

Emergency Management System Manual/Emergency Management Plan

Champion Pipeline Corporation Limited March 2024

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# A Administration of the Emergency Management Plan

# A.1 Preambule

Champion Pipeline Corporation Limited ("Champion") operates a high-pressure natural gas network to supply the Abitibi-Témiscamingue region. As part of these activities, Champion has implemented an Emergency Management System (EMS). The purpose of this management system is to define and oversee the activities in the Emergency Management Plan. It is divided into several programs which themselves may include one or more procedures to carry out these various programs. Note the following:

- Emergency management policy that establishes the organization's commitment to the protection of the public, property and the environment.
- Goals and objectives for the presentation of risk analyses to establish scenarios of potential events and develop response plans based on modelling situations with major consequences.
- Liaison activities for emergency preparedness with the various stakeholders. These activities are
  designed to raise awareness among the emergency responders of the specific issues related to
  natural gas pipelines and to align the field response.
- Recurring activities to build stakeholder awareness of potential incidents on natural gas pipelines.
- Exercises developed to put into practice the various aspects of the emergency management plans by emergency responders, based on increasingly complex scenarios.
- An incident management system that describes the structure and mechanisms for responding to an emergency. This section is intended to clarify the scope of the roles and responsibilities of stakeholders, both internal and external.

Operations and emergency management of the Champion network are ensured by Énergir resources, using the latter's usual tools, equipment and procedures.

As a result, many sections and links in this manual refer to existing Énergir documentation. The documents that can be accessed using these links are operational and official versions for Énergir personnel. However, to meet CER requirements, the information has been retranscribed in this manual.

Note that Champion's corporate emergency management system manual also includes Champion's Emergency Management Plan under the CER.

# A.2 Documentation monitoring

# A.2.1 Distribution list

Champion's manual is distributed to the persons listed below. When changes are made to this manual, the amended sections must be provided to all of the persons holding the identified positions as well as their substitutes.

Names and contact information (addresses, emails, telephone numbers) have been removed as they represent identifiable information

No.		Distribution list					
	Paper copy	Paper copy					
1	Canada Energy Regulator		210-517 10 Avenue SW Calgary, Alberta T2R 0A8				
	Electronic version						
	Internal employee						
1	ECC Coordinator						
2	ECC Manager						
3	EOC Manager, Ope	rations EOC					
4	CP Head – CP (Abit	tibi RO only)					
5	Health and Safety a	nd Environment – OC					
6	CCC Coordinator						
	External employee	Title	Contact details				
1	Canada Energy Regulator	CER website – Filing of electronic documents	https://www.cer-rec.gc.ca/pplctnflng/sbmt/nbpr- eng.html				
2	Earlton Fire Department (ON)	Fire Chief					
3	Englehart Fire Department (ON)	Fire Chief					
4	North Bay Fire Department (ON)	Fire Chief					
5	Temiscaming Fire Station (QC)	Fire Department Director					
6	Sûreté du	Division Head					
	Québec,	Division Head					

No.		Distribution list			
	Témiscamingue RCM (QC)				
7	Rouyn-Noranda (QC)	Fire Department Director			
		Public Safety Director			
8	Nédélec Fire Department (QC)				
9	Remigny Fire Department	Director, Fire Safety			
10	Rouyn-Noranda regional emergency management office				
11	Wolf Lake First Nation Hunter's Point				
12	Eagle Village Kebaowek First Nation Kipawa				
13	Timiskaming First Nation	Public Work Director			
14	MOECC – Emergency Management Ontario				

**Note 1:** For the Earlton region, 911 calls are transferred to Armstrong Township in Timmins, Ontario. The Armstrong call centre covers the Armstrong, Earlton, Casey and Harley fire departments.

Note 2: For the Thorne region, 911 calls are handled by North Bay.

See OPR sect. 6.5(1)I, OPR sect. 6.5(1)m, OPR Appendix A.2

# A.2.2 Table of references and records

No.	Records	In charge of filing	Filing location	Conservation	Retention period
1	Technical specifications	Engineering Manager – Énergir	Dossiers partagés – spécifications – Normes.pdf	50 last versions	50 last versions
2	Risk Analysis log	EM Coordinator – Énergir	SharePoint Portail PMUCO > Performance and Tracking > Documentation log	50 last versions	50 last versions
3	CAN/CSA Z246.2- 18 Emergency preparedness and response for petroleum and natural gas industry systems	EM Coordinator – Énergir	SharePoint PMUCO Portal > Performance and Tracking > Standard	N/A	N/A
4	ISO 31000 Risk management – Principles and guidelines	EM Coordinator – Énergir	SharePoint PMUCO Portal > Performance and Tracking > Standard	N/A	N/A
5	Post-mortem event reports	EM Coordinator – Énergir	Event Management (EMP)	N/A	N/A

See OPR sect. 6.5(1)o

# A.2.3 Summary of last revisions

No.	Who?	What?	Where in the procedure?	Date
1	Director, Risk Prevention, Emergency Management and Business Continuity (RPEMBC)	Creation of Champion's emergency measures plan in the new standardized template	Across the entire document	August 2015

No.	Who?	What?	Where in the procedure?	Date
2	Director, RPEMBC Advisor, EM & BC	Annual review Adjustments based on CER recommendations issued as part of an evaluation according to the CSA Z662 standard and the Canadian Energy Board Onshore Pipeline Regulations (OPR)	<ul> <li>Review of section A2 – Documentation monitoring</li> <li>Insertion of safety data sheets in the document (A7)</li> <li>Addition of a section on the roles and responsibilities of external stakeholders (B3)</li> <li>Insertion of the list of contacts in the mutual assistance agreement (B11)</li> <li>Addition of the list of available emergency field equipment (D2)</li> <li>Adjustments to the on-duty personnel chart (B10)</li> <li>Review of section C5 – Stakeholders' awareness</li> <li>Review of definitions (A3)</li> <li>Clarification of event notification procedures (CER and TSB) (B7 and D1)</li> </ul>	April 11, 2016
3	Director, RPEMBC Advisor, EM & BC	Annual review	<ul> <li>Emergency manual layout update</li> <li>Specifications regarding EM programs:         <ul> <li>EM management policy</li> <li>System management roles and responsibilities</li> <li>Performance indicators</li> <li>Information, training and awareness</li> <li>Exercises and simulations</li> <li>Legal obligations</li> <li>Risk assessment and analysis</li> <li>Audits, change management, continuous improvement</li> <li>Distribution list</li> </ul> </li> <li>EMP additions and updates:         <ul> <li>Emergency management structure</li> <li>Description of the emergency centres</li> <li>Criteria for triggering alert levels</li> <li>Demobilization criteria</li> </ul> </li> </ul>	July 31, 2017

