management & Coordination competency.

Refer to: LP Emergency Management (EM) Competency Learning Program Plans for a description on what ICS training is required, by proficiency level and the LP EM Course Syllabi (GDL) for courses.

3.0.4 Operational Training

The Emergency Management Training and Exercise Program describe the accountabilities, responsibilities, processes and procedures for Liquid Pipelines (LP) Training and Exercises so that employees assigned to an emergency response role(s) can respond safely and effectively.

The Program describes what Operational Training is required, by proficiency level and the LP EM Course Syllabi (GDL) describes the target audience, and method of delivery.

Enbridge will train employees using competency-based training. The intent of competency-based training is to ensure it is progressive, aligns to functional ER requirements, ensures regulatory compliance, industry best practices and/or standards and is performance-based. All training will have a documented evaluation process to assess that staff have achieved the required competencies.

On-the-Job Training and Task Assessments are to be used to confirm skills. Task Assessments Templates and Forms can be found on the Emergency Management GDL site.

All Regions, in coordination with their regional Training Advisor, will create and maintain for each employee an Individual Learning Plan (ILP) indicating required training/courses required for each employee. Training records will be stored in Workday.

Emergency Management personnel are assigned Emergency Response competencies which determine their required qualifications based on their Emergency Response role. For example, the Qualified Individual (Incident Commander or their alternate) are assigned the Skilled Level of the Response Management and Coordination Competency.
The minimum training to achieve this Expert level are:

- Incident Commander System Awareness
- Incident Command System 100, 200, 300, 320 and 400
- Incident Command System Position Specific Training-Incident Command
- LP EM: Integrated Contingency Plan (ICP) Awareness Course
- LP EM: Emergency Responder Awareness Course

3.0.5 HAZWOPER Training

OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) set minimum training and/or competency requirements for responders in The U.S. who are exposed to, or potentially be exposed to, hazardous substances including hazardous waste. Enbridge employs the OSHA requirements as an acknowledge/accredited program. HAZWOPER is included in Respond to a Release Emergency competency.

Canadian employees will be required to complete the appropriate training course based on their potential job duties for a cross border response. This may also occur at the destination in The U.S.

Overview of responsibilities for the training program	
Regional Training Advisors	• Ensuring competent external vendors provide training • Ensuring training records are maintained and are up-to-date • Annually identifying employees that are required to attend training • Scheduling "HAZWOPER" training • Ensuring employees that were absent from any scheduled training are re-scheduled • Responsible for the overall coordination of the delivery of HAZWOPER • courses • Refer to the Learning Program Plans for applicable HAZWOPER training, and ensure no less than one-third (⅓) of the hours will be dedicated to hands-on training • Regional Training Advisors will retain training records in the regional/field office permanently (in accordance with that region's training record retention standard) and in the Company's Learning Management System.

Regional Training Advisors will determine the courses/topics that will be covered as part of the annual 8-hour HAZWOPER refresher, in conjunction with the Regional Emergency Response Specialist.

Outlines response personnel HAZWOPER responsibilities	
Contractors	All contractors responding to a spill/release that involves the Company will be required, by their contracts, to satisfy the HAZWOPER training requirements of *29CFR§1910.120* for their positions.
New Employees	New employees that can provide a certificate of completion of a previous HAZWOPER course along with records of annual 8-hour refresher courses are not required to complete the initial training again; prior Learning Recognition can be granted. The previous training should have been done through an instructional company/institution that is currently conducting training.
Current Employees	Only approved venders will be used for HAZWOPER training HAZWOPER training requirements have been organized, as follows:

Outlines response personnel HAZWOPER responsibilities	
	Novice level – HAZWOPER 24. This allows for safe response with supervision. An 8-hour refresher is required; Fundamental Level – HAZWOPER 40. An 8-hour refresher course is required which allows for safe response without supervision for routine tasks and also allows for employees to work past the ER phase (40 hours is an OSRA requirement for post ER work). Two important points: • The 16-hour bridge course can be used to achieve • the 40 hours, assuming 24 hours have been completed; and ○ OJT and Tasks done within both the 24 and the 16-hour bridge course can be used as credit against OJT and Task Assessment in Fundamental. *Respond to a Release Emergency*: • Novice level – HAZWOPER 24 Some required HAZWOPER 24 competency requirements will be added to the OJT and Task Assessment forms in the Fundamental proficiency level.
	If a region desires to use HAZWOPER training with the intent to meet portions of the Health & Safety (HS) syllabus, a regional decision can be made to do so and grant cross-credit to the HS courses. The Safety Advisor and/or HS training group should be consulted on this decision, and a comment added to the record in TRAC noting cross-credit from HAZWOPER.
Casual Labourers	Casual laborers will generally not be hired but may be employed by the Company's response contractors or other response organizations. Contractors will be responsible for providing the appropriate HAZWOPER training to these laborers prior to their involvement in response operations.
Volunteers	Normally, the Company will not hire and/or train volunteers for work on an oil spill response event. Consequently, the Company will refer volunteers to appropriate provincial/state and/or local agencies or organizations that are set up to handle volunteers. In addition, the Company will refer volunteers to appropriate wildlife rescue agencies or contractors, such as the International Bird Rescue Research Centre, which may be contracted by the Company to work on the spill cleanup. In the event that the Unified Command approved "volunteers", the IAP will include them as resources with scope of work, training and PPE as required.
Waste Handling Training	Field operations personnel receive extensive regulatory-required training in HAZWOPER, HAZCOM, emergency response, firefighting, and other areas as described in this section. Employees at sites which generate hazardous waste receive additional orientation and training specific to hazardous waste regulatory requirements, and hazardous waste emergency response. Site emergency specialists (Qualified Individuals) also receive additional training on incident command systems.

3.0.6 HAZWOPER Course Descriptions

The table on the following page describes the overview of the HAZWOPER courses as well as the annual refresher topics.

	24 Hour Initial Hazwoper Course	40 Hour Initial Hazwoper Course
Abstract	This classification is considered the Enbridge Responder Operations Level training. Individuals are trained to respond in a defensive fashion without actually trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading and prevent exposures.	This classification is considered the Hazardous Materials Technician Level training. Individuals with this training will assume a more aggressive role than an Enbridge responder at the operations level in that they will approach the point of release in order to plug, patch or otherwise stop the release of a hazardous substance.
Target Audience	For individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for purposes of protecting nearby persons, property or the environment from the effects of the release.	For individuals who respond to releases or potential releases for the purpose of stopping the release.
Frequency	*One time*	*One time*
Description	*Includes:* • Legal rights and responsibilities; • Hazardous materials regulatory overview; • Principles of toxicology; • Hazard and risk assessment; • Hazardous materials classes and physical hazards; • Characteristics and hazards of an oil spill. • Identification systems; • Control and mitigation strategies of an accidental release (fire, explosion, toxicity, environmental damage, etc.). • Associated physical hazards; • Respiratory protection; • Personal protective equipment; • Principles of decontamination.	*Includes:* • All of the 24-hour initial training program topics; • Air and environmental monitoring; • Site control, supervision and incident management; • Response and site operations; • Review of conditions that are likely to worsen emergencies such as facility malfunctions or failures and appropriate corrective actions; • Hands-on practice of a minimum of decontamination, material handling, and source control (plugging/patching/over-packing, etc.).
Estimated Duration	24 hours and includes one day of actual field experienced directly supervised by a trained, experienced supervisor.	40 hours and three days of actual field experienced directly supervised by a trained, experienced supervisor.
Note	*Supervised Days for Initial Training:* • Personnel that complete either the 24-hour or 40-hour initial training should complete the specified supervised days of field work. Those days shall be recorded on a form created and maintained by the Operations Training Department and stored in the Company LMS. The activities that qualify for inclusion in the supervised days can be any of the topics listed in each of aforementioned course topics listed	

	24 Hour Initial Hazwoper Course	40 Hour Initial Hazwoper Course
Re-certification	*Annual Refresher* Each employee is required to attend an eight (8) hour refresher annually to include the above listed topics. No more than three topics of the 40-hour initial course may be duplicated in any given two-year training cycle unless there has been a change in operations, for example; a change in air monitoring, respiratory or hearing protection equipment. Refresher training should include, at a minimum, the following topics and procedures: • Review of and retraining on relevant topics covered in the 40-hour course; • Update on developments with respect to material covered in 40-hour course; • Review of changes to EPA or OSHA standards or laws; • Introduction of additional subject areas as appropriate; • Hands-on review of new or altered PPE or decontamination equipment or procedures; • Review of newly developed air and contaminant monitoring equipment; and • Critique of the past year's events that can serve as training examples for future work situations.	
Material / Delivery Type	All HAZWOPER COURSES: Trainer led, Participant Handbook, appropriate certification (classroom and practical evaluation)	

3.1 Response Exercise Program

The Emergency Management Training and Exercise program is designed to be consistent with, and amalgamate, the exercise requirements as outlined in the National Preparedness for Response Exercise Program (NPREP, an acknowledge/accredited program) and the exercise requirements in the CER Onshore Pipeline Regulation (OPR). Refer to Annex B of the LP Training & Exercise program document for exercise requirements. The result is that LP exceeds the exercise requirements in both countries.

Exercises are performed to check the effectiveness of the training, to test LP's ER Plans and refresh knowledge, skills and behaviours/attributes (i.e. competency-based requirements) obtained through training. Ongoing training and exercises are conducted within each Response Zone. Enbridge follows the NPREP requirements.

3.1.1 Exercise Design Guide

The Exercise Design Guide (modelled after the HSEEP version) provides guidance and descriptions of exercise types, design, execution, evaluation and templates. The Guide is found on the GDL.

Exercise Format and Procedures: See Exercise Design Guide for exercise definitions, types, design, evaluations, and post-exercise analysis guidance.

3.1.2 Company Facility Requirements

Emergency exercises and drills for training and regulatory requirements are required to be conducted at facilities as outlined in the PREP Guidelines. This includes the requirement to meet Government Initiated Unannounced Exercises (GIUEs), which require very short response requirements of the Company at specific facilities.

Security exercises requirements are contained in the LP Security Management Plan and reflected in the Training & Exercise Program document.

Regional Management is accountable for ensuring emergency response exercises are being conducted.

3.1.3 Oil Spill Removal Organization Exercise Record

The QI/Regional Management or designee shall contact their contracted certified OSRO and ensure that **one** of the following has taken place:

The OSRO has completed the required exercise(s) per the OSRO Classification Program and provided copies of the exercise(s) to the region; or

If the Company has exercised with OSRO, it will satisfy the minimum requirements set forth in the most current version of the NPREP Guidelines. It is expected that each region shall exercise with their recorded OSRO at least one time in the triennial period.

Documentation provided to the regions for OSRO-conducted exercise(s) shall be maintained by the ER Specialist permanently in a manner for ready access. A copy of this documentation is to be stored in the EM Document and Records Management site under OSRC Program.

3.1.4 Credit for Actual Response

Enbridge may take credit for responses to actual spills or releases, or to significant threats of a spill, instead of conducting exercises. The response should be evaluated using the Exercise Design Guide. The lead evaluator should determine which exercise requirements were met during the response. This determination should be based on whether the response effort would meet the objectives of the exercise requirements as listed in the PREP Guidelines.

For regions in Canada, in order to take credit for an actual event the following should occur for the purposes of reporting it against CER Performance Measures. Within the current year, or as communicated to the regulator, an event may take the place of a planned exercise in the applicable region.

Credit may also be taken for a non-spill event but only if:

- The Incident Management Team was activated.
- The event had the significant threat of a release; e.g. wildfire, tornado, etc.

For non-spill events, the same requirements above apply.

Documentation for credit purposes will include (but not limited to):	
☐	ICS 201 Packet • Type of exercise/event • Date and time • Description of exercise/event • Objective of exercise/event
☐	Incident Action Plan(s) (if applicable)
☐	Meeting Minutes and/or notes from post-exercise review
☐	• Participant (Responder) Feedback/Critique Forms • Company Personnel • Contractor Personnel (if available)
☐	PREP Components Evaluation Worksheet
☐	Signature of IC or designee completing reporting
☐	Source Control – contact CCO to shutdown and isolate the system
☐	Secure and restrict access to the site
☐	Evacuate unnecessary personnel
☐	After Action Report for events

ANNEX 1 – TABLE OF CONTENTS PAGE

1.0 Owner & Operator

The Owner and Operator of this pipeline system is:

Owner/Operator Address	Enbridge Pipelines Inc. 10175 101 Street NW Edmonton, Alberta T5J OH3 Ph: 1-780-420-5210
Edmonton Control Center	24-Hour Contact: **1-877-420-8800**

This pipeline system is comprised of the following legal entity:

- Enbridge Pipelines Inc.

1.1 Purpose

This Annex is designed to provide field personnel with the information necessary to respond to events in a safe and efficient manner in the Eastern Region Response Zone System, hereafter referred to as the Eastern Region.

Emergency response operations involve tactics to stabilize asset status and mitigate negative impacts of events involving a company pipeline. Response actions may occur at, or in close proximity to the event location with the intent to simultaneously provide safety of persons, protection of environment, asset integrity, facilitate the development of plans and enhance communications.

1.2 Interface with Contingency and Company Plans

This Plan has been prepared in accordance with jurisdictional Contingency Plans. These plans are used to provide a framework for liaison and assistance during an emergency response. This liaison may be in part or in full depending on the necessity of Unified Command outlining areas of concern, such as:

- Identification of environmentally, culturally, and economically sensitive areas potentially impacted by a spill.
- Descriptions of Company's response strategies and responsibilities in accordance with Enbridge Pre-Fire Plans, Tactical Response Plans (under development) and Control Point Maps.
- Integration of Company's response efforts with those of the Federal, Provincial, State and local agencies.

1.3 Management Certification

Management Certification
This Plan is approved for implementation as herein described. Manpower, equipment and materials will be provided as required in accordance with this Plan. The Company is dedicated to the protection of the environment and commits to implement the necessary measures, as specified in the Plan, as necessary in a spill response emergency. In addition to any non-company resources including Mutual Aid arrangements identified in this Plan, the necessary personnel and equipment resources, owned or operated by the facility owner or operator, are available to respond to a discharge within appropriate response times. The Regional Director has been identified and assumes the role of the Incident Commander. I, the undersigned, attest to the fact the information contained within this Integrated Contingency Plan is accurate and factual to the best of my knowledge. The listed individuals in *Section 1.4 - Incident Commanders (Qualified Individuals)*, are considered in priority of succession, as Qualified Individuals and have full authority to make all necessary decisions in an emergency situation. Such decisions include, but are not limited to the following: • Activate internal alarms and hazard communications systems; • Activate personnel, equipment, and response organizations Mutual Aid as needed; • Identify character, source, amount, and extent of release; • Notify and provide information to appropriate Federal, Provincial/State and local authorities; • Assess interaction of spilled substance with water and/or other substances stored at facility and notify on-scene response personnel; • Assess possible hazards to human health and the environment including both the direct and indirect effects of the release (i.e., the effects of any hazardous surface waters runoffs from water or chemical agents used to control fire and heat-induced explosion); • Assess and implement prompt removal and containment actions; • Coordinate rescue and response actions with response personnel; • Activate and direct cleanup activities with emergency response contractors; • Act as a liaison with the regulatory authorities; and • Designate any funds required to carry out all required and directed oil spill response, mitigation and clean-up activities. This Plan has been prepared in accordance to and is consistent with applicable contingency plans for the facilities covered by this Plan.
RTIFICATION SIGNATURE [redacted] [redacted] Director, Eastern Region NAME & TITLE March 11 , 2025 DATE

1.4 Incident Commanders (Qualified Individuals)

The Regional Director has been designated as the Qualified Individual and assumes the role of Incident Commander.

The Minimum Duties Required of The QI /IC or designee Include:	
✓	Activate response personnel and response organizations Mutual Aid/as needed.
✓	Notify and provide necessary information to appropriate Federal, Provincial, State and local authorities with designated response roles. See Annex 2 – Notifications.
✓	Assess the possible hazards to human health and the environment as a result of the release. This assessment should consider both the direct and indirect effects of the release (i.e., the effects of any hazardous surface waters runoffs from water or chemical agents used to control fire and heat-induced explosion).
✓	Assess and implement prompt removal actions to contain and then remove the substance released.
✓	Coordinate rescue and response action as previously arranged with all response personnel.
✓	Use authority to immediately access company funding to initiate response, mitigation and clean-up activities.

Incident Commander/Qualified Individual

The Qualified Individuals listed below are most familiar with the assets, resources, and terrain. The QI may designate any qualified personnel to perform tasks as applicable.

Name	Title	Contact Info
Primary		
[redacted]	[redacted]	[redacted]
Alternates		
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

1.5 Response Zone Description (Information Summary)

1.5.1 Eastern Region

Eastern Region is under Enbridge Pipelines, Inc. entity ownership. The pipelines traverse from the U.S./Canada Border at the St. Clair River east to the Sarnia Terminal in Sarnia, Ontario. From Sarnia Terminal, lines continue east and terminate at Montréal Terminal in Montréal, Quebec.

Regional asset summary:

- Nine active pipelines, including 3 inactive pipeline segments
- Two inactive pipelines
- 25 tanks total; 17 located at Sarnia terminal and 8 tanks at Westover terminal

The following tables list the details of assets within this region by pipeline, facilities and tank terminals.

1.5.2 Pipeline Information

The Eastern Region includes 7 active and 2 inactive pipelines with approximately 1,345 miles of active pipeline, with pipe diameters ranging from 16 inches to 30 inches.