No.	Who?	What?	Where in the procedure?	Date
			<ul> <li>Checklists for emergency roles</li> <li>Specifications regarding the roles and responsibilities of external stakeholders</li> <li>Management and communication cycles</li> <li>Mutual assistance agreement</li> <li>Emergency equipment</li> <li>Emergency response strategies</li> <li>Facilities map</li> <li>Technical specifications for execution of the works</li> </ul>	
4	Advisor, EM & BC	Annual review	<ul> <li>Specifics on 911 call centres in Ontario</li> <li>Specifics on the roles and responsibilities related to various programs (simulation, exercise, audit, etc.) in place</li> <li>Replacement of Gaz Métro by Énergir</li> <li>On the on-duty personnel chart: addition of the emergency contacts tab, addition of the CMC room location and changes to the chart layout</li> <li>Adjustments to the on-duty personnel (emergency structure)</li> <li>In the section "Description of the emergency centres": addition of the decision-making autonomy section</li> <li>In the section "On-call Personnel": addition of the roles and responsibilities of on-call personnel for CP or FCP, OC, EOC, CCC, ECC and CMC</li> <li>In the section "Alert criteria": addition of the "Red +" level and review of criteria</li> <li>In the section "Alert procedures and mobilization of emergency centres": review of the "Surveillance and reporting of unusual situations" table, addition of the "Information to be</li> </ul>	March 26, 2018

No.	Who?	What?	Where in the procedure?	Date
			transmitted to the Emergency Dispatch Centre" section, review of the demobilization criteria table, and addition of the "Red +" level to the chart	
			<ul> <li>In the section "Management and communication cycles": addition of the information validation section</li> </ul>	
			In the checklists section: further details	
			<ul> <li>Change to the EDC West number in the "gaseous natural gas" MSDS</li> </ul>	
			• In the "Debriefing" section: addition of the "Intervention specifics for mobilization at the CP level" section, addition of the "Division of responsibilities example for debriefings and investigations into the underlying cause" table and addition of the "Debriefing process" table	
5	Advisor, EM & BC	Ad hoc addition	Addition of the process for evaluating the effectiveness of liaison programs	June 22, 2018
6	Advisor, EM & BC	Annual review	<ul> <li>Minor adjustments to manager checklists</li> <li>Minor adjustment to the emergency structure</li> </ul>	March 31, 2019
7	Coordinator, EM, BC & Env. Advisor, EM & BC	Ad hoc addition	<ul> <li>Review of definitions following changes in the TSB Regulation</li> <li>Address of Val d'Or's branch office</li> <li>Minor text adjustments (e.g. Canada Energy Regulator)</li> <li>Minor adjustments to manager checklists</li> <li>Minor adjustment to the emergency structure</li> </ul>	March 31, 2020
8	Coordinator, EM, BC & Env.	Annual review	<ul> <li>Adjustment of the EM and BC policy</li> <li>Minor adjustments (checklists, technical specifications, inventory, links, etc.)</li> </ul>	March 19, 2021

No.	Who?	What?	Where in the procedure?	Date
	Advisor, EM & BC		Reference to the Frame of Reference     – Pipeline Response (FRPR) of the     MSPQ	
9	Coordinator, EM, BC & Env. Advisor, EM & BC	Annual review	<ul> <li>Minor adjustments (checklists, technical specifications, inventory, links, on-duty personnel chart, etc.)</li> <li>Update of the emergency centre descriptions (IT aspect)</li> <li>Update of alert criteria</li> <li>Specifics on performance criteria (training)</li> <li>Adjustment to the required emergency room equipment</li> <li>Review of the remote mobilization procedure (virtualization of emergency centres)</li> </ul>	March 31, 2022
10	Advisor, EM & BC Senior Advisor, EM & BC	Annual review	<ul> <li>Minor adjustments</li> <li>Template review</li> <li>Update of liaison and continuing education programs (E7)</li> <li>Update of alert criteria based on CER guidance notes <ul> <li>Update of the emergency response structure</li> </ul> </li> <li>Update of checklists</li> <li>Update of the Public Affairs notification section</li> <li>Addition of rules for managing virtual meetings</li> <li>Review of on-duty personnel chart template</li> <li>Update of links</li> <li>Review of the contact list for the mutual assistance agreements</li> <li>Review of the list of equipment available for repair at other storage sites</li> <li>Review of position titles in the emergency roles list</li> </ul>	March 2023

No.	Who?	What?	Where in the procedure?	Date
11	Advisor, EM & BC Senior Advisor, EM & BC	Annual review	<ul> <li>Review of Emergency Management Policy</li> <li>Review of emergency structure</li> <li>Update of checklists</li> <li>Review of alert level trigger criteria</li> <li>Review of technical specifications</li> <li>Review of agreement on mutual assistance in the event of an emergency</li> <li>Review of incident response equipment lists</li> <li>Update of links</li> </ul>	March 2024

See OPR sect. 6.5(1)o

# A.2.4 Draft and approval

Drafting team					
Advisor, Emergency Mar	Advisor, Emergency Management and Business Continuity Winter 2018				
	Арр	roval			
Name	Date		Signature		
Stéphane Santerre	Champion President	2024-03-25		Act	
Document owner		Stéphane Santerre			

See OPR sect. 6.5(1)o

# A.3 Definitions

No.	Term	Definition	References
1	Serious injury	<ul> <li>Major bone fracture;</li> <li>Amputation of a body part;</li> <li>Loss of eyesight in one or both eyes;</li> <li>Internal hemorrhage;</li> <li>Third-degree burns;</li> <li>Loss of consciousness;</li> <li>Loss of a body part or a body part's function.</li> </ul>	OPR sect. 1
2	LVP	Means "low vapour pressure" under the CSA Z662 standard.	OPR Z246.2
3	HVP	Means "high vapour pressure" under the CSA Z662 standard.	OPR Z246.2
4	Major negative impact on the environment	Means the release of a chemical product or substance at a concentration or volume that could irreversibly alter, either continuously or over the long-term, the environment in a way that will be harmful to people, fauna and flora.	OPR
5	Operations beyond design tolerances	Means any use of a pipeline beyond its design criteria or the criteria set by the CER to resolve a specific issue. This includes situations demonstrated in a technical evaluation to ensure the pipeline's ongoing ability to function (e.g. limits regarding pressure).	OPR
6	Incident	<ul> <li>Means an event that results in:</li> <li>A serious injury or death;</li> <li>A major negative impact on the environment;</li> <li>An unintentional explosion or fire;</li> <li>An unintended or unconfined release of LVP hydrocarbon of more than 1.5 m<sup>3</sup>;</li> <li>An unintended or uncontrolled release of HVP hydrocarbons or gas;</li> <li>Pipeline operations beyond the design limits according to the CSA Z662 or CSA Z276 standard or beyond the operating limits imposed by the CER.</li> </ul>	OPR sect. 1
7	Facility	<ul><li>Means:</li><li>a) structure erected or positioned on a pipeline right-of-way;</li></ul>	OPR

The following definitions apply for purposes of the emergency management manual:

No.	Term	Definition	References
		<ul> <li>b) highway, private road, railway, irrigation ditch, drain or off-take drain, drainage system, sewer, dike, underground telegraph or telephone line or a line for the transmission of hydrocarbons, electricity or any other substance, which crosses or is supposed to cross a pipeline or which is or will be located on, underneath or alongside a pipeline.</li> </ul>	
8	Critical habitat	The habitat necessary for the survival or recovery of a listed wildlife species and identified as the species' critical habitat in the recovery strategy or action plan for the species.Species Risk Act	
9	Toxic plume	A band of service fluid or other contaminant (e.g. hydrogen sulfide or smoke) resulting from an incident that forces people, including employees, to take protective measures (e.g. gather at a meeting point, shelter in place or evacuate the premises).	OPR
10	Release	Means any type of spill or emission, more specifically those consisting of a runoff, gush or vaporization.	OPR
11	Rupture	An instantaneous release that immediately impacts the operation of a pipeline segment such that the pressure in the segment cannot be maintained.	OPR
12	Emergency response area	Means a geographic area where an emergency has occurred or is about to occur, and which has been established, identified and designated as the deployment site for emergency measures.	Z246.2
13	Emergency planning area	Means a geographic area established around a well, pipeline or facility containing hazardous products and for which a specific emergency response plan is required.	Z246.2

# A.4 Emergency Management System

To ensure the efficient management of emergency situations affecting the infrastructure of Champion's gas network, various emergency management programs have been set up and maintained through the Emergency Management System (EMS).

See OPR sect. 6.3

# A.4.1 Emergency Management Policy

As part of its activities, Champion has adopted (by resolution) and applies Énergir's Emergency Management and Business Continuity Policy. This policy is copied below.

#### Background

The past few decades have been characterized by major natural, technological and human-induced events, resulting in significant human, financial and material impacts each time. It is therefore necessary for us to adapt and find innovative solutions. Énergir aims to protect itself to reduce vulnerability to such events, and also to improve its organizational resilience overall. As a critical infrastructure built on social responsibility, performance and respect, the company is looking to develop an Emergency Management and Business Continuity Policy.

This is to mitigate the impacts on the public and on the health and safety of its employees, contractors and suppliers, as well as the impacts on the environment, its customers, its assets, the company, its shareholders and other partners in an emergency, disaster or crisis situation—be it operational or non-operational in nature.

#### Objective

Énergir undertakes to deploy integrated emergency management and business continuity systems that are coherent and effective. As such, Énergir calls on its employees, suppliers and partners to be responsible for incorporating into their daily duties, tasks and services actions to develop a more concrete approach to emergency management and business continuity. Énergir wishes to fully play its role in improving regional societal resilience and local communities.

### Guiding principles

In order to maximize the achievement of its objectives, Énergir has adopted the following principles:

- Prevent risks, protect people, property and the environment:
  - Identify hazards and assess the real or potential risks that could result in emergency situations to abide by the organization's appetite for risk, and prioritize business functions based on their criticality over time.
  - Implement measures in proportion to the nature of the risks and to the size, location and critical importance of assets to be protected.
- Response preparation
  - a) Establish an emergency corporate, regional and local structure to ensure quick, effective action.

- b) Ensure that people with a role in emergency management and business continuity have the necessary skills.
- c) Implement emergency response and business continuity procedures based on the risk assessment.
- d) Conduct exercises and simulations to test the emergency response and business continuity procedures.
- e) Incorporate into the program the lessons learned and best practices from real events and exercises.
- f) Regularly review the various emergency management and business continuity programs to ensure compliance with our policy, rules and objectives.
- g) Develop, implement and update a process for monitoring, measuring, analyzing and continuously improving emergency readiness and business continuity performance.
- Collaboration and consultation with stakeholders
  - o a) Continuously build awareness among the various emergency response stakeholders.
  - o b) Contribute to developing multi-jurisdictional response practices.

#### Field of application

This policy covers the following activities for each of the management systems:

• Emergency Management System

The Emergency Management System (EMS) covers the activities related to the natural gas distribution system in Québec (QDA) via pipeline and at the natural gas liquefaction, storage and regasification (LSR) plant. The specific activities are:

- a) The activities related to the distribution network, namely operation, maintenance and development (including natural gas, odorant, renewable natural gas and network hydrogen mixtures), and to the LSR plant
- o b) Buildings, head office and business offices
- The EMS also covers the following activities:
  - a) Operation and maintenance of the CNG station, located at the head office on Du Havre Street (entrance on Du Havre)
  - b) Transport of LNG, CNG and ethylene
  - o c) Operation and maintenance of LNG stations
  - o d) Operation and maintenance of LNG tanks under Énergir's responsibility
  - o e) Maritime LNG refuelling
  - o f) RNG production sites under Énergir's responsibility
- Business Continuity Management System
  - The Business Continuity Management System (BCMS) covers the activities related to the natural gas distribution system in Québec (QDA) via pipeline and at the natural gas liquefaction, storage and regasification (LSR) plant.

#### Scope of responsibility

To ensure the success of these management systems, all employees at all hierarchical levels are responsible for actively following this policy, first by considering the impact of their daily actions, for respecting the strategic principles, and for fully carrying out their responsibilities.

### A.4.2 Scope

Champion's Emergency Management System covers activities related to the Québec and Ontario network for the transmission and supply of natural gas via pipeline. Specific activities involve network operations, maintenance and development.

# A.4.3 Legal and regulatory watch

Identifying the legal and regulatory requirements governing emergency measures is critical to upholding the EMS. Therefore, Champion makes the necessary efforts to comply with these requirements.

A legal watch of the laws and regulations applicable to emergency measures is carried out by the Legal Affairs department. Legal Affairs must advise the EMS coordinator of any amendments to laws and regulations in fields that could concern Champion.

A record of applicable laws and regulations concerning emergency measures is prepared and updated.

Champion introduced an Emergency Management System (EMS) to adequately and efficiently meet these requirements.