Line	Pipeline Section	Begin Lat	Begin Long	End Lat	End Long	Diameter	Length (km)	Product
05	St Clair River Border Crossing to Sarnia Terminal	42.9	-82.4	42.9	-82.3	30	11.55	NGL / CO
07	Sarnia Terminal to Westover Terminal *North Westover to Bronte Junction is Inactive	42.9	-82.3	43.3	-80.0	20	194	CO
08	Sarnia Terminal to Millgrove Junction Take-Off *Millgrove Junction to Bronte Junction Segment is Inactive	42.9	-82.3	43.3	-79.8	20	210	CO
09	Sarnia Terminal to North Westover Station	42.9	-82.3	43.3	-80.0	30	193	CO
09	North Westover Station to Hilton Station	43.3	-80.0	44.0	-77.8	30	217.3	CO
09	Hilton Station to Cardinal Station	44.0	-77.8	44.8	-75.4	30	216	CO
09	Cardinal Station to Montreal Terminal	44.8	-75.4	45.6	-73.5	30	206.1	CO
11	Westover Terminal to Nanticoke Junction Take-Off	43.3	-80.0	43.1	-79.8	20	32.76	CO
11	Nanticoke Junction Take-Off to Nanticoke	43.1	-79.8	42.8	-80.0	16	42.2	CO
78	St Clair River Border Crossing to Sarnia Terminal	42.9	-82.4	42.9	-82.3	30	11.75	CO
95	Sarnia Terminal to Shell Take-Off	42.9	-82.3	42.9	-82.4	20	9.683	CO
12	Clarkson Terminal to Bronte Terminal - Inactive	43.4	-79.7	43.3	-79.7	16		NF
22	Clarkson Lateral - Inactive	43.5	-79.7	43.5	-79.6	24		NF

NGL= Natural Gas Liquid
CO = Crude Oil
NF = Nitrogen Filled

1.5.3 Terminal/Station Information

The Eastern Region has 3 terminals, 2 with storage tankage, 6 stations, and a number of other facilities along the pipeline system.

Site	Call Sign	Lat	Long	Prov	County	Lines Serviced
Terminal						
Montreal	[redacted]	45.6[redacted]	-73.5[redacted]	QC	Montréal-Est	9
Sarnia		42.9	-82.3	ON	Sarnia	5, 7, 78, 8, 9, 95
Westover		43.3	-80.0	ON	Hamilton	7, 9, 11
Station						
Bryanston		43.1	-81.2	ON	Thames Centre	7, 8, 9
Cardinal		44.8	-75.4	ON	Edwardsburgh / Cardinal	9
Hilton		44.0	-77.8	ON	Cramahe	9
Keyser		43.0	-81.7	ON	Adelaide-Metcalfe	7, 8, 9
Terrebonne		45.7	-73.7	QC	Montréal-Est	9
North Westover		43.3	-80.0	ON	Hamilton	7, 8, 9
Take-Off						
Millgrove Junction		43.3	-79.8	ON	Hamilton	8
Nanticoke		42.8	-80.0	ON	Haldimand	11
Nanticoke Junction		43.1	-79.8	ON	Hamilton	11
Nova / St. Clair		42.9	-82.4	ON	Lambton	5, 78, 95
Shell / St. Clair		42.9	-82.4	ON	Lambton	5, 78, 95
Suncor / St. Clair		42.9	-82.4	ON	Lambton	5, 78, 95

1.5.4 Regional Tank Table

Tank No.	Location	Date Built	Total Volume (bbl)	Total Barrel Capacity at Terminal
301-TK-220	**Westover** [redacted]	1961	81,000	921,000
301-TK-221		1961	81,000	
301-TK-222		1967	128,000	
301-TK-223		1969	96,000	
301-TK-224		1977	101,000	
301-TK-225		1977	101,000	
301-TK-226		1994	165,000	
301-TK-227		1998	168,000	
301-TK-201	**Sarnia** [redacted]	1957	120,000	3,141,000
301-TK-202		1957	120,000	
301-TK-203		1957	120,000	
301-TK-204		1957	120,000	
302-TK-205		1961	151,000	
302-TK-206		1963	120,000	
302-TK-207		1965	151,000	
302-TK-208		1967	160,000	
302-TK-209		1968	158,000	
302-TK-210		1971	158,000	
302-TK-211		1972	158,000	
303-TK-212		1976	209,000	
303-TK-213		1976	209,000	
303-TK-214		1973	158,000	
303-TK-215		1979	410,000	
303-TK-216		1978	410,000	
303-TK-218		1975	209,000	
Total Capacity:	**Eastern Region**			**4,062,000**

1.6 Local Spill Response Equipment

Enbridge maintains a large cache of dedicated emergency response equipment to respond to any emergency (release, fire, business continuity, security), and to protect the public, personnel, and the environment. Examples include various types of boom, boom vane, sorbent materials, skimmers, portable dam skimmers, fast tanks, porta-tanks, pillow/bladder tanks, ICP trailers, decontamination trailers, boats etc. other emergency response tools/equipment to address discharges to land and water.

Community Air Monitoring Equipment – If an event requires community air monitoring, Enbridge would hire an on-call air monitoring consultant. Depending on the type and scope of the event, the consultant would bring various types and quantities of air sampling equipment. The equipment would be managed by the consulting group.

Personal Monitoring – Enbridge makes available personal gas monitors (typically measuring oxygen, LEL, CO, H2S) for operations employees who would work in positions that have the potential to come in contact with oil vapors or other air contaminants. Enbridge also has a number of different volatile organic compound (VOCs) meters. The main purpose of these monitoring devices is for employee safety. These devices are managed directly by the region.

The occupational hygiene team does not manage any equipment for use. The role of occupational hygiene team during an event would be:

- main role is to ensure worker safety to health hazards per OSHA legislation, and
- coordination of the community air monitoring and sampling by the consultant

External response agencies equipment locations are listed next in *Section 1.6.2* in addition to the weblinks to their equipment lists.

The locations of Enbridge facilities and the external response agencies are noted on emergency response maps within this Annex under *Section 1.7*.

In case of an event, the Control Center would contact the Regional-On-Call Manager, who has the ability to mobilize personnel and equipment on a 24-hour basis.

1.6.1 Enbridge Equipment

Equipment lists are accessible to internal users in Maximo. See *Annex 1.8* for the Eastern region equipment.

1.6.2 Spill Response Organizations – Internal & External Locations

Equipment Locations and Call Signs		Emergency Phone Nbr	Address	Lat	Long
Eastern Region Response Units					
Sarnia Terminal		519-337-0924		42.9	-82.3
Westover Terminal		905-659-2000		43.3	-80.0
Belleville Office		613-966-1955		44.1	-77.4
Montreal Terminal		514-643-4755		45.6	-73.5
Mississauga Office		905-659-2004		43.6	-79.6
Hilton				44.0	-77.8
External Response Agencies					
Eastern Canada Response Corporation (ECRC-SIMEC) https://www.ecrc-simec.ca/en/		519-862-2281		42.8	-82.4
		450-583-5588		45.7	-73.3
		418-692-8989		46.8	-71.2
		418-968-2344		50.1	-66.3
QM Environmental https://www.qmenv.com/expertise/emergency-response/		877-378-7745 905-388-4444		43.2	-79.6
EVOS Pipeline Services https://evospipeline.ca/en/		514-316-8977		45.7	-73.9
David Brown Construction Ltd. - DBC Environmental Services https://dbcltd.ca/		613-537-2255		45.0	-74.9
BASES - Bluewater Association for Safety, Environment and Sustainability (previously known as CAER) https://www.lambtonbases.ca/		519-383-1222		42.9	-82.3

1.6.3 BASES Mutual Aid Inventory

BASES (Bluewater Association for Safety, Environment and Sustainability) serves as the industry partner of Sarnia-Lambton. It aims to build upon the remarkable accomplishments of its three legacy organizations: the Sarnia-Lambton Environmental Association (SLEA), Community Awareness Emergency Response (CAER), and Industrial Education Co-operative (IEC), which have collectively achieved significant milestones over the past seventy years.

BASES members own and maintain the following equipment that is readily accessible by all members of BASES Emergency Preparedness.

1.7 Emergency Response Time Maps

1.7.1 Eastern Region Response Zone

Drive times depicted in the Regional Emergency Response Time Maps were generated using Environmental Systems Research Institute (ESRI) ArcPro. Times were calculated utilizing actual street speed limits based on a network dataset built from ESRI's StreetMap Premium North America, which contains street information from 2023. Optimal driving conditions during morning commute were used in this response time analysis, actual time is subject to change based on local road, traffic and weather conditions.

These response time maps are considered a conservative time frame for travel to site and do not include additional time for deployment. In case of an event, reference to individual maps will be necessary.

Manned station and Emergency Response Trailer travel times are calculated in hour increments up to 6 hours. The colored zone changes every hour on the maps. This will show the travel time required from the manned stations and company trailers to areas along the pipeline.

Mutual Aid Trailer location travel times are represented by calculating every hour up to six hours based on the criteria above. The color changes every hour on the maps. Response times may vary with the locations of mutual aid personnel at the time of an event. This is representative of travel time for the trailers **only**.

1.7.2 Company Response Times

Response times may be variable due to remote access, extreme road and weather conditions. The safety of responders is of the utmost importance, good decisions and safe behavior are more important than speed. The response times in the Emergency Response Time Maps are strict guidelines intended to be used during event pre-planning to pre-identify and appropriately pre-position the resources (people and equipment) before an event occurs.

1.7.3 Response Time Maps Internal & External Locations

The Enbridge Emergency Response Overview Map shows travel times from internal manned facility locations, after notification and deployment, to access areas along the pipeline. Time should be allotted to load equipment from the storage unit after notification and deployment.

The External Response Resource Map shows travel times from local response organization locations to areas along the pipeline. Time should be allotted to load equipment from the storage unit after notification and deployment.

1.8 Emergency Response Mapping and Equipment Lists

Maps and equipment lists are included for preparedness and response activities.

Figure 4 - Regional Boundary Map
Figure 5 - Emergency Response Time Maps
Equipment List

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Eastern Region

Assigned Storeroom	Description	Barcode	Asset #
Location:	**Bellville**		
Location Call sign:	[redacted]		
[redacted]	TRAILER:NOMODIFIER;BOATTRAILER, DUAL AXLE	[redacted]	
	TRAILER:NOMODIFIER;BOATTRAILER, DUAL AXLE		
	DAM:NOMODIFIER;WATERGATE,25'		
	DAM:NOMODIFIER;WATERGATE,25'		
	TRAILER:NO MODIFIER; RESPONSE ENCLOSED, DUAL AXLE, 20' to <26'		
	PUMP:NO MODIFIER; 3 IN, TRASH		
	BOOM:NO MODIFIER;BOOMVANE, 0.5M SMALL BOOM VANE		
	PUMP:NO MODIFIER; 3 IN, DIAPHRAM		
	SKIMMER:NOMODIFIER;SUCTION, MANTA RAY		
	GENERATOR:NOMODIFIER; GAS, 3000W		
	PUMP:NO MODIFIER; 2 IN, TRASH		
	PUMP:NO MODIFIER; 2 IN, WATER		
	BLOWER:NOMODIFIER; BLOWER		
	BLOWER:NOMODIFIER; BLOWER		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER; PORTABLE, POP-UP (400 gal to <600 gal, 1514L to < 2271L)		
	TANK:NOMODIFIER; PORTABLE, POP-UP (400 gal to <600 gal, 1514L to < 2271L)		
	BOOM:NOMODIFIER;SHORESEAL, 50' SECTION LENGTH, 63 SECTIONS (3150' TOTAL)		
	SKIMMER:NO MODIFIER; PEDCO/PELICAN, WEIR		
	SKIMMER:NOMODIFIER;SMOOTHDRUM, TDS118		
	GENERATOR:NOMODIFIER; GAS, 4000W		
	POWER UNIT:HYDRAULIC; DUALHYDRAULICS, DIESELFUEL		
	TANK:NOMODIFIER; PORTABLE, POP-UP (1000 gal to <2000 gal, 3785L to < 7570L)		
	PUMP:NO MODIFIER; 2 IN, TRASH		
	PUMP:NO MODIFIER; 3 IN, WATER		
Location:	**Mississauga**		
Location Call sign:	[redacted]		
[redacted]	BOOM:NO MODIFIER; ALUMINUM, BOOMVANE	[redacted]	
	POWER UNIT:HYDRAULIC; SINGLE HYDRAULICS		
	SKIMMER:NO MODIFIER; SMOOTH DRUM		
	PUMP:NO MODIFIER; 3 IN, DIAPHRAM		
	SKIMMER:NOMODIFIER;SUCTION, MANTA RAY		
	BOOM:NOMODIFIER;RIVER, FOAM, 50' SECTION LENGTH, 4 SECTIONS		

Eastern Region			
Assigned Storeroom	**Description**	**Barcode**	**Asset #**
[redacted]	PUMP:NO MODIFIER; 3 IN, WATER	[redacted]	
	TANK:NOMODIFIER; PORTABLE, POP-UP (1000 gal to <2000 gal, 3785L to < 7570L)		
	BOOM:NOMODIFIER;RIVER, FOAM, 50' SECTION LENGTH, 3 SECTIONS (150' TOTAL)		
	VEHICLE:NO MODIFIER; ARGO		
	POWER UNIT:HYDRAULIC; DUALHYDRAULICS, DIESELFUEL		
	SKIMMER:NOMODIFIER;WEIR, OCEANSKATER		
Location:	**Montreal**		
Location Call sign:	[redacted]		
[redacted]	TRAILER:NO MODIFIER;BOAT TRAILER, DUAL AXLE	[redacted]	
	TRAILER:NO MODIFIER;BOAT TRAILER, DUAL AXLE		
	TRAILER:NOMODIFIER;INCIDENT COMMAND POST, DUAL AXLE (30' TO <50') - ML-4		
	TRAILER:NO MODIFIER; FLATDECK - TRAILER, BOOM (ML-6)		
	TRAILER:NO MODIFIER;BOAT TRAILER, DUAL AXLE		
	VEHICLE:NO MODIFIER;VACCUM		
	TOOL:CHAINSAW;CHAINSAW, 36 INCH		
	PUMP:NO MODIFIER; 3 IN, TRASH		
	POWER UNIT:HYDRAULIC; DUALHYDRAULICS, DIESELFUEL		
	PUMP:NO MODIFIER; 3 IN, DIAPHRAM		
	SKIMMER:NOMODIFIER; SMOOTH DRUM, MAGNUM200		
	DAM:NOMODIFIER;WATERGATE,25'		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER; PORTABLE, POP-UP (400 gal to <600 gal, 1514L to < 2271L)		
	TANK:NOMODIFIER; PORTABLE, POP-UP (400 gal to <600 gal, 1514L to < 2271L)		
	TRAILER:NO MODIFIER; RESPONSE ENCLOSED, DUAL AXLE, 18' to <20' - TRAILER, Environmental (ML-8)- UNIT-229		
	BOOM:NOMODIFIER;RIVER, FOAM, 50' SECTION LENGTH, 4 SECTIONS		
	BOOM:NOMODIFIER;RIVER, FOAM, 50' SECTION LENGTH, 3 SECTIONS (150' TOTAL)		
	TRAILER:NO MODIFIER; RESPONSE ENCLOSED, DUAL AXLE, 18' to <20' - First Responder (ML-7)- UNIT: 201		
	DAM:NOMODIFIER;WATERGATE,25'		
	GENERATOR:NOMODIFIER; DIESEL, >10000W		
	POWER UNIT:HYDRAULIC; DIESEL FUEL, SINGLE HYDRAULICS		
	BOOM:NO MODIFIER; HYDRAULIC REEL		
	BLOWER:NOMODIFIER;		

Eastern Region

Assigned Storeroom	Description	Barcode	Asset #
[redacted]	GENERATOR:NOMODIFIER; GAS, 7000W	[redacted]	
	POWER UNIT:HYDRAULIC; DIESEL FUEL, SINGLE HYDRAULICS		
	SKIMMER:NOMODIFIER;GROOVEDDRUM, TDS118G		
	PUMP:NO MODIFIER; 3 IN, WATER		
	BOOM:NOMODIFIER;CREEK, FOAM, 50' SECTION LENGTH, 2 SECTIONS		
	BOOM:NOMODIFIER;RIVER, FOAM, 50' SECTION LENGTH, 2 SECTIONS (100' TOTAL)		
	SKIMMER:NOMODIFIER;SUCTION, MANTA RAY		
	TANK:NOMODIFIER; PORTABLE, POP-UP (1000 gal to <2000 gal, 3785L to < 7570L)		
	TANK:NOMODIFIER; PORTABLE, POP-UP (1000 gal to <2000 gal, 3785L to < 7570L)		
	GENERATOR:NOMODIFIER; GAS, 7000W		
	SKIMMER:NO MODIFIER; PEDCO/PELICAN, WEIR		
	BOOM:NO MODIFIER;BOOMVANE, 0.5M SMALL BOOM VANE		
	BOOM:NOMODIFIER;CREEK, FOAM, 50' SECTION LENGTH, 2 SECTIONS		
	PUMP:NO MODIFIER; 2 IN, TRASH		
Location:	**Sarnia**		
Location Call sign:	[redacted]		
[redacted]	BOAT:NOMODIFIER; JONBOAT, 10 TO < 20 HP, 14 FT, OUTBOARDJET	[redacted]	
	BOAT:NO MODIFIER; OUTBOARD PROPELLER, 50 to < 60 HP, 18 FT, WORKBOAT		
	TRAILER:NO MODIFIER; DUAL AXLE, BOAT TRAILER, Unit 239		
	TRAILER:NO MODIFIER; RESPONSE ENCLOSED, DUAL AXLE, 18' to <20', Unit 180		
	TRAILER:NO MODIFIER; RESPONSE ENCLOSED, DUAL AXLE, 18' to <20', Unit 230		
	SMALLMOTOR:NOMODIFIER;BLOWER		
	BOOM:NO MODIFIER;BOOMVANE, 0.5M SMALL BOOM VANE		
	TRAILER:NO MODIFIER; DUAL AXLE, BOAT TRAILER		
	MOTOR:NOMODIFIER; OUTBOARDPROPELLER, 5 TO <10 HP		
	DAM:NOMODIFIER;WATERGATE,25'		
	DAM:NOMODIFIER;WATERGATE,25'		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TRAILER:NO MODIFIER; ENCLOSED, DUAL AXLE, 18' to <20'		
	PUMP:NO MODIFIER; 2 IN, TRASH		
	PUMP:NO MODIFIER; 2 IN, TRASH		
	PUMP:NO MODIFIER; 2 IN, TRASH		
	PUMP:NO MODIFIER; 2 IN, TRASH		
	PUMP:NO MODIFIER; 3 IN, TRASH		