See OPR sect. 6.5(1)g, OPR sect. 6.5(1)h

# A.4.4 Objectives and targets

The EMS's objective is to mitigate the impacts on both the public and the health and safety of its employees, contractors and suppliers, the environment, its clients, assets, the business, shareholders and other partners in the event of an emergency situation, disaster or crisis—be it operational or non-operational in nature.

To monitor the goal attainment of the various EMS programs, Champion set up a series of objectives and targets to be reached, all monitored at predefined periods. These objectives are included in the Risk Prevention, Emergency Management and Business Continuity dashboard and cover the following:

No.	Performance measures	Definition	Target
1	Emergency response exercises	Total number of emergency response exercises carried out, compared to the total number of exercises planned for each of the following categories: a. Training exercises b. Tabletop exercises c. Operating exercises (simulation)	100%

No.	Performance measures	Definition	Target
		d. Complete exercises (mobilization)	
2a	Training and skills – Emergency structure stakeholders (ECC, EOC and CP Head)	Recertification rate for managers on call (number of persons whose certification is renewed every three years or less).	90% every three years
2b	b Training and skills – Field stakeholders	Total proportion of company employees with a role or responsibility in the field during an emergency (e.g. operations technicians) compared to the total number of company employees who must maintain valid qualifications to perform their emergency management tasks.	95% every four years
3a	Performance of corrective measures	Rate of compliance with the performance deadline for the corrective actions arising from the post-mortem after all emergency interventions (excluding safety actions).	75%
3b	Performance of corrective measures	Performance rate of corrective actions, on time or not, arising from the post-mortem after all emergency interventions (excluding safety actions).	75%

See OPR sect. 6.5(1)a, OPR sect. 6.5(1)b, OPR sect. 6.5(1)s, OPR Appendix A.7

# A.4.5 Roles and responsibilities

#### Emergency management system coordinator

EMS coordination is carried out by the Director, Risk Prevention, Emergency Management and Business Continuity.

The coordinator's main responsibilities are:

- Coordinate the management of emergency measures and ensure that EMS programs and processes are developed, implemented and updated across the entire organization;
- Submit reports on EMS performance and any necessary improvements to upper management;
- Promote greater knowledge of EMS requirements among stakeholders;
- Ensure a liaison with internal and external stakeholders so as to address any issues regarding the EMS;
- As part of the exercise program, establish a simulation schedule, and conduct exercises in line with the schedule;
- As part of the training program, establish the competencies required for each role, ensuring training information is distributed effectively;
- Participate in carrying out relevant risk analysis, in particular for the development and follow-up of emergency management corrective action.

OHS, Environment and Emergency Management executives, to whom the Director, Emergency Management, Business Continuity and Environment reports, are responsible for allocating the necessary EMS coordination resources.

#### Engineering, Asset Management and Geomatics department

As regards Champion's emergency measures management system, the Engineering, Asset Management and Geomatics department is responsible for the following:

- Asset management and network integrity
  - Development, maintenance and monitoring of risk analysis activity for Champion's pipeline. An RPEMBC representative sits on the risk management committee.
- Design engineering and Asset management and network integrity
  - Development, maintenance and distribution of all technical specifications, including those related to emergency situations.
  - Ensure training on these specifications when necessary.
- Network information and geomatics
  - Development and updating of geomatics tools for mapping Champion's infrastructure.
  - Updating of the Champion network's abutting owners.

#### Sustainable Development, Public Affairs and Community Engagement department

As regards Champion's Emergency Management System, the role of the SDPGA department is to:

 Manage the awareness program for abutting owners. An RPEMBC representative is involved in developing EM content as well as increasing awareness among abutting owners.

- Develop crisis communication plan tools and processes;
- Participate in emergency management simulations, as required.

#### École de Technologie Gazière (ÉTG)

As regards Champion's Emergency Management System, the role of the ÉTG is to:

- Provide internal training activities, according to established requirements;
- Monitor the level of training (refresher courses), according to established requirements.

#### Environment, Emergency Management and Business Continuity department

As regards Champion's Emergency Management System, the role of Quality Assurance is to:

• Coordinate the timing of internal audits.

#### Legal Affairs

As regards Champion's Emergency Management System, the role of Legal Affairs is to:

- Ensure legal monitoring;
- Provide requesting departments advice on their legal obligations.

#### Heads of the various departments involved in EM

The heads of the various departments with EM tasks are responsible for knowing and appropriately applying emergency measures within their respective business units. These persons are usually directors.

In this capacity, they must, on a regular basis or whenever there are major changes:

- Participate in the development, implementation and maintenance of all specific intervention procedures and emergency plans involving their teams;
- Ensure that all employees in their department are able to attend training or awareness-raising sessions with regard to the emergency plans and procedures that concern them;
- Ensure that all employees in their department participate in exercises/simulations held to test all strategies and interventions implemented.

See OPR sect. 6.4

# A.4.6 Danger and risk assessment

#### Danger and risk assessment

Danger and risk assessment are parts of the EMS management process for emergency situations.

Various assessments concerning threats, dangers and/or risks have been conducted over the years and are updated based on changes or as required.

- Assessment of threats and risks to safety, under the CSA Z246.1 standard.
- Risk assessments as part of the Transmission Integrity Management Program (TIMP).

A summary report of these danger and risk assessments is prepared to prioritize the risks to address in the emergency management manual. This summary is included in this manual (B - Danger and risk assessment).

#### Regulatory requirements

The exercise and simulation program was introduced as per the sections of the following OPRs: OPR sect. 6.5(1)c, OPR sect. 6.5(1)d, OPR sect. 6.5(1)e, OPR sect. 6.5(1)f, OPR Appendix A.1.

#### Analysis and link to the EMP

In general, given the type of product transported by the Champion infrastructure (natural gas), the risk to Champion's facilities is the same throughout its network. In fact, the emergency management equipment and intervention methods required are the same whenever Énergir technical personnel must take any action on the gas network, regardless of where the incident occurs.

In terms of risk to the population, this depends on the density of the sectors crossed (i.e. whether the zones are urban or not). In this case, local emergency services will adapt their response accordingly (e.g. evacuation of buildings, security perimeters, etc.).

# A.4.7 Information, awareness and training

#### Training programs and skills

Champion develops appropriate training programs to ensure that all of the stakeholders that could be called upon to intervene in emergency situations have the relevant skills. As a result, these training programs are specifically designed for the various roles and can consist of training booklets, labour market practices, etc., all based on the degree of skills deemed necessary.

In this regard, the various workers or stakeholders can attend information sessions (e.g. regional authorities), participate in awareness-raising initiatives (e.g. general employees with no specific emergency roles) or follow training sessions (e.g. those persons with specific roles in the event of an emergency).