Eastern Region			
Assigned Storeroom	**Description**	**Barcode**	**Asset #**
[redacted]	PUMP:NO MODIFIER; 3 IN, TRASH	[redacted]	
	TANK:NOMODIFIER; PORTABLE, POP-UP (2000 gal to <4000 gal, 7570L to < 11356L)		
	POWER UNIT:HYDRAULIC; DUALHYDRAULICS, DIESELFUEL		
	SKIMMER:NOMODIFIER;SUCTION, MANTA RAY		
	BOOM:NO MODIFIER; ALUMINUM, BOOMVANE		
	TANK:NOMODIFIER; PORTABLE, POP-UP (400 gal to <600 gal, 1514L to < 2271L)		
	TANK:NOMODIFIER; PORTABLE, POP-UP (400 gal to <600 gal, 1514L to < 2271L)		
	SKIMMER:NO MODIFIER; PEDCO/PELICAN, WEIR		
	PUMP:NO MODIFIER; 3 IN, DIAPHRAM		
	PUMP:NO MODIFIER; 2 IN, TRASH		
	SKIMMER:NOMODIFIER;SMOOTHDRUM, TDS118		
	TANK:NOMODIFIER; PORTABLE, POP-UP (1000 gal to <2000 gal, 3785L to < 7570L)		
	PUMP:NO MODIFIER; 3 IN, WATER		
	SKIMMER:NO MODIFIER; MI-30, 3 x 30 x 2.5 FT, 16 GPM, DISC		
	POWER UNIT:HYDRAULIC; DUALHYDRAULICS, DIESELFUEL		
	BOOM:NO MODIFIER; FOAM, 50' SECTION LENGTH, RIVER		
	TANK:NOMODIFIER; PORTABLE, POP-UP (1000 gal to <2000 gal, 3785L to < 7570L)		
	BOOM:NO MODIFIER; RIVER, FOAM, 50' SECTION LENGTH		
Location:	**Westover**		
Location Call sign:	[redacted]		
[redacted]	BOAT:NOMODIFIER; JONBOAT, 10 TO < 20 HP, 14 FT, OUTBOARDJET	[redacted]	
	BOAT:NO MODIFIER; OUTBOARD PROPELLER, 50 to < 60 HP, 18 FT, WORKBOAT		
	TRAILER:NO MODIFIER; DUAL AXLE, BOAT TRAILER, Unit 239		
	TRAILER:NO MODIFIER; RESPONSE ENCLOSED, DUAL AXLE, 18' to <20', Unit 180		
	TRAILER:NO MODIFIER; RESPONSE ENCLOSED, DUAL AXLE, 18' to <20', Unit 230		
	SMALLMOTOR:NOMODIFIER;BLOWER		
	BOOM:NO MODIFIER;BOOMVANE, 0.5M SMALL BOOM VANE		
	TRAILER:NO MODIFIER; DUAL AXLE, BOAT TRAILER		
	MOTOR:NOMODIFIER; OUTBOARDPROPELLER, 5 TO <10 HP		
	DAM:NOMODIFIER;WATERGATE,25'		
	DAM:NOMODIFIER;WATERGATE,25'		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TRAILER:NO MODIFIER; ENCLOSED, DUAL AXLE, 18' to <20'		
	TRAILER:NO MODIFIER; DUMP, DUAL AXLE, 18' to <20'		
	PUMP:NO MODIFIER; 2 IN, TRASH		

Eastern Region			
Assigned Storeroom	Description	Barcode	Asset #
[redacted]	PUMP:NO MODIFIER; 2 IN, TRASH	[redacted]	
	PUMP:NO MODIFIER; 2 IN, TRASH		
	PUMP:NO MODIFIER; 2 IN, TRASH		
	PUMP:NO MODIFIER; 3 IN, TRASH		
	PUMP:NO MODIFIER; 3 IN, TRASH		
	TOOL: NO MODIFIER: THERMAL IMAGER, FLIR, T540		
	TANK:NOMODIFIER; PORTABLE, POP-UP (2000 gal to <4000 gal, 7570L to < 11356L)		
	POWER UNIT:HYDRAULIC; DUALHYDRAULICS, DIESELFUEL		
	SKIMMER:NOMODIFIER;SUCTION, MANTA RAY		
	BOOM:NO MODIFIER; ALUMINUM, BOOMVANE		
	TANK:NOMODIFIER; PORTABLE, POP-UP (400 gal to <600 gal, 1514L to < 2271L)		
	TANK:NOMODIFIER; PORTABLE, POP-UP (400 gal to <600 gal, 1514L to < 2271L)		
	SKIMMER:NO MODIFIER; PEDCO/PELICAN, WEIR		
	PUMP:NO MODIFIER; 3 IN, DIAPHRAM		
	PUMP:NO MODIFIER; 2 IN, TRASH		
	SKIMMER:NOMODIFIER;SMOOTHDRUM, TDS118		
	TANK:NOMODIFIER; PORTABLE, POP-UP (1000 gal to <2000 gal, 3785L to < 7570L)		
	PUMP:NO MODIFIER; 3 IN, WATER		
	SKIMMER:NO MODIFIER; MI-30, 3 x 30 x 2.5 FT, 16 GPM, DISC		
	POWER UNIT:HYDRAULIC; DUALHYDRAULICS, DIESELFUEL		
	BOOM:NO MODIFIER; FOAM, 50' SECTION LENGTH, RIVER		
	TANK:NOMODIFIER; PORTABLE, POP-UP (1000 gal to <2000 gal, 3785L to < 7570L)		
	BOOM:NO MODIFIER; RIVER, FOAM, 50' SECTION LENGTH		
Location:	**Hilton**		
Location Call sign:	[redacted]		
[redacted]	SKIMMER:NOMODIFIER;DISC	[redacted]	
	POWER UNIT:HYDRAULIC; DUALHYDRAULICS, DIESELFUEL		
	TANK:NOMODIFIER;PORTABLE, POP-UP (600 GAL TO <1000 GAL, 2271L TO < 3785L)		
	TRAILER:NO MODIFIER; FLATDECK, DUAL AXLE BUMPER PULL		
	TRAILER:NO MODIFIER; RESPONSE ENCLOSED, DUAL AXLE, 20' to <26'		
	TRAILER:NO MODIFIER; RESPONSE ENCLOSED, DUAL AXLE, 20' to <26'		
	BOOM:NO MODIFIER; RIVER, FOAM, 50' SECTION LENGTH		
	CONTAINER:NOMODIFIER; STANDARD, NOSKIDSMOUNTED		
	TRAILER:NO MODIFIER; RESPONSEENCLOSED, DUAL AXLE (16 TO <18')		
	TRAILER:NO MODIFIER; RESPONSEENCLOSED, DUAL AXLE (16 TO <18')		
	PUMP:NO MODIFIER; 2 IN, DIAPHRAM		
	MOTOR:NOMODIFIER; DRILL, STIHL BT45		
	AUGER:NOMODIFIER; ICEAUGER, GAS		
	TOOL:CHAINSAW; CHAINSAW, 36 INCH, 385XP		

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Eastern Region				
Assigned Storeroom		Description	Barcode	Asset #
[redacted]		TOOL:CHAINSAW; CHAINSAW, 36 INCH, 390XP	[redacted]	
		AUGER:NOMODIFIER; ICEAUGER, GAS		
		PUMP:NO MODIFIER; 2 IN, TRASH		
		POWER UNIT:HYDRAULIC; SINGLEHYDRAULICS , GASFUELSELF CONTAIN DUAL AIR/PUMP; GAS POWERED POWER UNIT		
		TOOL:CHAINSAW; CHAINSAW, 36 INCH, 390XP		
		GENERATOR:NOMODIFIER; GAS, 7000W		
		SKIMMER:NOMODIFIER; WEIR		
		PUMP:NO MODIFIER; 3 IN, WATER		
		BOOM:NO MODIFIER; RIVER, FOAM, 50' SECTION LENGTH		
		GENERATOR:NOMODIFIER; GAS, 7000W, HONDA, EM6500SX		
		SKIMMER:NOMODIFIER;SMOOTHDRUM, TDS118		
		POWER UNIT:HYDRAULIC; DUALHYDRAULICS, DIESELFUEL		
		TANK:NOMODIFIER; PORTABLE, POP-UP (1000 gal to <2000 gal, 3785L to < 7570L)		
		BOOM:NO MODIFIER; RIVER, FOAM, 50' SECTION LENGTH		

ANNEX 2 – TABLE OF CONTENTS PAGE

2.0 Notifications Overview

Immediate actions are required at the onset of an emergency response to limit the extent of a release, minimize the potential hazard to human health and the environment, and coordinate an effective response. It is also important to act decisively to create a professional working atmosphere among Company personnel and stakeholders. This section provides the steps for determining the appropriate initial response and notification actions that should be carried out in the event of a release or other emergency events.

The internal notification procedures are essentially the same for all emergency events although the external notifications will vary depending on the type of event, type and quantity of material released, and the consequences (injuries, deaths and property damage).

Company personnel have the authority and obligation to terminate any operation in response to an abnormal, threatening or hazardous situation.

2.0.1 Emergency Notification / Activation

The chart on the following page is an overview of roles and responsibilities of personnel or groups upon initial discovery, from reporting the emergency to activating Emergency Response Teams to manage an emergency.

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Section 2.0.2 - Eastern Region Notification Chart

ENBRIDGE

Last Updated 07-Feb-2025

Incident Observer

- Member of the Public calls the toll free number
- Industrial User or Local Police contacts Control Center
- **Enbridge Employee discovery call Edmonton Control Center 1-877-420-8800**
- Internal Alarm is Sounded
- *Telephone Answering Service (T.A.S) in Quebec

Control Center Operations

- Document incoming call from incident observer
- Contact Regional Management /Region On-Call to dispatch company first responder
- Alert Police *if required
- Implement CCO notifications

Regional Management

During Regular Work Hours:

[redacted]

(outside of regular hours see Region On-Call Schedule)

Dispatch First Responder (nearest employee or on-call person)

IF CONFIRMED; ACTIVATE THE EMERGENCY RESPONSE PLAN (ICP & FERP) & ICS

Mobilize Support Services (Safety, Compliance, EM, Public Awareness, Environment, Security, Lands and Right of Way, and other groups as required); transition to ICS roles

Gov't Notification

Ontario – Spills Action Center 1-800-268-6060
Quebec – Ministry of Environment (French Only) 1-866-694-5454
Quebec - Ministry of Public Security
Gov't Operations Center: 1-866-650-1666

Transportation Safety Board (**TSB**)
Incident Line 1-819-997-7887
Fax 1-819-953-7876
E-mail address: PipelineNotifications@tsb.gc.ca

Canada Energy Regulator (**CER**) Incident Line 403-299-2773
CER Online Event Reporting System (OERS) (https://apps.cer-rec.gc.ca/ers)

If confirmed/applicable, see notification lists to:

- Activate Incident Management Team
- Notify required government agencies
- Notify external stakeholders
- Activate support resources (spill co-operatives etc.)

Canada/US Border Emergency Enbridge US – Schererville

[redacted]

Senior Management

[redacted]

[redacted]

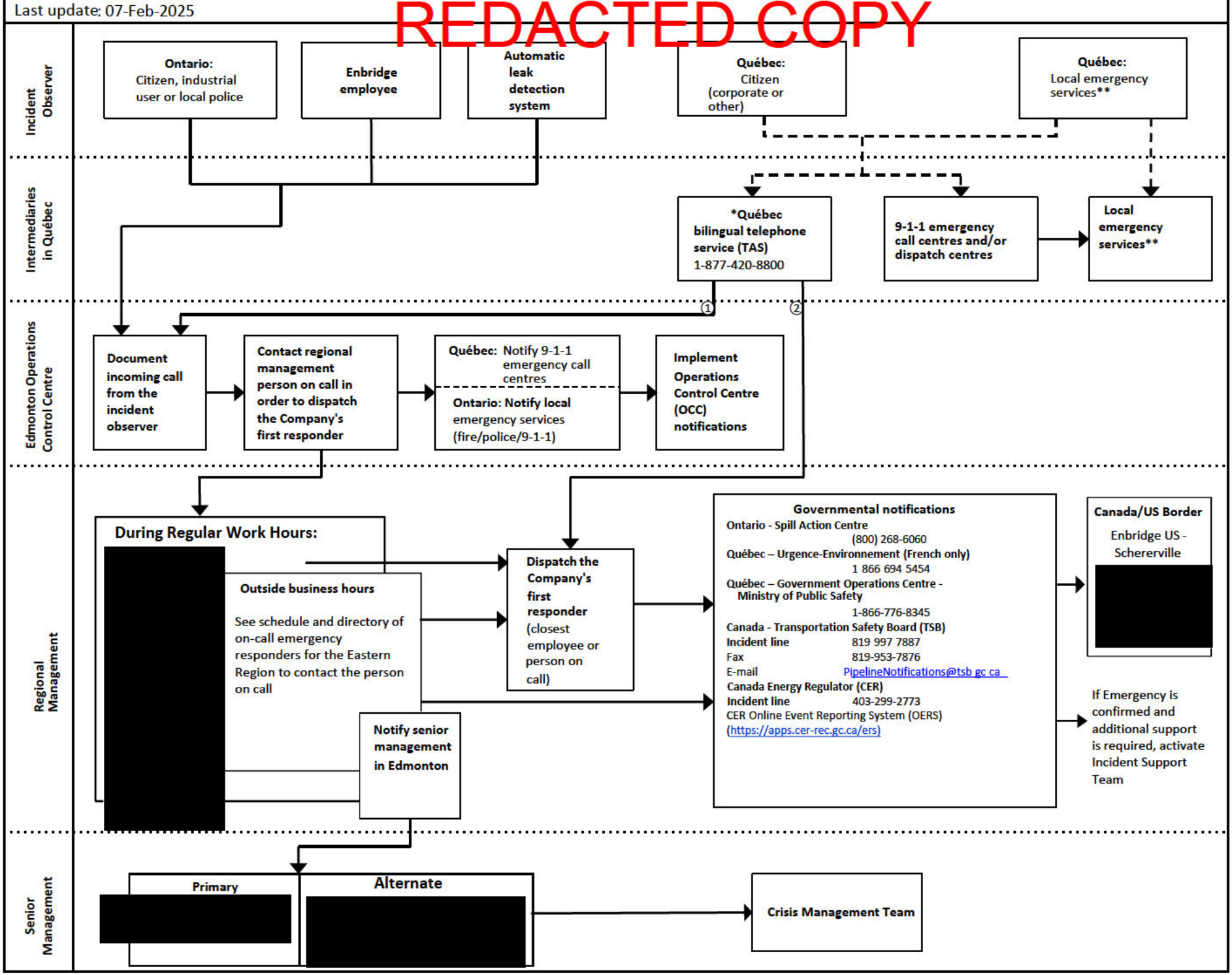
Crisis Management Team

* 1. Any party is to continue through the next step if contact cannot be made

*2. Emergency reports may be received from Police, Public, Employees or Alarms

Section 2.0.3 - Alert & Mobilization diagram, updated by the Pipeline Emergency Measures Technical Subcommittee (PEMTS)

Last update: 07-Feb-2025



Dotted line (- - - -) Optional/non-systematic notification.

Full line ( ) Systematic notification.

* In Québec, citizens call 1-877-420-8800 to report an emergency. These calls are directed to the bilingual telephone service (TAS) in Montréal. The TAS then relays the information to the Edmonton Operations Control Centre.

** Local emergency services include police, fire, ambulance, civil protection and other required services.

2.1 Initial Response

The following Initial response checklists are designed to promote safety and guidance for first responders and regional management.

2.1.1 First Responder Checklist

To be used by the Enbridge First Responder | Initial Incident Commander for initial response actions.

Safety	
☐	Stop work immediately if ongoing
☐	Conduct Field Level Hazard Assessment
☐	Wear appropriate PPE including a Four Head Gas Monitor
☐	Approach the site from uphill, upwind, or upstream, only if safe to do so. If not safe, DO NOT approach
☐	Eliminate all ignition sources
☐	Assign a Safety Officer as soon as possible
Isolate	
☐	Source Control – contact CCO to shutdown and isolate the system
☐	Secure and restrict access to the site
☐	Evacuate unnecessary personnel
Notifications	
☐	Contact Regional Management and People Leader (Regional On-call)
☐	Verify Control Center has been informed
☐	Inform Public Affairs, Communications & Sustainability (PACS) Crisis Communications team
Documentation	
☐	Review Hazard Specific Response Actions and Initial Response within the FERP
☐	Document initial actions on 214a Individual Log (if applicable based on the Event Classification)
☐	Initiate ICS 201 packet
☐	*ICS forms are required for events classified at Level 1-3, not an alert level

Additional Considerations	
☐	Scene size up – estimate volume out to determine emergency level and tiered response actions
☐	If applicable, work with the external first responding agency on scene to ensure a coordinated response

Edmonton Control Center	1-877-420-8800 CDN Regions (Prairie and Eastern)
Enbridge Media Hotline	1-888-992-0997
Public Information Officer	1-866-761-5400 (leave a voicemail) [redacted]
Security Reporting	1-844-786-8305

2.1.2 Regional Management Checklist

To be used by Regional Management/Regional On-Call for initial response actions.