For the purposes of this manual, awareness programs group together awareness-raising, consultation and information activities designed to reduce the likelihood and consequences of a severe incident by promoting a greater understanding of risk among stakeholders and deeper knowledge of the measures to be implemented in the event of an emergency. Like other Champion activities, these are executed by Énergir personnel.

Awareness activities (e.g. external stakeholders, abutting owners) are managed effectively to validate their relevance with stakeholders. In this regard, an evaluation is carried out on a regular basis to ensure that the information has been properly understood. The appendices present a summary table of the liaison programs and the methods used to measure performance.

#### Objective of the information, awareness and training program

The objective of the information, awareness and training program is to ensure a greater degree of knowledge regarding established emergency management plans with respect to the roles of the stakeholders in such situations.

#### Regulatory requirements

The information, awareness and training program was introduced as per the following provisions of the OPR: OPR sect. 6.5(1)j, OPR sect. 6.5(1)k, OPR sect. 33, OPR sect. 34, OPR sect. 35, OPR Appendix A.4, OPR Appendix A.5 and OPR Appendix A.6.

#### Emergency centre stakeholders (ECC, EOC and CP Head)

All of the stakeholders with an emergency role (in emergency centres, i.e. level 3 - ECC, level 2 - EOC and level 1 - CP Heads) are trained at a pre-established frequency (every three years or whenever there are major changes). These training sessions seek to provide workers with critical information essential for emergency management. This information can include, without being limited to:

- The roles and responsibilities;
- The emergency management structure;
- The tools developed;
- The feedback phase;
- The governance structure of the emergency management manual, particularly regarding updates;
- The on-call rules.

These courses are offered by the École de Technologie Gazière (ÉTG). They monitor training in accordance with established standards.

#### Field stakeholders (operations technicians, Network Technical Services and contractors)

Field teams (operations technicians, Network Technical Services and contractors) must attend regular training sessions on emergency interventions at facilities similar to those at Champion. Requalification training sessions for the Énergir team take place every four years based on the tasks involved (i.e. skill certification renewal).

These courses are offered by the École de Technologie Gazière (ÉTG). They monitor training in accordance with established standards.

#### External stakeholders

External emergency stakeholders with an active role in emergency interventions are met with during AGSICQ meetings (see section C). The meetings are held to:

- Unveil Champion's Emergency Management Plan, including:
  - Énergir's emergency intervention structure;
  - Énergir's infrastructure and the products transported;
  - o Alignment of roles and responsibilities at the time of an emergency intervention.
- Provide further details on the sharing of responsibilities as regards interventions, when necessary.

The organizations invited to participate in these activities mainly include fire departments.

#### Resident awareness program

Champion established this awareness program to meet its obligations under the CSA Z662 standard and the *Canadian Energy Regulator Onshore Pipeline Regulations* (OPR) (SOR/99-294).

The program's primary objective is to further increase the safety of persons living or working near pipelines who could be impacted in the event of a major incident. The program focuses on communicating key elements, including the primary characteristics and location of the transmission facilities, the measures introduced by Champion and Énergir to ensure the safety of network operations, the safety rules to follow to ensure the integrity of the facilities, and the measures to adopt in an emergency situation. The initiative also includes a "consulting" component for ensuring that the content and type of communications are in line with the targeted audience.

The program takes into consideration the following stakeholders:

- Representatives of the municipalities impacted by the gas lines;
- First responders in the event of an emergency;
- Residents of the potentially impacted area, as defined in the following paragraphs (ref.: emergency planning area, or EPA).

First responders and the municipalities impacted by the gas lines are initially advised, during meetings. These meetings serve to apprise them of the risks in their area, and to offer them tools to integrate the provided information into their emergency management and civil protection. In addition to the key elements noted above, they will also receive information on the properties of natural gas, the respective roles of all of the stakeholders involved in an emergency, and the procedures followed by Champion in such cases. Participants will also be made aware that Champion's emergency management manual is available online (www.championpipeline.com) or can be provided to them on demand. These meetings also aim to confirm the best communication method for keeping citizens informed. It was suggested that an information brochure be sent out every three years, according to a previously updated distribution list. This brochure includes information on methods for identifying the presence of a pipeline, safety rules to follow to ensure the integrity of facilities, and measures to take in the event of an emergency.

In conjunction with this program, specific instances can be identified and prioritized, after which specific measures can be quickly implemented. In addition, a toll-free telephone number and website are available for those who wish to obtain more details or share comments. Although the location of all lines is indicated with signs every 500 metres, a map indicating the location of the line can also be provided to whomever requests one. In all instances, internal stakeholders will be equipped to appropriately respond to comments received or to people who have questions on the business's emergency measures plan.

Furthermore, the program encourages the persons involved to remain vigilant as regards to any work carried out near the transmission network and to inform Champion of any situation they believe may be problematic.

To determine the EPAs, the scenario involving a major leak and torch fire under pressure due to a complete rupture of the pipeline is used. Distance is established with the thermal radiation criterion of 5 kW/m<sup>2</sup>. This complies with the recommendations of the CSA Z246.2-2023 standard. Therefore, this area varies according to pressure class and pipe diameter. This scenario is quite unlikely, but carries the greatest risk, which makes it useful for establishing the number of abutting owners that could be affected.

It also happens to be in line with the content of the Guide pour l'analyse et la gestion des risques d'accidents industriels majeurs of the Conseil pour la réduction des accidents industriels majeurs (CRAIM, 2017).

A feedback session is planned at the end of this communication cycle to evaluate the effectiveness of the measures and improve them, if applicable.

Champion has also introduced an awareness program for assigning owners, to remind those landowners having granted a right-of-way of the factors to take into account with regard to the use of their land to avoid incidents.

There is a process in place to identify abutting owners. It makes it possible to establish a list of the abutting owners at Champion's pipes.

This list was created, and is kept updated, in an Excel document, by the Engineering department.

The intranet address (hyperlink to internal documentation) allowing the Excel document to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

#### Other awareness and communication programs

In tandem with the abutting owner awareness-raising program, other activities have also been introduced to ensure public safety. These activities are carried out as a complement to or at the same time as the awareness program for abutting owners.