Activate Response Plan(s)	
☐	Integrated Contingency Plan
☐	Field Emergency Response Plan
☐	Any other relevant company documents *(Incident Management Handbook, Inland Response Tactics Guide, Control Points, OMMs, Safety Procedures etc.)*
Internal Notifications	
☐	Activate Support Services (Safety, Compliance, Public Awareness, Environment, Security, Lands and ROW, and Emergency Management to assist prior to the Incident Command System structure being stood up)
☐	Activate Field Response Team
☐	Activate Incident Management Team, and put potential members on standby notice
External Notifications	
☐	Engage Region Compliance to conduct federal regulatory notifications
☐	Activate Spill Response Contractors (if needed)
☐	Review external stakeholder list in the *Notifications* section, notify as required
Documentation	
☐	Document initial actions on 214a Individual Log (if applicable based on the Event Classification)
☐	Begin the development of the Incident Action Plan

Federal Regulatory Reporting	1-403-299-2773 Canada Energy Regulator Incident Line 1-819-997-7887 CER & TSB Reporting Hotline for all Reportable Events

Refer to OMM Book 1: General Compliance, reference-02-02-12 Unexpected Operational Event Response. Which applies to Regional Management On-Call Personnel in responding to certain unexpected operational events or leak triggers, such as restart of the line following investigation of an alarm that did not require activation of this plan.

Quebec Province (CRIP)

For major disasters that necessitate a significant response, coordination with the municipal, provincial, and federal government of Quebec is required. This coordination is facilitated through an Emergency Operations Center (EOC), as outlined in the Pipeline Response Frame of Reference (PRFR), also known in French as CRIP (Cadre de reference intervention pipeline).

The FRPR or CRIP does not modify the roles, responsibilities or regulatory and legislative obligations of relevant authorities and does not replace a company's jurisdictional regulatory requirements and approaches to achieve compliance, including those regulated by the CER.

2.2 Event Reporting

A list of emergency contact information detailing required internal notifications and external agency contacts is located in this section. The following summarizes who should be contacted in an emergency:

2.2.1 Required Notifications / Emergency Contacts

Any person, who observes or becomes aware of a release, shall immediately report the event to the Control Center and Regional Management/Regional On-Call. If applicable, direct all media to the Public Information Officer, if the PIO is not available:

CONTROL CENTER			
Edmonton Control Centre		CDN Region including Quebec 877-420-8800	
ENBRIDGE MEDIA HOTLINE			
Media Hotline		888-992-0997	
ENBRIDGE QUALIFIED INDIVIDUALS			
Job Title	Name	Office #	Cell #
[redacted]			
Alternate Qualified Individuals			
[redacted]			
[redacted]			
[redacted]			

2.2.2 Regulatory Reporting Criteria

Event reporting requirements are for the company are outlined in the Canada Event Reporting Guide located on the Governance Document Library (GDL). The guide includes verbal and written reporting. Verbal reports include immediate notification to appropriate internal departments, as well as external reporting to federal/provincial/municipal agencies on provincially and federally regulated lines.

2.2.3 Incident Management Team List

The Region has designated personnel that will be activated based on the needs of the event response to fill command and general staff roles within the Incident Command System. To see the latest IMT List, go to the ER Portal - Regions.

ICS Position	Normal Job Title	Name	Office Nbr	Alt. Number
Command Staff				
Incident Commander (IC)	Director, Eastern Region Ops			
Alternate IC	Mgr Area Operations - Sarnia			
Alternate IC	Manager Regional Services			
Alternate IC (FR)	Manager Area Operations St. Lawrence Area			
Liaison Officer (LOFR)	Sr Advisor Regulatory Compliance			
Alternate LOFR	Supervisor Lands & ROW			
Alternate LOFR (Fr)	Advisor Lands & ROW			
Alternate LOFR (Fr)	Right of Way Sr Advisor			
LOFR to CCM (Fr)	Manager Area Operations St. Lawrence Area			
Public Information Officer (PIO)	Sr Advisor Community & Indigenous			
Safety Officer (SOFR)	Sr Safety Advisor			
Alternate SOFR	Maintenance Planner			
Alternate SOFR	Supervisor Safety Cdn. Liquids Pipelines			
Legal Advisor	Associate General Counsel			
Alt. Legal Advisor	Associate General Counsel			
Operations Section				
Operations Section Chief (OSC)	Mgr Area Operations - Sarnia			
Alternate OSC (Fr)	Manager Area Operations - St. Lawrence Area			
Alternate OSC	Manager Area Operations - Westover Area			
Alternate OSC (Fr)	Supervisor Elect/Mech and Operations			
Alternate OSC	Supervisor PLM - Westover			
Alternate OSC	Supervisor PLM - Sarnia			
Alternate OSC	Supervisor Maintenance Services			
Staging Area Manager (STAM)	Mechanical Specialist			
Alternate STAM	Supervisor Maintenance Services			
Alternate STAM	Supervisor Maintenance Services			

ICS Position	Normal Job Title	Name	Office Nbr	Alt. Number
Alternate STAM (Fr)	Mechanical technician			
Planning Section				
Planning Section Chief (PSC)	Supervisor Engineering & Tech Services			
Alternate PSC	Sr Engineer			
Alternate PSC	Supervisor maintenance planning			
Situation Unit Leader (SITL)	Sr. Regional engineer			
Alternate SITL	Scheduler			
SITL to PC (Fr)	Maintenance planner			
Environmental Unit Leader (ENVL)	Senior Advisor Environment			
Alternate ENVL	Supervisor Environment Programs			
Alternate ENVL	Environmental Manager			
Documentation Unit Leader (DOCL)	Operation Training Specialist			
Alternate DOCL	Scheduler 1			
Alternate DOCL	Administrative Assistant III			
Alternate DOCL (Fr)	Administrative Assistant III			
Resource Unit Leader (RESL)	Supervisor PLM-Sarnia			
Alternate RESL	Engineer			
Alternate RESL	Maintenance planner			
Logistics Section				
Logistics Section Chief (LSC)	Sr Analyst Lands & ROW			
Alternate LSC	Planner II			
Alternate LSC	Planner II			
Alternate LSC (Fr)	Administrative Assistant III			
Finance Section				
Finance Section Chief (FSC)	Operations Financial Analyst II			
Alternate FSC	Regional Analyst			

2.3 External Agencies and Support Resources

After the initial situational assessment and regulatory reporting are completed, activate external agencies and support resources as required.

In the event of an event in Quebec that affects public safety, Enbridge's emergency plan will work under the Quebec civil protection system to facilitate interaction with provincial ministries. The Enbridge Incident Commander will report to the affected municipality through the municipal civil protection coordinator.

2.3.1 External Response Agencies

Equipment Locations	Emergency Phone #	Address	Lat	Long
Eastern Canada Response Corporation (ECRC-SIMEC)	519-862-2281	[redacted]	42.8[redacted]	-82.4[redacted]
	450-583-5588		45.7[redacted]	-73.3[redacted]
	418-692-8989		46.8[redacted]	-71.2[redacted]
	418-968-2344		50.1[redacted]	-66.3[redacted]
QM Environmental	877-378-7745 905-388-4444		43.2[redacted]	-79.6[redacted]
EVOS Pipeline Services	514-316-8977		45.7[redacted]	-73.9[redacted]
David Brown Construction Ltd. - DBC Environmental Services	613-537-2255		45.0[redacted]	-74.9[redacted]
BASES - Bluewater Association for Safety, Environment and Sustainability (previously known as CAER)	519-383-1222		42.9[redacted]	-82.3[redacted]

2.3.2 Government Contacts

Calls should be made to **911** for all on-site emergency situations. The numbers listed in this table are not designed for any emergency related type of calls but for administrative calls only (i.e.: notifications, information, …).

Name	Prov	Phone	Phone 2	Fax
Categories: 1. Ontario Emergency Services				
Ambulance		911		
Fire Department		911		
Ontario Provincial Police (OPP)		911	(888) 310-1122	
Bluewater Health	ON	(519) 464-4400		(519) 464-4407
Brampton Civic Hospital	ON	(905) 494-2120	(416) 494-2120	
Brantford General Hospital	ON	(519) 751-5544		
Brockville General Hospital	ON	(613) 345-5649		
Cambridge Memorial Hospital	ON	(519) 621-2330		(519) 740-4938
Charlotte Eleanor Englehart Hospital of Bluewater Health	ON	(519) 882-4325		(519) 882-3711
Cornwall Community Hospital	ON	(613) 938-4240		(613) 930-4502
Emergency Management Ontario	ON	1-866-314-0472		
Fire Marshall (OFM)	ON	(647) 329-1200		
Glengarry Memorial Hospital	ON	(613) 525-2222		
GO Transit Control Centre (GTCC)	ON	(416) 601-2174	(888) 438-6646	
Great Lakes St. Lawrence Seaway Systems	ON	(613) 932-5170		
Hamilton General Hospital	ON	(905) 521-2100		
Hawkesbury & District General Hospital	ON	(613) 632-1111		
Kingston General Hospital	ON	(613) 549-6666	(613) 548-3232	
Lakeridge Health	ON	(905) 576-8711		
London Health Sciences Centre	ON	(519) 685-8500	(519) 685-8380	
Ministry of Community Safety and Correctional Services (MCSCS)	ON	(416) 326-5060	(866) 517-0571	(416) 326-0498
Ministry of Environment and Climate Change (MOECC), Spills Action Centre (SAC)	ON	(800) 268-6060	(416) 325-3000	(416) 314-6713
Ministry of Natural Resources (MNR)	ON	(866) 898-7372	(800) 667-1940	
Niagara Health System (St. Catharines)	ON	(905) 378-4647		
Niagara Health System (Welland)	ON	(905) 378-4647		
Norfolk General Hospital	ON	(519) 426-0130		(519) 429-6998
North York General Hospital	ON	(416) 756-6000		
St. Marys General Hospital (Kitchener)	ON	(519) 744-3311		(519) 749-6426
Toronto General Hospital	ON	(416) 340-3131		
Trillium Health Centre	ON	(905) 848-7100		
Woodstock General Hospital	ON	(519) 421-4211		
Categories: 2. Lead Ontario Agencies				
Aamjiwnaang First Nation	ON	(519) 336-8410		(519) 336-0382
City of Belleville	ON	(613) 968-6481		
City of Burlington	ON	(905) 335-7600	(905) 335-7777	
City of Hamilton	ON	(905) 546-2489		
City of Kingston	ON	(613) 546-1181	(613) 546-0000	

Name	Prov	Phone	Phone 2	Fax
City of Mississauga	ON	(905) 615-4311		(905) 615-4081
City of Niagara Falls	ON	(905) 356-7521		
City of Oshawa	ON	(905) 436-3311	(800) 667-4292	(905) 436-5642
City of Pickering	ON	(905) 683-7575	(866) 683-2760	(905) 420-6064
City of Quinte West	ON	(613) 392-2841	(866) 485-2841	
City of Sarnia	ON	(519) 332-0330		(519) 332-3995
City of Thorold	ON	(905) 227-6613		(905) 227-5590
City of Toronto	ON	(416) 392-2489		
City of Welland	ON	(905) 735-1700		(905) 732-1919
Ministry of Health and Long Term Care (MOHLTC)	ON	(866) 797-0000	(866) 532-3161	
Ministry of Labour (MOL)	ON	(877) 202-0008		
Ministry of Transportation (MTO)	ON	(519) 873-4100	(416) 327-9200	
Municipality of Clarington	ON	(905) 623-3379	(800) 563-1195	
Municipality of Middlesex Centre	ON	(519) 666-0190	(800) 220-8968	
Municipality of North Middlesex	ON	(519) 294-6244	(888) 793-9637	(519) 294-0573
Municipality of Port Hope	ON	(905) 753-2230		(905) 753-2434
Municipality of Thames Centre	ON	(519) 268-7334	(866) 425-7306	(519) 268-3928
Ontario Power Generation River Control (International Control Dam)	ON	(905) 357-6700	(905) 357-6702	
Technical Standards & Safety Authority (TSSA)	ON	(877) 682-8772	(416) 734-3300	
Town of Ajax	ON	(905) 683-4550	(905) 619-2529	
Town of Brighton	ON	(613) 475-0670		(613) 475-3453
Town of Greater Napanee	ON	(613) 354-3351		(613) 354-6545
Town of Milton	ON	(905) 878-7252		(905) 878-6995
Town of Oakville	ON	(905) 845-6601		(905) 815-2025
Town of Pelham	ON	(905) 892-2607	(866) 271-0391	(905) 892-5055
Town of Plympton-Wyoming	ON	(519) 845-3939	(877) 313-3939	(519) 845-0597
Town of Whitby	ON	(905) 668-5803	(905) 430-4300	
Township of Adelaide Metcalfe	ON	(519) 247-3687	(866) 525-8878	(519) 247-3411
Township of Alnwick Haldimand	ON	(905) 349-2822		(905) 349-3529
Township of Augusta	ON	(613) 925-4231		(613) 925-3499
Township of Blandford-Blenheim	ON	(519) 463-5347		(519) 463-5881
Township of Cramahe	ON	(905) 355-2821	(877) 272-4263	(905) 355-2821
Township of East Zorra-Tavistock	ON	(519) 462-2697		(519) 462-2961
Township of Edwardsburgh Cardinal	ON	(613) 658-3055	(866) 848-9099	(613) 658-3445
Township of Elizabethtown-Kitley	ON	(613) 345-7480		(613) 345-7235
Township of Front of Yonge (Mallorytown)	ON	(613) 923-2251		(613) 923-2421
Township of Hamilton	ON	(905) 342-2810		(905) 342-2818
Township of Leeds and the Thousand Islands	ON	(613) 659-2415	(866) 220-2327	(613) 659-3619
Township of Loyalist	ON	(613) 389-3648		
Township of North Dumfries	ON	(519) 632-8800		(519) 632-8700
Township of South Dundas	ON	(613) 543-2673	(800) 265-0619	(613) 543-1076
Township of South Glengarry	ON	(613) 347-1166		(613) 347-3411
Township of South Stormont	ON	(613) 534-8889	(800) 265-3915	(613) 534-2280
Township of St. Clair	ON	(519) 867-2021	(800) 809-0301	
Township of Tyendinaga	ON	(613) 396-1944		(613) 396-2080

Name	Prov	Phone	Phone 2	Fax
Township of Warwick	ON	(226) 848-3926		(226) 848-6136
Township of West Lincoln	ON	(905) 957-3346		(905) 957-3219
Township of Zorra	ON	(519) 485-2490	(888) 699-3868	(519) 485-2520
Workplace Safety and Insurance Board (WSIB)	ON	(800) 387-0750	(416) 344-1000	
Categories: 3. Lead Quebec Agencies				
Bureau of Rivière-Des-Prairies	QC	311	(514) 872-0311	
Le Ministère – Urgence Environnement	QC	(866) 694-5454		
Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST)	QC	(866) 302-2778	(844) 838-0808	
Ministère du Travail, de l'Emploi et de la Solidarité Sociale	QC	(877) 767-8773	(514) 873-4000	
Ministère de la Santé et des Services Sociaux	QC	(514) 644-4545	(877) 644-4545	
Ministère de la Sécurité Publique	QC	(866) 650-1666	(866) 776-8345	
Ministère du Développement durable, de l'Environnement, de la Lutte Contre…	QC	(800) 561-1616		
Ministère de l'Énergie et des Ressources Naturelles	QC	(866) 248-6936		
Montreal General Hospital	QC	(514) 934-1934		
Municipalité de Pointe-Fortune	QC	(450) 451-5178		(450) 451-4649
Municipalité de Saint-André-d'Argenteuil	QC	(450) 537-3527		(450) 537-3070
Municipalité de Très-Saint-Rédempteur	QC	(450) 451-5203		(450) 451-8894
Municipalité de Saint-Placide	QC	(450) 258-2305	(514) 230-8221	(450) 258-3059
Garde Côtière du Canada-(Secteur Québec)	QC	(800) 363-4735	(418) 648-4557	
Municipalité de Sainte-Justine-de-Newton	QC	(450) 764-3573		(450) 764-3180
Sûreté du Québec	QC	(514) 598-4141		
Transportation of Dangerous Goods	QC ON	911		
Transports Quebec	QC	(888) 355-0511		
Ville de Laval	QC	(450) 978-8000		(450) 978-6569
Ville de Mirabel	QC	(450) 475-8653		(450) 475-7195
Ville de Montreal	QC	(514) 872-0311		
Ville de Montreal-Est	QC	(514) 905-2000		(514) 645-7485
Ville de Rigaud	QC	(450) 451-0869		(450) 451-4227
Ville de Sainte-Anne-des-Plaines	QC	(450) 478-0211		(450) 478-5660
Ville de Terrebonne	QC	(450) 961-2001		(450) 471-4482
Categories: 4. Lead Federal Agencies				
Régie de l'Énergie du Canada – Canadian Energy Regulator	AB	(403) 292-4800	(800) 899-1265	(403) 292-5503
Ducks Unlimited	MB	(800) 665-3825		(204) 467-9028
NAV Canada (London)	ON	(866) 992-7433		
Canadian Coast Guard (Ontario)	ON	(613) 925-4471	(613) 925-0666	(613) 925-4519
Environment and Climate Change Canada	ON	(800) 668-6767	(613) 949-8259	
CANUTEC	ON	(888) 226-8832	(613) 996-6666	
Environmental emergency Canada	ON	(866) 283-2333		
Fisheries and Oceans Canada (Burlington)	ON	(905) 336-6240		
Fisheries and Oceans Canada- Pêches et Océans Canada (General)	QC	(418) 648-2239		
Fisheries and Oceans Canada (Peterborough)	ON	(705) 750-0269		