#### Excavator awareness

Excavator awareness activities consist of various tools designed to minimize the risk of pipe damage during excavation work. They include:

- Québec's Info-Excavation and Ontario One Call—a call service that is free, quick and easy to use by the general public and contractors planning excavation work.
- A free service for locating main and service lines, which allows Énergir resources to quickly and efficiently respond to requests in this regard, either within a maximum of three working days from the time a request is received or within a longer time period (agreed upon with the requester).
- An excavator surveillance program, in conjunction with the Régie du Bâtiment du Québec (RBQ) and the Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), which is essentially a means of strictly controlling the activities of less vigilant excavators through the implementation of progressive measures.
- Meetings between Énergir representatives and contractors responsible for damaged pipes.
- Meetings with contractors, at the latter's request or at Énergir's initiative.
- Participation in municipal groups, to raise awareness about hiring companies that adhere to best practices regarding excavation.
- Preparation of "<u>Guidelines for working near natural gas pipelines</u>," a document for both those
  responsible for planning and those who carry out excavation and construction activities near gas
  facilities. This document includes guidelines to be followed and specifies general technical
  requirements applicable to these types of activities, in particular potential emergency situations, and
  the rules to follow in the event of an emergency. This document is available to anyone who requests it
  from Énergir's Communications, Public and Government Affairs department. It can also be obtained
  by visiting www.energir.com.

#### Program for risk disclosure to municipalities

This program was developed to help municipalities crossed by a transmission line with their emergency management and civil protection planning.

This activity consists of meeting primary municipal stakeholders to share information regarding the transmission network's location and any associated risks.

The details of this program are presented in Appendix E.7.

#### Training of emergency first responders

The *Fire Safety Act* (c. s-3.4) enables the École nationale des pompiers du Québec (the "School") to grant certain teaching establishments the mandate of creating or giving training courses and study programs. Thus, Champion and Énergir concluded an agreement with the School to develop a first responder training program. A number of training courses are offered by ÉTG. These programs, made available to municipal fire safety and public safety departments, aim to educate participants on the fundamental properties of

natural gas and the characteristics of natural gas facilities, as well as various emergency response methods. The elements addressed during the training sessions include a presentation of the gas network emergency response guide, which is available on the Énergir website. An outline of all the courses offered is available on the ÉTG website.

In addition, each year, discussion workshops are organized especially for the members of the Association des gestionnaires en sécurité incendie et civile du Québec (AGSICQ) to explain our specific response methods and procedures and thereby better coordinate a joint response with these stakeholders.

# A.4.8 Exercise and simulation program

All of the stakeholders must take part in emergency management exercises, based on their involvement with the various emergency units. The frequency of participation is established in parallel, according to role.

#### Objectives of the exercise and simulation program

The exercise and simulation program's aim is to illustrate that the stakeholders have the ability to respond in the event of a major emergency.

#### Regulatory requirements

The exercise and simulation program was introduced as per the provisions of OPR sect. 32 and more specifically, OPR Appendix A.8 – Training and emergency intervention exercises.

#### Exercise schedule

The exercises will be conducted at the frequency determined according to the criteria indicated below. Corrective measures may nonetheless require a second test within a shorter timeframe.

It should be noted that participation in a real event will be taken into account when establishing the need to take part in an upcoming simulation, and this to the extent that the event called for executing procedures inherent to the role, and that this role was adequately taken on (as per an evaluation by the director in charge of the event [2nd or 3rd level] in conjunction with the Emergency Management Coordinator). In such a case, a post-mortem of the situation related to the emergency plan will need to be prepared.

The schedule is based on the following criteria, which aim to determine the number and types of simulations that must be held each year:

- Roles
  - o The frequency, established according to role, is identified in the record.
- Resource identified as being on call.
  - New employee who has never taken part in a simulation as part of their functions.
  - The CP employee was evaluated during a real event by the CP head Succession.
  - The employee took part in a real event and met the expectations of the director responsible for the event (2nd, 3rd level) in collaboration with EM coordinator (debriefing).
- Specific exercise scenario required (e.g. security).
- Legal obligations (e.g. per plan or site).
- Any other need identified by a corrective measure.

• Type of exercise (e.g. alert, escalation, tabletop exercise).

Other types of exercises can be held, as needed.

#### Simulation log

A simulation plan is created to monitor the degree of preparation. This plan comprises:

- The emergency role;
- The names of the persons involved for each role identified;
- The plans and procedures to be tested;
- The simulation frequency for each role, plans, etc.;
- The simulation types and method (e.g. immediate manager, PMUCO, ÉTG).

The intranet address (hyperlink to internal documentation) allowing the simulation plan to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

A post-mortem must be prepared to record that the exercise took place. It must include the following elements:

- Description of the exercise, including the test scenario;
- Exercise participants;
- Equipment tested, if applicable;
- Observations and associated corrective measures.

Post-mortems for company exercises are managed with the Gestion des événements (GDE) event management tool, which allows, in particular, for monitoring observations and corrective measures.

The intranet address (hyperlink to internal documentation) allowing the Gestion des événements event management tool to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

### A.4.9 Documentation management, updates and controlled release

EMS documentation is kept in an internal collaborative site (SharePoint). All of the emergency documentation is at least read-only for Énergir employees. This platform facilitates, in particular:

- Documentation management;
- Management of document sharing;
- Rules on updates, versioning, the removal of obsolete versions, the control of versions released following amendments, as well as final approval by the Director, Emergency Management;
- Distribution lists.

#### The following information conservation rules have been developed (Retention schedule):

The intranet address (hyperlink to internal documentation) allowing the retention schedule to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

No.	Category	Type of document	Conservation period for original document
1	Emergency measures	a) Documents related to an emergency situation, such as reports and other documents submitted or prepared as part of an ECC, CMC, CCC, EOC, etc.	Retain permanently
2		b) Emergency procedures.	Retain for 10 years following date on which the procedure is no longer valid

Champion's Emergency Management Plan is updated once a year, or whenever there are major changes.

Associated documents are updated on a different schedule, the frequency of which is indicated in the documents themselves or via SharePoint's metadata.

Any adjustments to the procedures or change requests should be submitted to the person in charge of the Champion Emergency Management Plan. External requests should be sent to.<u>mailto:communications@championpipeline.com</u>

Lastly, whenever there are major changes to the Champion Emergency Management Plan, the documentation is:

- First reviewed by the person in charge of the EMP and approved by the person in charge of the asset or, for more specific documents (e.g. technical specifications), by the designated owner;
- Distributed through controlled releases. As part of this procedure, it is expected that:
  - o All of the stakeholders identified on the distribution list will be sent new documentation via email;
  - o Recipients will confirm that they have read the updates concerning them.

See OPR sect. 6.5(1)n, OPR sect. 6.5(1)o, OPR sect. 6.5(1)p

# A.4.10 Accountability

The Director, Emergency Management, Business Continuity and Environment prepares a report at predetermined periods for the various persons in charge of the Champion network:

• Management review – annually

In particular, this report takes the following into account:

- Degree of resolution of action plans introduced subsequent to debriefing on incidents or exercises, etc.
- Number of significant incidents over a given period that triggered emergency measures.
- Degree of program deployment, such as training participation, awareness, exercises, etc.