Name	Prov	Phone	Phone 2	Fax
Fisheries and Oceans Canada (Prescott)	ON	(613) 925-2865		
Fisheries and Oceans Canada (Sarnia)	ON	(866) 290-3731		
Health Canada	ON	(613) 957-2991	(866) 225-0709	(613) 941-5366
Human Resources and Skills Development Canada – Service Canada	ON	(800) 622-6232		
Canadian Wildlife Service	QC	(800) 668-6767	(613) 949-8259	
Énergir	QC	(800) 361-8003		
Hydro-Québec	QC	(514) 385-7252	(888) 385-7252	
Transportation Safety Board of Canada–Bureau de la sécurité des transports du Canada	QC	(819) 997-7887	(800) 387-3557	(819) 997-2239
Categories: 5. Support Services				
BASES - Bluewater Association for Safety, Environment and Sustainability (previously known as CAER)	ON	(519) 383-1222		
David Brown Construction Ltd	ON	(613) 537-2255		(613) 537-8561
Eastern Canada Response Corporation (ECRC)	ON	(613) 230-7369		(613) 230-7344
Quantum Murray	ON	(800) 251-7773		
EVOS Pipeline Services	QC	(514) 316-8977		(514) 313-5525
Categories: 6. BASES fka. CAER				
Arlanxeo Canada Inc	ON	(519) 337-8251		
BASES	ON	(519) 383-1222		
CF Industries	ON	(519) 867-2739		
City of Sarnia	ON	(519) 332-0330		
Enbridge Pipelines	ON	(877) 969-0999	(877) 420-8800	
Imperial Oil	ON	(780) 784-3405	(519) 339-2000	
Nova Chemicals	ON	(519) 862-2911	(844) 346-3202	
Village of Point Edward	ON	(519) 337-3021		
Shell Canada	ON	(519) 481-1100	(800) 661-7378	
St. Clair Township	ON	(519) 481-0111		
Suncor Energy	ON	(519) 337-2301	(403) 296-3000	
Categories: 7. Quebec Emergency Services				
Ambulance/Pompier/Police		911		
Hôpital de Rivière-Des-Prairies	QC	(514) 323-7260		(514) 323-8622
Centre Hospitalié d'Argenteuil	QC	(450) 562-3761		
Sûreté du Québec - Municipalité de Saint-André-d'Argenteuil	QC	(450) 562-2442	(800) 565-0911	
Municipalité de Saint-André-d'Argenteuil	QC	(450) 537-3527	(450) 562-2442	(450) 537-3070
Sûreté du Québec Vaudreuil- Municipalité de Très-Saint-Rédempteur	QC	(450) 456-3883		(450) 456-3804
Municipalité de Sainte-Marthe	QC	(450) 459-4284		(450) 459-4627
Sureté du Québec Oka - Municipalité de Saint-Placide	QC	(450) 479-1313		
Municipalité de Saint-Placide	QC	(450) 258-2305	(514) 230-8221	(450) 258-3059
Police – Saint-Eustache	QC	911	(450) 974-5300	
Hôpital du Suroît - Sainte Justine de Newton	QC	(450) 371-9920		
Sûreté du Québec Vaudreuil - Sainte Justine de Newton	QC	(450) 456-3883		(450) 456-3804

Name	Prov	Phone	Phone 2	Fax
Sécurité Incendie de Sainte Justine de Newton	QC	(450) 802-0772		
Service de police de Laval	QC	(450) 662-4242		
Caserne de pompiers Ville de Laval	QC	(450) 662-4450		
Hôpital régional de Saint-Jérôme - Mirabel	QC	(450) 432-2777		
Service de police de Mirabel	QC	(450) 475-7708		
Hôpital de Saint-Eustache - Mirabel	QC	(450) 473-6811		
Service de la Sécurité Incendie Mirabel	QC	(450) 475-2010		
Service de Police du Grand Montréal	QC	(514) 280-2222		
Ville de Montreal	QC	311	(514) 872-3142	(514) 872-5655
Hôpital Maisonneuve-Rosemont - Montréal-Est	QC	(514) 252-3400	(800) 634-3400	
Service Incendie - Ville de Rigaud	QC	(450) 451-0869		(450) 451-4227
Service d'Incendie de Sainte-Anne-des-Plaines	QC	(450) 478-2520		
Hôpital de la Cité-de-la-Santé - Ville de Sainte-Anne-Des-Plaines	QC	(450) 668-1010		
Service de Police Sainte-Anne-Des-Plaines	QC	(450) 471-4121		
Service de Police Terrebonne	QC	(450) 471-4121		
Hôpital Pierre-Le Gardeur - Terrebonne	QC	(450) 654-7525		

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ONTARIO ONECALL
1-800-400-2255

SARNIA-LAMBTON PIPELINE EMERGENCY CONTACT LIST

Rev. No. 65
Rev. Date June 2024

COMPANY / OWNER	CONTACT	CONTACT PHONE NO.	CONTACT EMAIL ADDRESS	EMERGENCY PHONE NO.
Air Products Canada Ltd.	[redacted]	[redacted]	[redacted]	519-332-6193
ARLANXEO Canada Inc.	[redacted]	[redacted]	[redacted]	519-337-8251 x 4272
Cabot Corporation	[redacted]	[redacted]	[redacted]	519-312-0681
	[redacted]	[redacted]	[redacted]	519-331-2907
DOW Canada c/o MIG Engineering	[redacted]	[redacted]	[redacted]	519-466-5676
Enbridge Pipelines Inc.	[redacted]	[redacted]	[redacted]	1-877-420-8800
	[redacted]	[redacted]	[redacted]	1-877-969-0999
Enbridge Gas Inc.	[redacted]	[redacted]	[redacted]	519-862-1473
	[redacted]	[redacted]	[redacted]	1-800-265-5260
	[redacted]	[redacted]	[redacted]	1-877-969-0999
Imperial Oil Prod. Div.	[redacted]	[redacted]	[redacted]	519-339-5666
Imperial Oil	[redacted]	[redacted]	[redacted]	
Canada Fuels Operations	[redacted]	[redacted]	[redacted]	1-800-372-9597
Imperial's Sarnia Products Pipeline (SPPL)	[redacted]	[redacted]	[redacted]	
NEOS Styrolution Canada Ltd.	[redacted]	[redacted]	[redacted]	226-784-3117
Lagasco Inc.	[redacted]	[redacted]	[redacted]	1-877-590-1990
NOVA Chemicals Corporation (Incl. Genesis Pipeline Canada Ltd.)	[redacted]	[redacted]	[redacted]	519-862-2002
Plains Midstream Canada	[redacted]	[redacted]	[redacted]	1-800-265-1423
Pembina Pipelines Corporation	[redacted]	[redacted]	[redacted]	519-862-3561
Linde Canada Inc.	[redacted]	[redacted]	[redacted]	519-332-1311 x 0
Shell Canada	[redacted]	[redacted]	[redacted]	519-862-2822
St. Clair Energy / Invenergy	[redacted]	[redacted]	[redacted]	519-862-5900 x 2227
Sun Canadian Pipe Line	[redacted]	[redacted]	[redacted]	1-800-263-6641
Suncor Energy	[redacted]	[redacted]	[redacted]	519-383-3640
Suncor - St. Clair Ethanol Plant	[redacted]	[redacted]	[redacted]	519-481-0552
Sunoco Logistics c/o LamSar Inc.	[redacted]	[redacted]	[redacted]	519-332-5010 x 6
CF Industries	[redacted]	[redacted]	[redacted]	519-867-2739 x 8
TC Energy	[redacted]	[redacted]	[redacted]	
Subsidiary, Great Lakes Pipeline Canada	[redacted]	[redacted]	[redacted]	1-888-982-7222

[redacted]

Prepared By:
MIGENGINEERING
[redacted]

2.3.4 BASES - Bluewater Association for Safety, Environment and Sustainability (previously known as CAER – Community Awareness Emergency Response)

In the City of Sarnia, a request for fire, police, ambulance and mutual aid is completed by submitting a BASES code through the Everbridge system.

BASES Emergency Preparedness member companies utilize a standardized system to communicate with area Emergency Management Coordinators, Dispatch, and one another in the event of an emergency. This codified system is known as Mutual Aid Code Notifications and alerts necessary parties to the nature of an emergency event.

Description of BASES Codes

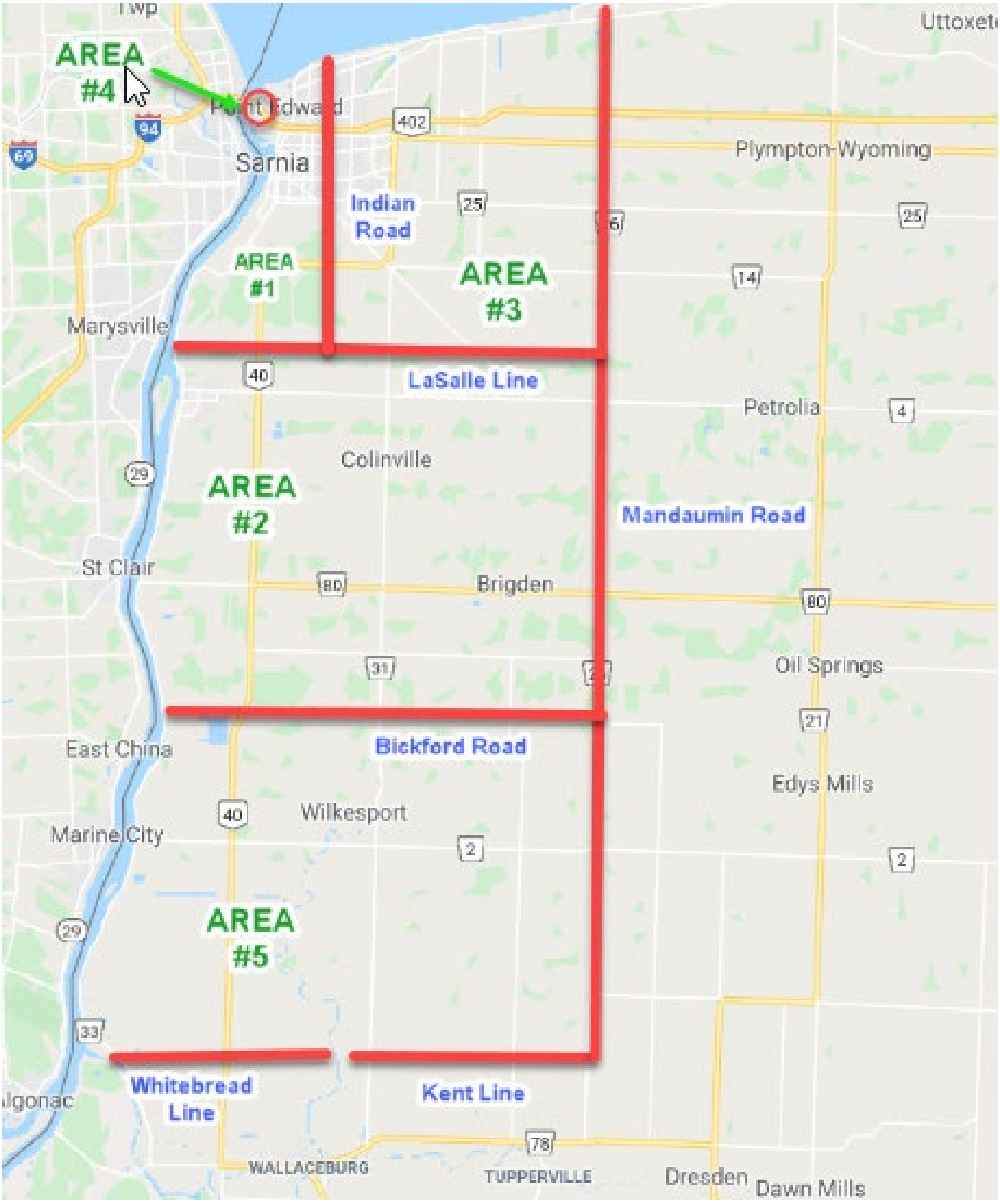
BASES CODE	What it means
CODE 5	Emergency without ownership
CODE 6	Municipal response for community impact
CODE 7	Security threat
CODE 8	Internal emergency response event
CODE 9	Mutual aid request
CODE 9-1	Request for specific responders or equipment
CODE 9-2	Request for mobilization of all response teams and equipment
CODE 10	Spill to the St. Clair River requiring downriver notification

Eastern Region personnel who serve as Manager On Call have access to this system and can submit a code call from anywhere just by logging into the system.

[redacted]

To access the Everbridge incident code page, go to Incident – Launch Incident – and select a template from the Enbridge Codes list to get started.

Map Showing BASES Area Boundaries



2.3.5 Indigenous Business Database

Community & Indigenous Engagement (CIE) and Supply Chain Management (SCM) maintain the Indigenous Business Database, which provides rapid and easy access to qualified indigenous businesses that might be able to assist during an emergency response. Some of these businesses have equipment or provide services that could be useful in case of an event.

The IBD is accessible by members of the SCM Indigenous Engagement Team, PACS-CIE and Operations. During an event, a member of these teams can access the IBD, housed on Power BI. To extract a list of Indigenous Businesses, use the *Emergency Response Filter* for the geographic area.

2.3.6 Federal and Provincial Agency Roles

The role of government agencies is outlined in the following tables.

2.3.6a Canadian Federal Agency Roles

Federal Agency Roles	
Environment & Climate Change Canada (ECCC)	• Collaborate with federal, provincial, territorial and international environmental protection agencies to enable rapid sharing of information. • Convene and chair a Science Table of experts and stakeholders to develop consensus-based advice to the Lead Agency. • Identify environmentally sensitive areas and priorities (sensitivity and resource at risk mapping). • Advise on mitigation and cleanup measures. • Provide support and guidance in the assessment of oiled shorelines to prioritize their protection and cleanup (Shoreline Cleanup Assessment Technique (SCAT)). • Advice on the fate and behavior of the spilled product. • Advice on sampling and laboratory analysis. • Provide weather forecasting and spill dispersion modelling to identify where these substances are likely to move in the environment. • Provided expertise on the migratory bird resources and species at risk, including on-site assessment and determination of wildlife impact. • Can conduct post-emergency assessments.
Canadian Department of Fisheries & Oceans (DFO)	• Work together with provincial environment protection agencies and may be initially notified by ECCC • May send personnel to the site if there has been or could potentially be an impact to fish or fish habitat • Monitors and investigates all reports of marine pollution in Canada in conjunction with other federal departments • Maintains communications with the program's partners, including Transport Canada and ECCC, to ensure a consistent coordinated approach to marine pollution incident response • Aids in search and rescue operations
NAV Canada	• NAV Canada is a private company who coordinates the safe and efficient movement of aircraft in Canadian domestic airspace and international airspace assigned to Canadian control. • As requested by the provincial oil and gas regulator, the Flight Information Centre will issue a NOTAM (Notice to Airmen) • To close air space beyond an airport (e.g., above a sour gas release), refer to the Transport Canada section. • Rescind the NOTAM.
Health Canada	• During a health emergency or disaster, Health Canada and the Public Health Agency of Canada are responsible for supporting emergency health and social services in the provinces and territories
Public Health Agency of Canada	• In an emergency situation, the Office of Emergency Response Services (OERS) is responsible for supporting emergency health and social services in the provinces, territories or abroad. It manages the National Emergency Stockpile System (NESS), which includes medical, pharmaceutical and related emergency supplies. The Office is responsible for the federal response to emergencies that have health repercussions; this includes the deployment of health emergency response teams (HERT)

Federal Agency Roles	
	• If a public health emergency grows beyond one province and/or territory, the Public Health Agency of Canada usually gets involved
Indigenous Services Canada (ISC), Regional Operations (RO) and First Nations and Inuit Health Branch (FNIHB)	• In regards to First Nations emergency management, the role of RO is to liaise, communicate, cooperate, coordinate and collaborate with First Nations and public, private, and non-government sector partners in support of on reserve emergency management service delivery. • ISC-RO supports First Nations in the four pillars of emergency management through service agreements with partners such as provincial emergency management agencies and the Red Cross. • FNIHB carries out the public health preparedness and response activities related to natural and man-made disasters. • This includes Communicable Disease Control and Environmental Public Health Services. • In addition, FNIHB administers Non-Insured Health Benefits to First Nations clients, which includes extended coverage for medical transportation, pharma-care, medical devices and mental health supports. During an emergency, FNIHB works with First Nations leadership and health service providers to ensure health needs of First Nations communities are met.
Indian Oil & Gas Canada (OOGC)	• Identify and evaluate oil and gas resource potential on Indian reserve lands. • Encourage companies to explore for, drill and produce these resources through leasing activity. • Negotiate, review, issue, and administer contracts between First Nations, industry, and IOGC. • Ensure environmental stewardship throughout the entire oil and gas life cycle. • Ensure equitable production, fair prices and proper collection of royalties on behalf of First Nations. • Secure compliance with and administer the regulatory framework in a fair manner.
Canada Energy Regulator	• Monitors, observes and assesses the overall effectiveness of the company's emergency response in terms of: o Emergency Management o Safety o Security o Environment o Integrity of operations and facilities; and o Energy Supply. • Investigates the event, either in cooperation with the Transportation Safety Board of Canada, under the Canada Labour Code, or as per the Canada Energy Regulator Act or Canada Oil & Gas Operations Act (whichever is applicable). • Inspects the pipeline or facility. • Examines the integrity of the pipeline or facility. • Requires appropriate repair methods are being used. • Appropriate environmental remediation of contaminated areas is conducted. • Coordinate stakeholder and Aboriginal community feedback regarding environmental clean-up and remediation. • Confirms that a company is following its Emergency Procedures Manual (s), commitments, plans, procedures, and CER regulations and identifies non-compliances. • Initiates enforcement actions as required. • Approves the restart of the pipeline.

Federal Agency Roles	
Transport Canada	• Canadian Transport Emergency Centre (CANUTEC) Assist emergency response personnel in handling dangerous good emergencies including advice on: o Chemical, physical and toxicological properties and incompatibilities of the dangerous goods o Health hazards and first aid o Fire, explosion, spill or leak hazards o Remedial actions for the protection of life, property and the environment o Evacuation distances o Personal protective clothing and decontamination o CANUTEC staff does not go to the site of an incident, however, should on-site assistance be required, CANUTEC can assist in the activation of industry emergency response plans. o Provide communication links with the appropriate industry, government or medical specialists. • Aviation Operations Centre (AVOPS) o To close air space beyond an airport in a defined area (e.g. above a sour gas release), AVOPS can be contacted by the oil and gas company. o Rescind the NOTAM and re-open air space that was closed due to emergency.
*Transportation Safety Board	• Deploy to site to examine, document and collect anything relevant to the investigation. • Conduct independent investigations, including public inquiries when necessary, into selected transportation occurrences in order to make findings as to their causes and contributing factors; • Identify safety deficiencies, as evidenced by transportation occurrences; • Make recommendations designed to eliminate or reduce any such safety deficiencies; • Report publicly on investigations and on the findings in relation thereto.

2.3.6b Ontario Lead Agency Role Chart

Ontario Lead Agency Roles	
Ministry of Energy and Electrification	OIC (Order in Council) assigned emergency: "Energy supply" • Execute the ministry emergency response plan, which could include among other things the actions outlined below: o Implement, in coordination with the Independent Electricity System Operator (IESO), electricity transmission and local distribution companies, petroleum and natural gas utility companies, the ministry's energy supply emergency response plans to ensure the safety, reliability and security of Ontario's energy supply. o Maintain liaison with the Ontario Energy Board especially with respect to any necessary emergency deviations from established regulatory policies or guidelines. o Provide emergency information to the PEOC through coordination with the IESO, petroleum and natural gas utility companies. o Provide professional expertise in all matters related to energy sources and energy. o Advise the PEOC when conditions exist which may warrant the declaration of a provincial energy supply emergency.

Ontario Lead Agency Roles	
	○ Serve as primary contact for energy availability and distribution issues during an emergency. ○ Provide advice and assistance regarding and, if necessary, control of the distribution of energy supplies. ○ Assist the Ministry of Environment in the management of pollution problems related to the petroleum-producing industry. ○ When requested, provide Ministry staff to be part of any Provincial Liaison Team who may be assembled and deployed to an emergency area.
Ministry of the Solicitor General	OIC assigned emergency: "Any emergency that requires the coordination of provincial emergency management" **Recommended emergency response actions that are considered necessary for provincial coordination during an emergency:** • Assist local authorities in emergency response operations, including law enforcement operations and the evacuation of persons and property. • Coordinate and maintain liaison with the provincial ministries and other bodies for use of their available personnel and equipment for augmentation and special assignments, if necessary. • Liaise with Government of Canada agencies for emergency resources, except for that assistance required for forest fire fighting or in a situation in which a police agency has primary jurisdiction. • Develop provincial emergency response plans for the types of emergencies assigned above. • Provide support to health and medical services with the identification of human remains. **Emergency Management Ontario:** • EMO will spearhead emergency response in the following cases from the above list: ○ Any emergency that requires the coordination of provincial emergency management. ○ Nuclear and radiological. ○ Severe Weather. ○ War and international; and ○ Any other peacetime emergency not listed herein. • The PEOC Commander will elevate the level of response of the PEOC commensurate with the actual or impending emergency situation. • The PEOC will coordinate the government response to emergencies. • Provide recommendations to the government regarding the declaration of an emergency. • Prepare, coordinate and distribute government situation reports. **Provincial Chief Emergency Information Officer** • Provide, in conjunction with a primary ministry, a coordinated emergency information plan for the government response to an emergency. • Coordinate the release of information on response activities from all involved ministries and agencies to the public, media and elected officials. • Establish and operate a Joint Information Centre, as required.

Ontario Lead Agency Roles	
	• Support emergency information activities in the PEOC. • Assist local authorities to prepare and plan emergency communications. • Assist local authorities to communicate messages to the public and media. **Policing Services Division:** • Facilitate communication between the Ministry and municipal police services in the event of an emergency as well as to provide policy direction, advice and support to police services in Ontario. **Ontario Provincial Police:** • Coordinate law enforcement and traffic control throughout the province including participation in any joint traffic control plans. • Provide personnel to reinforce police services of municipalities, upon request. • Facilitate requests for Canadian Forces assets and resources by municipal police services. • Provide technical advice to the PEOC. • Develop public order plans for events of a provincial nature. **Office of the Fire Marshal:** • Coordinate disaster firefighting and suppression resources available through the mutual fire aid system. • Provide personnel and equipment to support communication, hazardous materials operation, transportation and search and rescue as required through partnership agreements with community providers. **Correctional Services Division:** • Ensure continuity of care and protective measures for correctional institutions and persons under custody of the division.

Ministry of the Environment, Conservation and Parks (MOE)	OIC assigned emergency:
	Spills of pollutants to the natural environment including fixed site and transportation spills - Drinking water".
	
	• Execute the ministry emergency response plan, which could include among other things the actions outlined below:
	  ○ Provide meteorological, environmental technical and hydrological data and forecasts to the PEOC.
	  ○ Provide emergency environmental technical advise to the PEOC.
	  ○ Monitor provincial waters suspected of contamination due to an emergency
	  ○ Implement drinking water control measures, as required.
	  ○ Provide technical assistance for groundwater, hydrology and sewage problems.
	  ○ Serve as a primary provincial ministry for emergency environment pollution response and cause investigation.
	  ○ Manage air, water and land pollution monitoring, reporting and clean-up activities.
	  ○ Serve as a primary provincial ministry for hazardous materials or wastes, including suspect substances.
	  ○ Coordinate and manage the overall provincial effort to detect, identify, contain, cleanup, and dispose of or minimize releases of oil or hazardous materials.
	  ○ Manage, with the assistance of the Ministry of Energy, pollution problems related to the petroleum-producing industry

Ontario Lead Agency Roles	
	○ Provide disaster damage assessments, as required ○ Provide emergency personnel, materials and services
Ministry of Labour, Immigration, Training and Skills Development (MLITSD)	OIC assigned emergency: "Any emergency that affects worker health and safety" Execute the ministry emergency response plan, which could include among other thing, the actions outlined below: • Ensure that employers meet their obligations concerning health and safety of workers during an emergency • Provide emergency worker safety support according to MOL emergency response plans • Provide occupational health and safety advice for workers deployed to emergency sites • Provide radiation analyses of samples, interpretations and recommendations for public safety actions in support of other Ministries and to local agencies during a nuclear or radiation emergency through the Ministry's Radiation Protection Service
Ministry of Natural Resources (MNR)	OIC assigned emergency: "Any emergency that includes: Forest Fires / Floods / Drought/low water / Dam failures / Crude oil and natural gas exploration and production, natural gas and hydrocarbon underground storage and salt solution mining emergencies / Erosion / Soil and bedrock instability." • Execute the ministry emergency response plan, which could include among other things the actions outlined below ○ Evacuate and close Provincial Parks as required or if requested by the PEOC. ○ Provide ministry facilities to be used as assembly, relocation, and dispatch areas for emergency response operations, and temporary emergency care and accommodation. ○ Manage and coordinate operations for control and suppression of wildfires. ○ Coordinate or conduct debris removal, land reclamation, and road reconstruction necessary to support emergency response operations on Crown lands in respect of the types of emergency assigned. ○ Coordinate the acquisition of bulldozers, trucks, and other heavy equipment, for its assigned hazard responsibilities or if requested by the PEOC. ○ Coordinate the provision of air transportation for emergency personnel and equipment, for its assigned hazard responsibilities or if requested by the PEOC. ○ Provide flood and water flow forecasting services and management of flood control operations with Conservation Authorities where they exist. ○ Implement water control measures as required or if requested by the PEOC. ○ Provide aircraft, telecommunications, and other resources, if requested by the PEOC. ○ Provide aerial reconnaissance for its assigned hazard responsibilities or if requested by the PEOC. ○ Advise on the restriction of consumption of contaminated food from fisheries or wildlife habitats. ○ Provide GIS support if requested by the PEOC. ○ Where an emergency is within an unincorporated/unorganized community and that community is unable to respond, the ministry will respond to the emergency as outlined in the ministry emergency response plan, for its assigned emergency responsibilities.

Ontario Lead Agency Roles	
	○ Provide emergency response to First Nations communities as outlined in the First Nation Emergency Assistance Agreement and the Nishnawbe-Aski Nation Protocol Agreement, primarily for incidents related to forest fire and flood.

2.3.6c Quebec Lead Agency Role

Quebec Lead Agency Roles	
Commission des normes, de l'équité, de la santé ET de la sécurité du travail (CNESST)	The CNESST promotes labor rights and obligations and ensures respect and equal treatment among both workers and employers in Quebec. To do this, CNESST: • Promotes fair and balanced working conditions • Ensures the implementation and maintenance of pay equity • Aims to ensure health and safety in the workplace, compensates victims of occupational injuries and ensures their rehabilitation

Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs	The Ministère can intervene throughout Québec, 24 hours a day, to minimize the consequences of an environmental emergency to a minimum and intervene by providing technical advice.
	
	In Québec, municipalities are responsible for protecting citizens and property in their territory. To support them and ensure that all appropriate measures are taken promptly to protect the environment, Urgence-Environnement will intervene especially to:
	• Help limit the release of contaminants into the environment;
	• Participate in disaster prevention;
	• Ensure contaminant recovery.
	
	The Ministère ensures that all necessary steps are taken in due time to protect the environment. In major environmental emergencies. Government response is coordinated by the Organisation de la sécurité civile du Québec. (Regional teams are ready to respond at anytime, anywhere in Québec.)
	
	The Ministère operates in the following areas:
	• Devising and implementing policies, bills, draft regulations, and programs aimed primarily at:
	  ○ Preventing and reducing water, air, and soil contamination.
	  ○ Fighting and adapting to climate change.
	  ○ Ensuring the quality of drinking water.
	  ○ Managing water resources sustainably.
	• Conserving biodiversity.
	• Reducing, reclaiming, and managing residual materials.
	• Coordinating the government's approach to sustainable development within the public service.
	• Devising, coordinating, and implementing strategies for fighting and adapting to climate change.
	• Protecting Québec's ecosystems and biodiversity through the development of a network of protected areas and safeguarding endangered or vulnerable floristic species and their habitats.
	• Conducting environmental assessments of projects and strategic evaluations of environmental issues.

Quebec Lead Agency Roles	
	• Overseeing environmental protection law and regulation enforcement, especially through authorization and permit application analysis, inspections, inquiries and administrative recourse. • Managing the land of Québec's public water property, especially by operating public dams and monitoring dam safety. • Observing and gathering knowledge about ecosystems and their components. • Maintaining intergovernmental and international relations in its areas of interest.
Régie du bâtiment du Québec (RBQ)	The Régie du bâtiment du Québec (RBQ) develops adapts and implements the regulatory framework related to the quality and safety of petroleum equipment in order to prevent risks of fire and water contamination. However, the RBQ shares responsibilities in the area of petroleum equipment with other provincial and federal departments, as well as municipalities. The RBQ has responsibility for: • Ensuring the quality of construction work on petroleum equipment. • Ensuring the safety of the public using that equipment. • Verifying compliance with the construction and safety requirements affecting that equipment. The use of petroleum equipment or installations may cause fire hazards and contamination of drinking water sources that might affect the safety by jeopardizing, among others: • the well-being of the public who uses the equipment or the installations, or who is in their vicinity (injuries, deaths, etc.) • the health of the public who might be affected by the contamination of a drinking water source by a petroleum product.
Sécurité publique Quebec (RBQ)	There are three coordination mechanisms that make it possible to adapt the government response, according to the type and extent of the disaster, and to direct the actions of the governmental, private or voluntary resources that will join those of the municipality to ensure a more efficient management of the disaster. The Organisation régionale de la sécurité civile (ORSC) brings together representatives of Québec government departments and agencies from the regions. The regional director for civil protection of the Ministère de la Sécurité publique coordinates government measures in a region in the event of a disaster.The Organisation de la sécurité civile du Québec (OSCQ) brings together the civil protection coordinators of each government department and agency concerned. Under the government coordinator for civil protection, the OSCQ plans civil protection measures for all of Québec. In the event of a major disaster, such as a pandemic, it coordinates the operations carried out by each of the mission directors specified in the National Civil Protection Plan. The Quebec Civil Security Committee (CSCQ) is the body where the deputy ministers and leaders of the main departments and agencies involved in disaster management, as well as the government coordinator for civil protection are members of the Comité de sécurité civile du Québec (CSCQ). Under the government's Secretary General, this committee provides direction for and approves government emergency preparedness planning. During a pandemic, the Secretary General supervises government activities and reports to the Premier of Québec.

2.4 Emergency Communications

2.4.1 Spills on Lake Ontario (St. Lawrence area)

Canadian Coast Guard ("CCG") Activation

The Canadian Coast Guard is the lead agency for the following pollutant sources:

- Ship in waters of Canadian interest, unless limited by another jurisdiction
- Mystery spill in waters of Canadian interest
- Any source originating in foreign waters where it crosses into Canadian waters
- Offshore mooring points if spill of ship's equipment
- Offshore petroleum exploration or production installation if the platform is in transit.

The following agencies will take the lead for the following pollutant sources:

Agency	Pollutant Source
St. Lawrence Seaway Authority	Ship controlled by the St. Lawrence Seaway Authority within the Welland Canal or within the locks (end of wall to end of wall) in the Montreal-Lake Ontario section
National Defense	Vessels operated by National Defense
Province(s)/Territory (MOE) & Environment Canada (for federal facilities)	Land- based
Natural Resources Canada & Ontario Ministry of Natural Resources	Offshore petroleum exploration or production installation for a rig on the lake bed in the Great Lakes
Province(s)	Offshore Mooring Points for an underwater pipeline or other equipment supplied to/from shore.

2.4.2 Emergency Response - Refined Products

Introduction

Line 8 is a 20" pipeline owned by Enbridge Pipelines Inc. It transports refined petroleum products for Imperial Oil from their refinery in Sarnia to the Sarnia Products Pipelines at Millgrove Junction (outside of Waterdown Ontario). Average line rates will range between 330 and 500 m3/hr. The types of product shipped are (Material Safety Data Sheets attached):

- Light Catalytic Cracked Naphtha
- Light Distillates (includes Stove Oils, Furnace Oils, Diesels)
- Raffinates, and
- Gasolines.

First Responder

Enbridge personnel will be dispatched as the first responders on a suspected leak on Line 8. The First Responder is to verify whether a leak has occurred, assess the area impacted and act as the initial Incident Commander until properly relieved of this duty.

Note: The emergency response procedures for the Line 8 product types are the same as for crude oil leaks on Enbridge's other pipelines whether on land or within a watercourse. See the *Field Response Team Quick Reference Guides* in Section 2 for additional instruction.

Refer to the Emergency Contact List on how to report events involving refined products.

Pipeline Control

The Line 8 pipeline is controlled by the Sarnia Products Pipeline ("SPPL") Houston Control Center with the Enbridge Edmonton Control Center ("ECC") having the ability of some override functions: SPPL will stop and start the pumping units.

- Should it become necessary for an emergency line shutdown ("ESD") and the Line Protection Module ("LPM") has not already issued an ESD, the Enbridge operator can remove the pump permissive from SPPL's units thereby shutting down their pumps.
- ECC will have a status display and shutdown control only of SPPL's units at Sarnia.
- If an ESD is initiated, Enbridge can then isolate and sectionalize as needed. Enbridge cannot open valves at Sarnia or Millgrove unless SPPL's permissives are set.
- Enbridge and SPPL will each use their own independent leak detection programs for the line. Alarm conditions on either system could initiate a line shutdown if a leak condition cannot be discounted within 10 minutes. Consultation between control rooms will determine if the line needs to be shut down.

Emergency Notification

If a leak or suspected leak is reported by the public, an employee or the Material Balance System (MBS) software:

- The ECC will initiate the ECC Emergency Procedures.
- The ECC will notify Sarnia Products Pipeline of a potential leak and SPPL will initiate the shutdown of Line 8.
- The ECC operator will call the Regional Management / On Call person to initiate the dispatch of the first responder
- See First Responders Tab for procedures to be followed once Regional Management/On Call Employee has been contacted.
- Sarnia Products Pipelines will notify their Area Manager or on call personnel of a potential leak.
- ECC and SPPL will determine the type of refined products that are in the line and what product may have been released from the line.