See OPR sect. 6.6

### A.4.11 Audits

An audit process was developed to ensure the quality of the Emergency Management System.

This audit process occurs regularly, over a three-year horizon, to cover all of the EMS's components.

These audits are managed through Énergir's Process Safety Management System (PSMS). Audit results are recorded in a report, per management system. This report is in turn sent to the audited sectors. It is stored in a repository where access is restricted to the appropriate individuals. These documents are archived for three years.

See OPR sect. 6.5(1)v, OPR sect. 6.5(1)w

# A.4.12 Change management

Champion developed a specific procedure to better manage change within its organization. The objective of this procedure is to assess impacts prior to implementing proposed changes.

The intranet address (hyperlink to internal documentation) allowing the procedure to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

This procedure applies to the various changes that could have an impact on one or more of the following elements:

- The integrity and supply reliability of the gas network;
- The health and safety of staff or the public;
- The protection of the environment;
- The corporate image or customer satisfaction;
- The organization's financial stability;
- The mobilization of staff;
- The safety of employees and facilities;
- The emergency and business continuity procedures.

The origin of the change may involve a change in:

- The organization;
- The equipment/devices/tools;
- The technology;
- The standards/regulations/recommended practices;
- The processes/methods/practices;
- The physical environment;
- Etc.

A procedure has also been implemented to prepare for emergency situations during activities that are not part of the organization's regular operations (e.g. construction or maintenance work). This procedure seeks to identify all of the risks and the associated measures to be executed immediately. This information is provided in technical specification 22.06.01 (see Appendix) on the work, which also includes the concept of preventive Operations EOC. This serves as the foundation for developing emergency plans for various activities.

See OPR sect. 6.5(1)i

# A.4.13 Continuous improvement

Lastly, as regards all elements, it is expected that Champion will make every reasonable effort to continually improve its Emergency Management Plan as well as its management system practices. Continuous improvement initiatives must take into account the results of exercises, audits, performance indicators, etc.

See OPR sect. 6.5(1)x

# A.5 Debriefing

Regardless of its scope, an emergency situation always represents a learning opportunity for the organization. Énergir has adopted the means of identifying its strengths, weaknesses, as well as the threats and opportunities represented by such events. This involves gathering, analyzing and sharing the information and feedback obtained subsequent to major incidents or simulations. This will lead to the development of a preventive or corrective action plan.

Debriefing sessions are critical, at all intervention levels. This promotes communication of the observed needs, opportunities for improvement and positive elements noted by one or more of the stakeholders involved.

The aim of the procedure is to establish a debriefing process following major incidents or simulations.

It is intended to clarify:

- The roles and responsibilities;
- The tools available;
- The steps to follow for documenting the final report.

The procedure is designed for the heads of all emergency centres, as and when deemed appropriate.

Debriefings are held in various situations of different nature and with varying impacts. These may include:

- Real events or near misses, in connection with emergency measures, damages to underground infrastructure, safety, business continuity, occupational health and safety, the environment, etc.;
- Simulations;
- Mobilization of emergency centres as a preventive measure (preventive ECC, preventive EOC).

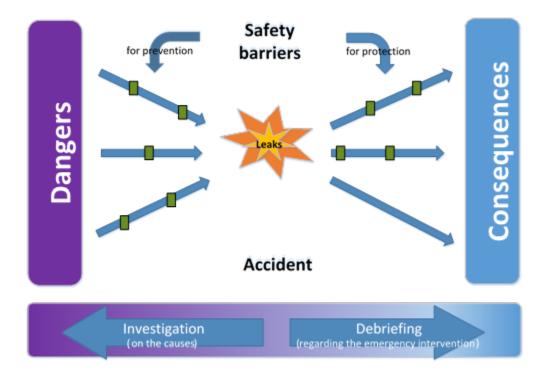
In the event an emergency procedure is not initiated, but the incident requires an investigation to establish the fundamental causes, the investigation is not covered by this procedure; instead, it is conducted in accordance with existing investigation procedures set out by the respective departments (e.g. OHS, Environment, Engineering, IT).

Debriefings should cover all of the emergency centres mobilized during an event or a simulation. The scope can be adjusted, based on the situation.

# A.5.1 Investigations and debriefing

Situational analysis in various areas must be carried out to obtain an overall picture of a given situation. It is possible to conduct evaluations on elements related to:

- the causes. In this case, it will be possible to perform an investigation. This situation is not covered by the procedure;
- the consequences of the emergency and the ensuing intervention. In this case, a debriefing will be carried out. This situation is covered by the procedure.



A distinction must be drawn between the two types of analysis:

- Investigation: fact-finding to reenact the events leading up to the incident.
- Debriefing: a debriefing consists of formally taking into account the experiences drawn from a situation and transmitting the resulting knowledge so as to improve the quality and efficiency of the emergency response system.

# A.5.2 Initiating a debriefing

The purpose of debriefings is to create a collective memory as part of a continuous improvement process. In order to provide a framework and to streamline the effort invested in this documentation, various criteria are established to identify situations that require a debriefing process.

Debriefings must be documented, for example, when:

- an EOC has been mobilized
- an ECC has been mobilized
- a CCC has been mobilized
- a CMC has been mobilized
- the situation so requires. In this case, the on-call ECC EM Coordinator must be contacted to validate the need.

# A.5.3 Hot and cold debriefing

A debriefing session must be held soon after the event is over (hot debriefing). The objective of this session is to gather precise details on the operations and to record volatile information. A second debriefing session must also be conducted, this one within a reasonable time after the event (cold debriefing). This session is designed to gather facts and to deal with observations and analyses. The table in Appendix B lists the primary steps in the debriefing process.

	Hot debriefing	Cold debriefing	
When Immediately after the event		Within a reasonable amount of time, post- demobilization	
Duration	30 to 60 minutes	1 to 3 hours	
Purpose	<ul> <li>To ensure a smooth return to normal operations after the event.</li> <li>To take a step back when considering the situation.</li> <li>To share the experience.</li> <li>To exchange information regarding the interventions and the sequence of events.</li> <li>To discuss the successes and difficulties encountered.</li> <li>To record volatile information.</li> </ul>	<ul> <li>To analyze past events and actions.</li> <li>To take a step back and let time pass before reviewing the events.</li> <li>To identify success factors.</li> <li>To identify improvement opportunities (learning).</li> <li>To gather the information needed to draft a report of the events.</li> </ul>	

Debriefing sessions must be organized to:

- More accurately define the situation impacting the organization and have a shared understanding;
- Review the human, financial, material, political, reputational, environmental, legal and other impacts so that they can be more easily documented;
- Identify the difficulties encountered;
- Evaluate the effectiveness of mitigation measures;
- Evaluate the effectiveness of the intervention (preparation and recovery);
- Identify possible improvements to mitigation and intervention measures;
- Gather the information required to draft the analysis report of the event (EMP).