Contact Information for Sarnia Products Pipelines

SPPL Houston Control Center	1-800-372-9597
Area Manager – [redacted]	[redacted]
Business Team Lead- [redacted]	[redacted]
Process Lead (SPPL) – [redacted]	[redacted]

REDACTED COPY

Oil Volume Calculation Table

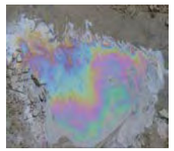
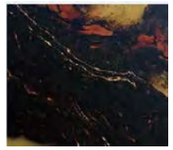
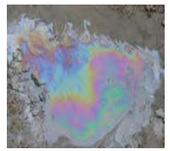
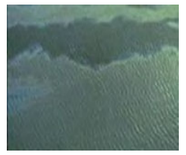
Visual Color											
	Sheen (Silver Grey) 	Rainbow 	Metallic 	Transitional 	Dark (or True) Color 		Sheen (Silver Grey) 	Rainbow 	Metallic 	Transitional 	Dark (or True) Color 
	Sheen (Silver/Grey)	Rainbow	Metallic	Transitional	Dark (or True)		Sheen (Silver/Grey)	Rainbow	Metallic	Transitional	Dark (or True) Color
Approximate Thickness	0.04 to 0.3 um	0.3 to 5.0 um	5.0 to 50 um	50 to 200 um	>200 um	Approximate Thickness	1.6×10^{-5} to 1.2×10^{-5} inches	1.2×10^{-5} to 2.0×10^{-5} inches	2.0×10^{-4} to 2.0×10^{-3} inches	2.0×10^{-5} to 1.2×10^{-5} inches	8×10^{-3} inches
Area	**Volume (liters)**					**Area**	**Volume (gallons)**				
100 m^2	0.004 to 0.03	0.03 to 0.5	0.5 to 5	5 to 20	>20	100 yd^2	0.003 to 0.007	0.007 to 0.11	0.11 to 1.1	1.1 to 4.4	>4.4
500 m^2	0.02 to 0.15	0.15 to 2.5	2.5 to 25	25 to 100	>100	500 yd^2	0.013 to 0.03	0.03 to 0.56	0.56 to 5.6	5.6 to 22	>22
1,000 m^2	0.04 to 0.3	0.3 to 5	5 to 50	50 to 200	>200	1,900 yd^2	0.026 to 0.07	0.07 to 1.1	1.1 to 11.1	11.1 to 44	>44
1,500 m^2	0.06 to 0.45	0.45 to 7.5	7.5 to 75	75 to 300	>300	1,500 yd^2	0.039 to 0.10	0.10 to 1.67	1.67 to 16.7	16.7 to 66	>66
2,000 m^2	0.08 to 0.6	0. 6 to 10	10 to 100	100 to 400	>400	2,000 yd^2	0.052 to 0.14	o.14t o22	22 to 222	222 to 88	>88
3,000 m^2	0.12 to 0.9	0.9 to 15	15 to 150	150 to 600	>600	3,000 yd^2	0.078 to 020	0.20 to 3.3	3.3 to 33.3	33.3 to 132	>132
5,000 m^2	0.2 to 1.5	1.5 to 25	25 to 250	250 to 1000	>1000	5,000 yd^2	0.13 to 0.34	0.34 to 5.6	5.6 to 55.5	55.5 to 220	>220
10,000 m^2	0.4 to 3	3 to 50	50 to 500	500 to 2000	>2000	10,000 yd^2	026 to 0.68	0.68 to 11.1	11.1 to111	111 to 440	>440
50,000 m^2	2 to 15	15 to 250	250 to 2500	2500 to 10,000	>10,000	50,000 yd^2	1.3 to 3.4	3.4 to 55.5	55.5 to 555	555 to 2,200	>2,200
100,000 m^2	4 to 30	30 to 500	500 to 5000	5000 to 20,000	>20,000	100,000 yd^2	2.6 to 6.8	6.8 to 111	111 to 1,110	1,110 to 4,400	>4,400
150,000 m^2	6 to 45	45 to 750	750 to 7500	7500 to 30,000	>30,000	150,000 yd^2	3.9 to 102	10.2 to 167	167 to 1,665	1,665 to 6,600	>6,600
200,000 m^2	8 to 60	60 to 1000	1000 to 10,000	10,000 to 40,000	>40,000	200,000 yd2	5.2 to 13.6	13.6 to 222	222 to 2,.220	2,220 to 8,800	>8,800
400,000 m^2	16 to 120	120 to 2000	2000 to 20,000	20,000 to 80,000	>80,000	400,000 yd^2	10.4 to 272	272 to 444	444 to 4,440	4,440 to 17,600	>17,600
600,000 m^2	24 to 180	180 to 3000	3000 to 30,000	30,000 to 120,000	>120,000	600,000 yd^2	15.6 to 40.8	40.8 to 666	666 to 6,66 0	6,660 to 26,400	>26,400
800,000 m^2	32 to 240	240 to 4000	4000 to 40,000	40,000 to 160,000	>160,000	800,000 yd^2	20.8 to 54.4	54.4 to 888	888 to 8,880	8,880 to 35,200	>35,200
1,000,000 m^2	40 to 300	300 to 5000	5000 to 50,000	50,000 to 200,000	>200,000	1,000,000 yd^2	26 to 68	68 to 1,110	1,110 to 11,100	11,100 to 44,000	>44,000

Table is based off of information in NOAA's *Open Water Oil Identification Job Aid for Aerial Observation*

2.4.4 ECRC Required Call Out Information

ECRC Emergency Number: 613-230-7369

ECRC~SIMEC CALL-OUT REPORT FORM

RESPONSIBLE PARTY (COMPANY NAME): [redacted] (CONTACT NAME):

TEL# NUMBERS:

CONTRACT NUMBER: [redacted]

PRODUCT/TYPE OF OIL: [redacted]

SDS AVAILABLE: ☑ YES ☐ NO

SPILL VOLUME:	☐ GALLONS ☐ LITRES ☐ BBL ☐ m³ ☐ TONNES
TOTAL VOLUME AT RISK:	☐ GALLONS ☐ LITRES ☐ BBL ☐ m³ ☐ TONNES

GEOGRAPHIC LOCATION:

PROBLEM:

CURRENT STATUS:

CONDITIONS AT SCENE:

2.4.5 [redacted] Evacuation Plan

[redacted]
ENBRIDGE PIPELINE EVACUATION PLAN
17 May 2017

In the event of an emergency related to one or more of the Enbridge pipelines in the back playground, the emergency evacuation plan that was written jointly by Enbridge and the Board is to be put into effect. This plan is found in the "Emergency Procedures" binder and the Health & Safety Department also has a copy. This document outlines how best to put that plan into effect. It was field-tested on 17 May 2017 and proved to be sound.

Once an emergency has been identified, and both Enbridge and the Health & Safety Department have been notified, staff and students are to be advised that an evacuation might be necessary. This announcement will allow staff the opportunity to gather any necessary material that they would need off-site, including their emergency duotang. Emergency staff, who will be on site, will determine whether to evacuate the school. In the meantime, the principal of either [redacted], when that school has moved [redacted], in the alternate, is to be forewarned that an evacuation to his/her location might be necessary. The evacuation site [redacted] The Transportation Department is also to be forewarned of a possible evacuation and that five school buses would be needed, assuming two classes per bus.

Until such time as emergency personnel have determined that it is no longer possible to remain in the school, students will be kept inside and a regular program will be run, although no one will be permitted to go outside. In the event, however, that it is no longer possible to remain at the school, an evacuation will be declared.

When an announcement is made declaring an evacuation, staff must be reminded that the oldest class will pair up with the youngest class, the second oldest class will pair up with the second youngest, and so on, for the purpose of the older students helping the teachers of the younger students with shoes and coats, and so on, should that be needed. Teachers must also be reminded to take another attendance before leaving their classrooms and to bring their emergency duotang with them to the evacuation site.

Staff and students will be directed to one of three outside "muster points". These are the grass area between [redacted] the neighbouring driveway to our immediate east, and the neighbouring driveway to our immediate west. Emergency personnel will determine which one to use depending on the direction of the wind and other factors. In the event that this is necessary, classes will evacuate the school in pairs as described in the preceding paragraph. It is anticipated that emergency services will have closed [redacted], thus making this procedure much safer than if there were road traffic.

Because the principal will be the last to leave, the teacher-in-charge must be on the first bus to depart so that he/she can take charge at the evacuation site. The secretary must also be on the first bus so that she can take charge of the attendance procedure and the dismissal procedure. It is anticipated that students will be dismissed to their parents from the evacuation site. For that reason, the resource teacher, who will initiate the emergency dismissal procedure, must also ride the first bus. The secretary's organisational binder contains her plan for such a dismissal. A parent will be required to sign when taking a child from the evacuation site. Other than the C1, all other staff members who are not otherwise directly supervising students are to ride on the first bus so that they can help take charge at the evacuation site. This will become more important as more students arrive there. EAs will assign themselves to those students who most need to be supported at this time and will ride the appropriate bus.

While the last bus is being loaded, the C1 will "sweep" one of the hallways, checking classrooms for stragglers and locking each one has it has been cleared. Similarly, other rooms, including washrooms, will be cleared and locked. The principal, or another staff member, should one be available, will do the same with the other hallway. The principal will lock the front door and board the bus, which will then drive up to the parking lot door and wait for the C1, who will be setting the alarm and locking that exit door. The last bus will then depart for the evacuation site.

Meanwhile, at the evacuation site, teachers will have arranged their classes in a straight line in alphabetical order with the oldest class seated beside the youngest class and so on. They will take attendance and make a report to the secretary. When the final bus has arrived and the attendance of those students has been verified, the decision to dismiss students will be made in consultation with the superintendent. If so, then the emergency dismissal procedure is to be put in place once the secretary has the appropriate sign-out form ready. The resource teacher will begin the calling out procedure according to the plan that has already been set up in September when the secretary set up a phone chain. The principal of the host school will provide the resource teacher and other staff members not needed for supervision with phones for this purpose. In absolutely no case will a parent be permitted to take a child without presenting himself/herself to the secretary and signing for that child. No staff member will leave the evacuation site until the welfare of each student has been assured and the principal, or the superintendent, has determined that his/her presence is no longer needed. The superintendent will determine when Confederation Central will reopen.

In an emergency, where the school will be impacted, please contact:

NAME	PHONE NUMBER	ACTION
[redacted]	[redacted]	Enbridge to liaise with school regarding evacuation

2.4.6 Conservation Authorities

There are 36 Conservation Authorities located across Ontario. If you would like to contact a Conservation Authority, please use this link https://conservationontario.ca/conservation-authorities/find-a-conservation-authority/ and click on the interactive map or the listing by region to view the contact details.

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3.0 High Consequence Area Information

High Consequence Areas ("HCAs") analysis is an integral part of the Enbridge Eastern Response Zone for emergency response.

The HCA maps identify all HCAs along the pipeline, this list includes the following unusually sensitive areas which a subset of the HCA.

- High Population Areas ("HPA")
- Other Population Areas ("OPA")
- Commercially Navigable Waterways ("CNW")
- Environmentally Sensitive Areas ("ESA")
- Drinking Water ("DW")

HCA data is accessible on EMap

HCA tables are located on the LPRM SharePoint site

3.1 Public Water Supplies/ Water Intakes (DW)

Drinking Water (municipal drinking water wells and municipal water intakes) are also represented in the HCA maps.

3.2 Indigenous Community Lands

There are five Indigenous community lands in the response zone corridor, within five kilometers around the pipeline right-of-way.

[redacted]

3.3 National / Provincial Parks

There are five National Parks/Provincial Parks/Provincial Recreational Areas in the response zone corridor, within five kilometers around the pipeline right-of-way.

[redacted]

3.4 Sensitive Impact Areas

Additional planning has been done to consider the following sensitive impact areas.

Schools	There are 1,477 schools in the response zone corridor, within 1 kilometer around the pipeline right-of-way. These include both urban and rural schools and those within 60 meters around the LVP right-of-way and 200m around the HVP right-of-way are included in the Public Awareness mailing list.
Residential Areas	There are several residential clusters within the zone corridor referred to as Other Populated Areas (OPA) and Highly Populated Areas (HPA) as represented in the electronic version of the HCA Maps. These maps are updated annually to include urban development.
Businesses	Numerous business concerns exist within the response zone corridor. Because of the large number of businesses in the various metropolitan and urban areas along the pipeline route, contact listings for these businesses are not listed. It is expected that businesses would receive notification of pipeline spills over public communications media in the same way as metropolitan and urban areas.

3.5 Water Resources/ Lakes and Streams

Control Point Maps document the water crossings product containment and recovery sites on water-bodies that could be impacted by a pipeline leak. The impact mechanism could be via direct crossing, overland flow or spray. Control point mapping can be accessed through EMap by all staff.

The following table lists the direct water crossings determined by LP Risk Management using the information that was collected by aerial imagery. Each visible water crossing was analyzed to meet the following criteria:

- a watershed size greater than 10km² or evidence of perennial open channel flow;
- an associated latitude/longitude
- a waterbody name

Table 1- Eastern Region Pipeline Control Points and Water Crossings

CP_ID	Longitude	Latitude	Water Crossing	Line(s)
ETRCP0001	-82.3	42.9	Perch Creek	7, 8 & 9
ETRCP0002	-82.3	42.9	Perch Creek	7, 8 & 9
ETRCP0003	-82.3	42.9	Perch Creek	7, 8 & 9
ETRCP0004	-82.3	43.0	Perch Creek	7, 8 & 9
ETRCP0008	-82.3	42.9	Waddell Creek	7, 8 & 9
ETRCP0010	-82.3	42.9	Perch Creek	7, 8 & 9
ETRCP0028	-81.9	43.0	Bear Creek	7, 8 & 9
ETRCP0029	-81.9	43.0	Bear Creek	7, 8 & 9
ETRCP0030	-81.9	42.9	Bear Creek	7, 8 & 9
ETRCP0031	-81.9	42.9	Bear Creek	7, 8 & 9
ETRCP0197	-80.3	43.2	Grand River	7, 8 & 9
ETRCP0198	-80.3	43.2	Grand River	7, 8 & 9
ETRCP0199	-80.3	43.2	Grand River	7, 8 & 9
ETRCP0200	-80.3	43.2	Grand River	7, 8 & 9
ETRCP0251	-79.8	43.4	Bronte Creek	9
ETRCP0252	-79.7	43.4	Bronte Creek	9
ETRCP0253	-79.7	43.3	Bronte Creek	9
ETRCP0254	-79.7	43.3	Lake Ontario	9
ETRCP0255	-79.7	43.4	Sixteen Mile Creek	9
ETRCP0256	-79.7	43.4	Sixteen Mile Creek	9
ETRCP0258	-79.6	43.4	Sixteen Mile Creek	9
ETRCP0269	-79.6	43.6	Little Etobicoke Creek	9
ETRCP0270	-79.5	43.6	Little Etobicoke Creek	9
ETRCP0271	-79.5	43.6	Little Etobicoke Creek	9
ETRCP0272	-79.5	43.6	Little Etobicoke Creek	9
ETRCP0273	-79.5	43.6	Etobicoke Creek	9
ETRCP0274	-79.5	43.6	Etobicoke Creek	9
ETRCP0275	-79.5	43.6	Etobicoke Creek	9
ETRCP0276	-79.5	43.6	Etobicoke Creek	9
ETRCP0281	-79.5	43.6	Mimico Creek	9
ETRCP0282	-79.5	43.6	Mimico Creek	9
ETRCP0283	-79.5	43.6	Mimico Creek	9
ETRCP0284	-79.4	43.6	Lake Ontario	9
ETRCP0286	-79.5	43.7	West Humber River	9
ETRCP0287	-79.5	43.7	Humber River	9
ETRCP0288	-79.5	43.7	Humber River	9
ETRCP0289	-79.5	43.7	Humber River	9
ETRCP0290	-79.5	43.6	Humber River	9
ETRCP0297	-79.5	43.7	Black Creek	9
ETRCP0298	-79.4	43.7	Black Creek	9
ETRCP0299	-79.4	43.6	Black Creek	9
ETRCP0331	-79.2	43.8	Rogue River	9
ETRCP0332	-79.2	43.8	Rogue River	9
ETRCP0333	-79.2	43.8	Rogue River	9
ETRCP0334	-79.1	43.8	Rogue River	9
ETRCP0352	-79.0	43.8	West Duffins Creek	9
ETRCP0353	-79.0	43.8	West Duffins Creek	9
ETRCP0354	-79.0	43.8	West Duffins Creek	9
ETRCP0355	-79.0	43.8	Ganatsekiagon Creek	9
ETRCP0356	-79.0	43.8	Ganatsekiagon Creek	9
ETRCP0357	-79.0	43.8	Ganatsekiagon Creek	9

ENBRIDGE

CP_ID	Longitude	Latitude	Water Crossing	Line(s)
ETRCP0358	-79.0	43.8	Ganatsekiagon Creek	9
ETRCP0359	-79.0	43.8	Duffins Creek	9
ETRCP0360	-79.0	43.8	Duffins Creek	9
ETRCP0362	-79.0	43.8	Lake Ontario	9
ETRCP0367	-79.0	43.9	Unnamed Creek	9
ETRCP0368	-79.0	43.8	Unnamed Creek	9
ETRCP0369	-78.9	43.8	Unnamed Creek	9
ETRCP0370	-78.9	43.8	Lake Ontario	9
ETRCP0375	-78.9	43.8	Lake Ontario	9
ETRCP0379	-78.9	43.9	Unnamed Creek	9
ETRCP0380	-78.9	43.8	Unnamed Creek	9
ETRCP0381	-78.9	43.8	Lynde Creek	9
ETRCP0382	-78.9	43.9	Lynde Creek	9
ETRCP0383	-78.9	43.9	Lynde Creek	9
ETRCP0384	-78.9	43.9	Lynde Creek	9
ETRCP0385	-78.9	43.8	Lynde Creek	9
ETRCP0394	-78.8	43.9	Oshawa Creek	9
ETRCP0395	-78.8	43.8	Oshawa Creek	9
ETRCP0396	-78.8	43.8	Lake Ontario	9
ETRCP0397	-78.8	43.9	East Oshawa Creek	9
ETRCP0405	-78.8	43.8	Harmony Creek	9
ETRCP0407	-78.7	43.9	Farewell Creek	9
ETRCP0408	-78.7	43.9	Farewell Creek	9
ETRCP0409	-78.8	43.9	Farewell Creek	9
ETRCP0429	-78.4	43.9	Graham Creek	9
ETRCP0430	-78.4	43.9	Graham Creek	9
ETRCP0431	-78.4	43.9	Graham Creek	9
ETRCP0432	-78.5	43.9	Graham Creek	9
ETRCP0433	-78.5	43.9	Graham Creek	9
ETRCP0434	-78.5	43.9	Graham Creek	9
ETRCP0435	-78.5	43.9	Graham Creek	9
ETRCP0436	-78.5	43.9	Graham Creek	9
ETRCP0437	-78.5	43.9	Graham Creek	9
ETRCP0438	-78.5	43.8	Graham Creek	9
ETRCP0484	-77.8	44.0	Cold Creek	9
ETRCP0485	-77.8	44.0	Cold Creek	9
ETRCP0486	-77.8	44.1	Cold Creek	9
ETRCP0487	-77.7	44.1	Cold Creek	9
ETRCP0501	-77.5	44.1	Trent River	9
ETRCP0502	-77.5	44.1	Trent River	9
ETRCP0503	-77.5	44.1	Trent River	9
ETRCP0504	-77.5	44.1	Trent River	9
ETRCP0526	-77.3	44.2	Moira River	9
ETRCP0527	-77.3	44.1	Moira River	9
ETRCP0528	-77.3	44.1	Moira River	9
ETRCP0529	-77.3	44.1	Moira River	9
ETRCP0577	-76.7	44.2	Millhaven Creek	9
ETRCP0578	-76.7	44.2	Millhaven Creek	9
ETRCP0579	-76.7	44.2	Millhaven Creek	9
ETRCP0580	-76.7	44.2	Millhaven Creek	9
ETRCP0596	-76.5	44.3	Collins Creek	9
ETRCP0597	-76.5	44.2	Collins Creek	9
ETRCP0598	-76.6	44.2	Collins Creek	9

CP_ID	Longitude	Latitude	Water Crossing	Line(s)
ETRCP0599	-76.6	44.2	Collins Creek	9
ETRCP0637	-76.1	44.3	Gananoque River	9
ETRCP0638	-76.1	44.3	Gananoque River	9
ETRCP0639	-76.1	44.3	Gananoque River	9
ETRCP0640	-76.1	44.3	Gananoque River	9
ETRCP0648	-76.0	44.4	Black Creek	9
ETRCP0649	-76.0	44.4	Black Creek	9
ETRCP0746	-74.6	45.1	Raisin River	9
ETRCP0747	-74.6	45.1	Raisin River	9
ETRCP0748	-74.6	45.1	Raisin River	9
ETRCP0753	-74.6	45.1	Raisin River	9
ETRCP0833	-74.3	45.5	Ottawa River	9
ETRCP0834	-74.3	45.5	Riviere du Nord	9
ETRCP0835	-74.3	45.5	Riviere du Nord	9
ETRCP0849	-74.3	45.5	Riviere Rouge	9
ETRCP0851	-74.3	45.5	Riviere du Nord	9
ETRCP0858	-74.3	45.5	Ottawa River	9
ETRCP0859	-74.3	45.5	Ottawa River	9
ETRCP0860	-74.2	45.5	Baie de Carillon	9
ETRCP0877	-74.0	45.6	Riviere du Chene	9
ETRCP0886	-74.0	45.6	Riviere du Chene	9
ETRCP0887	-74.0	45.5	Riviere du Chene	9
ETRCP0888	-74.0	45.5	Riviere du Chene	9
ETRCP0928	-73.6	45.6	Riviere des Mille Iles	9
ETRCP0929	-73.6	45.6	Riviere des Mille Iles	9
ETRCP0930	-73.5	45.6	Riviere des Mille Iles	9
ETRCP0931	-73.5	45.6	Riviere des Mille Iles	9
ETRCP0939	-73.5	45.6	Prairies River	9
ETRCP0940	-73.5	45.6	Prairies River	9
ETRCP0941	-73.5	45.6	Prairies River	9
ETRCP0942	-73.5	45.6	Prairies River	9
ETRCP0943	-73.5	45.7	Prairies River	9
ETRCP0944	-73.4	45.6	Prairies River	9
ETRCP0946	-73.4	45.7	Prairies River	9
ETRCP0947	-73.4	45.7	Prairies River	9
ETRCP0948	-73.4	45.7	Prairies River	9
ETRCP0949	-73.4	45.7	Prairies River	9
ETRCP0976	-79.9	43.0	Tributary 4 to Big Creek	11
ETRCP0977	-79.8	43.0	Tributary 4 to Big Creek	11
ETRCP0978	-79.8	42.9	Tributary 4 to Big Creek	11
ETRCP1058	-82.4	42.8	St. Clair River	5, 6 and 78
ETRCP1059	-82.4	42.8	St. Clair River	5, 6 and 78
ETRCP1060	-82.4	42.8	St. Clair River	5, 6 and 78
ETRCP1061	-82.4	42.7	St. Clair River	5, 6 and 78
ETRCP1062	-82.4	42.7	St. Clair River	5, 6 and 78
ETRCP1063	-82.4	42.6	St. Clair River	5, 6 and 78
ETRCP1064	-82.4	42.6	St. Clair River	5, 6 and 78
ETRCP1065	-82.5	42.6	St. Clair River	5, 6 and 78

3.6 Historical/Archaeological Sites

Environmental impact on a Historical/Archaeological site would be a major concern and would impact response activities. Consideration would be made when creating an IAP to address sensitivities around Historical/Archaeological sites. Prior to initiating response activities contact the Provincial Emergency Management Office

3.7 Transportation Areas

The following table represents the various transportation corridors along the pipeline routes which may be affected during a response.

Federal and Provincial Highway Crossings
Pipelines 5, 7, 8, 9, 11, 78 and 95 (Ontario)
[redacted]
Pipeline 9 (Québec)
[redacted]

Railroads

[redacted]

Other Pipelines Located Within 1 km

[redacted]

ANNEX 4 – TABLE OF CONTENTS PAGE

4.0 Federal Legislation and Guidelines

4.0.1 Canada Energy Regulator Onshore Pipeline Regulations, SOR/99-294

Canada Energy Regulator Onshore Pipeline Regulations, SOR/99-294	
Program Element	EM Control
6.4: The company must have a documented organizational structure that enables it to (a) meet the requirements of the management system and meet its obligations under these Regulations; (b) determine and communicate the roles, responsibilities and authority of the officers and employees at all levels of the company; and (c) demonstrate, based on an annual documented evaluation of need, that the human resources allocated to establishing, implementing and maintaining the management system are sufficient to meet the requirements of the management system and to meet the company's obligations under these Regulations.	• Emergency Management Program • Integrated Contingency Plan • Integrated Management System Document • Incident Management Handbook
Emergency Management Program 32: (1) A company shall develop, implement and maintain an emergency management program that anticipates, prevents, manages and mitigates conditions during an emergency that could adversely affect property, the environment or the safety of workers or the public. (1.1) The company shall develop an emergency procedures manual, review it regularly and update it as required.	• Emergency Management Program • Integrated Management System Document • IMS Occupational Health & Safety • Integrated Contingency Plans, Core 1.0.2, 1.1, 1.2 • Tactical Response Plans • Exercise Design Guide • Course Syllabus • Control Points • Pre-fire Plans
(2) A company shall submit the emergency procedures manual and any updates that are made to it to the Regulator.	
Emergency Management Program 33: A company shall establish and maintain liaison with the agencies that may be involved in an emergency response on the pipeline and shall consult with them in developing and updating the emergency procedures manual.	• Mutual Aid Agreement Development Process; • CANADA - Public Awareness • Program for First Response & Municipal Organizations Record; Emergency Response Education • Program Training Records; • 911 Dispatch Module training records
Emergency Management Program 34: A company shall take all reasonable steps to inform all persons who may be associated with an emergency response activity on the pipeline of the practices and procedures to be	• Emergency Management Program; • Integrated Management System Document;

Canada Energy Regulator Onshore Pipeline Regulations, SOR/99-294	
Program Element	EM Control
followed and make available to them the relevant information that is consistent with that which is specified in the emergency procedures manual.	• IMS Occupational Health & Safety; • Top Risk Areas; Volume Out; Dispersion Analysis Results; • High Consequence Areas • Implementation Docs: Book 1; Incident Reporting; • Integrated Contingency Plans (Cores 1.1.2 & 3.0) • Tactical Response Plans; • Tactical Response Guide; • Guide Exercise Design Guide; Course Syllabus; • Pre-fire Plans for Athabasca, Eastern, and Prairie Regions. • Public Awareness Program; • LP External Stakeholder Engagement Program; • Mutual Aid Agreement Development Process; • CANADA - Public Awareness Program for First Response & Municipal Organizations Record; • Emergency Response Education Program Training Records; • 911 Dispatch Module training records
Emergency Management Program 35: A company shall develop a continuing education program for the police, fire departments, medical facilities, other appropriate organizations and agencies and the public residing adjacent to the pipeline to inform them of the location of the pipeline, potential emergency situations involving the pipeline and the safety procedures to be followed in the case of an emergency.	
General Operation Requirements 36: A company shall (a) maintain communication facilities for the safe and efficient operation of the pipeline and for emergency situations;	• Information Production Unit written and visual communication materials • Media alerts and advisories • Enbridge Alert System (MIR3) • New Releases (including advance notices or external website notices) • Messaging • Statements • Social Media Messages • ICP Core 2.0 & 2.4
Training Program 46: (1) A company shall develop and implement a training program for any employee of the company who is directly involved in the operation of the pipeline.	• Core 3 • Training & Exercise Program
Training Program 46:	• Core 3 • Training & Exercise Program

Canada Energy Regulator Onshore Pipeline Regulations, SOR/99-294	
Program Element	EM Control
(2) The training program shall instruct the employee on (a) the safety regulations and procedures applicable to the day-to-day operation of the pipeline; (a.1) the security processes, procedures and measures applicable to the day-to-day operation of the pipeline; (b) responsible environmental practices and procedures in the day-to-day operations of the pipeline; (c) the procedures for the proper operation of the equipment that the employee could reasonably be expected to use; and (d) the emergency procedures set out in the manual developed under section 32 and the procedures for the operation of all emergency equipment that the employee could reasonably be expected to use.	
Training Program 46: (3) The company shall use reasonable efforts to ensure that any employee who attends a training program has a working knowledge of the subject-matter of the program at the end of the program.	• Core 3 • Training & Exercise Program
Incident Report 52: (1) A company shall immediately notify the Regulator of any incident relating to the construction, operation or abandonment of its pipeline and shall submit a preliminary and detailed incident report to the Regulator as soon as is practicable.	• Core 2.1.1, 2.1.2 • Annex 2.2 • Integrated Management System Document • ICP • Book 1

4.0.2 Canada Energy Regulator Emergency Procedures Manual Requirements

Canada Energy Regulator Act – Annex 2 Event Reporting Guidelines, dated June, 2020	
Brief Description	Location in ICP
Reporting Guidelines – File # OFSurv-CompMan 01 Event Reporting Guidelines, dated June, 2020	Annex 2.2
Annex A.2 Emergency Procedures Manual The contents of the Emergency Procedure Manual, should include, but are not limited, to the following: • Manual Distribution List (or on separate file)	Core 1.0.2
• Manual updating procedures and schedule (or on a separate file);	Update Notice and Revision Record Table; Core 1.0.2

Canada Energy Regulator Act – Annex 2 Event Reporting Guidelines, dated June, 2020	
Brief Description	Location in ICP
• Description of initial actions when someone reports an incident;	Core 2.0, 2.1 Annex 2.2
• Definitions and levels of emergencies;	Core 2.2.5, 2.2.6
• Corporate and operational chains of command (e.g., organization structures);	Core 2.4
• management of threat information;	Core 2.5.3
• incident management system (e.g., Incident Command System);	Core 2.4
• spill control procedures and locations of spill control points (if applicable);	Core 2.3 Annex 3
• debriefing procedure;	Core 2.8.2, 2.8.3, & 2.8.4
• internal and external communications;	Core 2.1, Annex 2.2, 2.3
• external communication information, warnings and evacuations (e.g., public relations or media plan);	Core 2.1.1, 2.1.2, 2.1.3, 2.3.8, 2.3.1.1 & Annex 2.3
• alternative means of communication;	Core 2.1.2 & 2.1.3
• roles and responsibilities for internal positions involved in a response (including contractors);	Core 2.4.1 Annex 2.0, 2.1, 2.2
• roles and responsibilities for agencies that would likely be involved in a response;	
• environmental or other areas requiring special consideration or protection;	Annex 3
• detailed product information;	Core 2.3.1 & 2.3.10
• internal and external reporting requirements;	Annex 2
• up-to-date internal and external contact lists;	Annex 2
• lists of persons in the Emergency Planning Zones (or on a separate file);	Annex 3 Specific lists are kept on a separate file with the Public Awareness Program
• description and location of response equipment, including information on how to access the response equipment on a 24-hour basis;	Annex 1.6, 1.8
• up-to-date area maps or mapping;	Core 1.4 Annex 1.7, 1.8
• agreements with other companies or organizations (or on a separate file) or a reference to agreements in the emergency procedures manual;	Annex 1.6, 2.3
• templates and records to document the events, actions and meetings during an incident.	Core 1.2.2, 1.2.3, 1.2.4 Incident Action Plan Software

4.0.3 Transportation Safety Board Regulations, SOR/2014-37

Transportation Safety Board Regulations, SOR/2014-37		
Section	Brief Description	Location in ICP
4	Pipeline Occurrences **Report — pipeline occurrences** 4 (1) The operator must report any of the following pipeline occurrences to the Board: (a) the pipeline sustains damage that affects the safe operation of the pipeline as a result of another object coming into contact with it; (b) an unauthorized third party activity affects the structural integrity of the pipeline; (c) a geotechnical, hydrotechnical or environmental activity poses a threat to the safe operation of the pipeline. **Report — occurrences caused by operation** (1.1) The operator must report any of the following pipeline occurrences to the Board if they result directly from the operation of the pipeline: (a) a person sustains a *serious injury* as defined in section 1 of the *National Energy Board Onshore Pipeline Regulations* or is killed; (b) there is a fire, ignition or explosion that (i) affects the safe operation of the pipeline, or (ii) poses a threat to the safety of any person, property or the environment; (c) there is an occurrence that results in (i) an unintended or uncontrolled release of hydrocarbon gas, (ii) an unintended or uncontrolled release of HVP hydrocarbons, (iii) an unintended or uncontrolled release of LVP hydrocarbons in excess of 1.5 m^3, or (iv) an unintended or uncontrolled release of a commodity other than hydrocarbon gas, HVP hydrocarbons or LVP hydrocarbons; (d) there is a release of a commodity from the line pipe body; (e) the pipeline is operated beyond design limits or any operating restrictions imposed by the National Energy Board; (f) the pipeline restricts the safe operation of any mode of transportation. **Information in report** (2) The report must contain the following information: (a) the name of the operator; (b) the date and time of the occurrence; (c) the unique identifier of the pipeline or portion of pipeline, such as its name or number; (d) the specific pipeline components that malfunctioned or failed;	Core 2.1.1 Annex 2.0.2, 2.0.3, 2.1.2, 2.2.2, 2.3.2, 2.3.6

Transportation Safety Board Regulations, SOR/2014-37		
Section	Brief Description	Location in ICP
	(e) the location of the occurrence by reference to a specific designation point such as the operator's facility or the pipeline's kilometre post location; (f) the closest city, town or village to the occurrence site; (g) the number of persons who were killed or sustained serious injuries as a result of the occurrence; (h) a list of any commodity contained in or released from the pipeline and an estimate of the volume of commodity released and recovered; (i) the actual or anticipated duration of any interruption of the operation of the pipeline or a portion of the pipeline; (j) a description of the occurrence, the events leading up to it and the extent of any damage, including the consequences on the pipeline or portion of the pipeline and on any other property and the environment; (k) a description of any action taken or planned to address the consequences of the occurrence; (l) a description of any action taken or planned to protect persons, property and the environment, including any evacuation as a result of the occurrence; (m) the name and title of the person making the report and the phone number and address at which they can be reached; and (n) any information specific to the occurrence that the Board requires. **Time limit** (3) The person making the report must send to the Board (a) as soon as possible and by the quickest means available, all the information required under subsection (2) that is available at the time of the occurrence; and (b) the remainder of that information as soon as it becomes available within 30 days after the occurrence. **Agreement** (4) The Board and the operator of the pipeline may enter into an agreement regarding a format and time frame for reporting pipeline occurrences that are not likely to require immediate Board response. **Definitions** (5) The following definitions apply in this section. ***CSA Z662*** means Canadian Standards Association Standard Z662 entitled *Oil and Gas Pipeline Systems*, as amended from time to time. (*norme CSA Z662*)	

Transportation Safety Board Regulations, SOR/2014-37		
Section	Brief Description	Location in ICP
	design limits means the design limits and criteria for a pipeline that are prescribed by the standards and codes under which the pipeline is designed, constructed and operated. (*limites de calcul*) ***HVP*** means high vapour pressure as defined in CSA Z662. (*HPV*) ***LVP*** means low vapour pressure as defined in CSA Z662. (*BPV*) ***operator*** means the company that operates the pipeline or portion of the pipeline. (*exploitant*) ***safety zone*** [Repealed, SOR/2018-258, s. 3]	

4.1 Ontario Provincial –Legislation

4.1.1 Ontario Regulation 210/01 Oil and Gas Pipeline Systems

Oil and Gas Pipeline Systems Ontario Regulation 210/01 June 27, 2001 – O. Reg. 210/01		
Section	Brief Description	Location in ICP
14	**Accidents and occurrences** (1) Where it appears that carbon monoxide poisoning, asphyxiation, explosion or fire has occurred, or an accidental release, vent or spill has occurred because of the use, handling or storage of oil or gas, the licensee shall notify forthwith an inspector of the occurrence by telephone, facsimile, or any other form of electronic transmission, and a licence holder shall have in place procedures for such notification.	Core 2 Annex 2
	(2) No person shall interfere with or disturb any wreckage, an article or thing at the scene of and connected with the occurrence except in the interest of public safety, saving a life, relieving human suffering, continuity of service or preservation of property.	
	(3) Where it is permitted to interfere with or disturb any wreckage, an article or a thing under subsection (2), no person shall carry away or destroy any wreckage, article or thing unless an inspector gives permission to do so.	

4.2 Quebec Provincial – Regulation / Legislation

4.2.1 Ministry of Public Security

Act respecting civil protection to promote disaster resilience Chapter S-2.4 - 2024, c. 18, s.1		
Section	**Brief Description**	**Location in ICP**
11	The persons whose property or activities may cause a disaster that the Government determines by regulation must collaborate with the municipal authorities in whose territory the property is situated, or the activities are carried on by filing a risk report. The Government also determines the form and content of the risk report, the other authorities to whom the report must be sent, the conditions governing its sending and any other applicable terms. The Government may determine the disaster response preparation measures that the persons referred to in the first paragraph must put in place and the emergency response and recovery measures that they must deploy to respond to a disaster, prescribe the terms applicable to the putting in place of such measures or to their deployment, and determine other obligations to collaborate with the municipal authorities or with any other authority that the Government designates.	Full ICP