# A.5.4 Roles and responsibilities

In practice, the following persons have various debriefing responsibilities, based on their respective roles. They must communicate with the on-call ECC EM Coordinator during the event in order to receive the necessary support.

#### ECC Manager

The ECC Manager ensures that a debriefing is performed by all of the emergency centres, particularly those at a lower level, involved in the event for which the ECC was mobilized.

The manager's responsibilities include:

- Gathering all the facts related to the event, as well as all documents and other elements such as photos, activity logs, diagram of the impacted network, etc.
- Overseeing the logistics associated with the feedback sessions, including the preparation of the required equipment.
- Helping the emergency centre members identify all the corrective measures implemented.

#### EOC Manager

The EOC Manager ensures that a debriefing is performed by all the emergency centres, and most particularly those at a lower level, involved in the event for which the EOC was mobilized.

The manager's responsibilities include:

- Gathering all the facts related to the event, as well as all documents and other elements such as photos, activity logs, diagram of the impacted network, etc.
- Overseeing the logistics associated with the feedback sessions, including the preparation of the required equipment.
- Helping the emergency centre members identify all the corrective measures implemented.

#### Head of the CP/FCP

The Head of the CP/FCP ensures the performance of a debriefing of the teams involved (e.g. Network Technical Services, Transmission, Buildings, Safety) in the event for which the CP was mobilized.

The manager's responsibilities include:

- Gathering all the facts related to the event, as well as all documents and other elements such as photos, activity logs, diagram of the impacted network, etc.
- Overseeing the logistics associated with the feedback sessions, including the preparation of the required equipment.
- Helping the emergency centre members identify all the corrective measures implemented.

#### ECC Emergency Management Coordinator

The EM Coordinator:

- Assists in leading the debriefing sessions for all of the emergency centres involved;
- Follows up and implements the recommendations put forth in the debriefing report.

#### Debriefing participants

The debriefing participants are those persons involved in the actual emergency intervention (according to the mobilized emergency centres). These participants are tasked with:

- Communicating the information relevant to the debriefing report's preparation to the coordinator, to enable organizing the post-mortem session. This information can include:
  - o individual activity logs, client communications, client lists, etc.;
  - comments on the manner in which the event was handled, including positive elements and areas requiring improvement.
- Taking part in the debriefing session to identify potential areas of improvement.

# A.5.5 Debriefing report

All the incidents implicating emergency management, damage to underground infrastructure, safety and business continuity are reported in the shared GDE (Gestion des évènements) event management database. This is the official debriefing report. The information contained in this database is not erased.

Each event is documented in an event report (typically in Word format), which is designed to provide feedback on the situation and how it was handled. It includes the following elements:

- The event category and status (active or not).
- A description of the event, including:
  - the date and time it occurred;
  - o the associated alert level;
  - the consequences;
  - $\circ$  the progress of the situation.
- An analysis of the event and the actions taken:
  - Alert and mobilization of the necessary resources: ease of the process for contacting and mobilizing the persons involved, with the right persons mobilized to the appropriate decisionmaking centres.
  - o Communications: clarity of the messages sent and received, sharing of information, etc.
  - Problem-solving: access to information, analysis of the options, identification of necessary actions, intervention procedures, business continuity and recovery plans (BCRPs), health considerations, occupational safety, communication plan, etc.
  - o Available facilities: computer and telephone equipment, etc.
  - o Emergency procedures and documentation.
  - Ease of recording communications and information.
- All the observations made during the feedback sessions. Each observation is associated with:
  - a corrective measure;
  - o a person in charge;
  - o a deadline for resolution;
  - $\circ$  the related follow-up, i.e. the action carried out and the resolution date.

The GDE report can include all the documents (tools), evidence, photos, etc. associated with the event.

Following major IT incidents, debriefing reports are managed in parallel in the ServiceNow application, which groups these broad categories.

### A.5.6 Follow-up and accountability

The EM Coordinator regularly follows up on the corrective measures to ensure they are properly carried out within a reasonable timeframe.

The follow-up of corrective measures is recorded in the EM annual management report. This action thus becomes a performance indicator.

### A.5.7 Intervention specifics for mobilization at the CP level

Given the operational reality in the field, CP heads will take the following action:

- Hot debriefings with fire departments and various teams in the field to review the event
- Cold debriefings between the mobilized CP members, as required (for example, if a notable item was identified in the hot briefing)

Documented in the forms for damage by third parties.

### A.5.8 Debriefing process

The following table outlines the steps to follow in the debriefing process. These guidelines are designed to standardize Énergir practices. They apply to both EOC and ECC emergencies.

No.	Steps	Details
1	Upon closing the emergency centre (ECC or EOC)	<ul> <li>EM Coordinator will present the next steps for the debriefing</li> <li>EM Coordinator will ask to see the documentation produced during emergency management coordination (e.g. individual activity logs, photos, relevant emails, video or sound recordings, work plan and resolution date)</li> </ul>
2	Preparation prior to the debriefing meeting	<ul> <li>Emergency centre members will send the documentation produced during emergency management coordination</li> <li>Emergency centre members will send elements of the emergency management coordination they want to bring to light (elements that are good and those that could be improved)</li> </ul>
3	Debriefing meeting	<ul> <li>EM Coordinator will facilitate the meeting to review the following:         <ul> <li>Debriefing meeting objectives</li> <li>Event process (including the date, and the key steps, elements, decisions, etc.)</li> <li>Main impacts</li> <li>Photos</li> </ul> </li> </ul>

No.	Steps	Details
		<ul> <li>Feedback received</li> <li>Best practices and potential improvements to the emergency response process (some criteria from the Emergency Management System Manual may be used for this purpose)</li> <li>Emergency centre members will agree on the corrective action to be taken, as well as on the lead resources and appropriate timelines identified, if applicable</li> <li>The next steps (enter the corrective measures in the GDE [Gestion des évènements] database and follow up on corrective measures)</li> </ul>
4	Drafting, approval of the debriefing report and follow- up	<ul> <li>EM Coordinator:         <ul> <li>documents the debriefing report</li> <li>obtains the required validations according to the nature of the event</li> <li>puts the debriefing report into GDE, including the description of emergency management, filing of associated documentation (photos, emails, reports, etc.), corrective measures, etc.</li> </ul> </li> <li>Follow-up on corrective measures by the identified persons in charge, within the agreed timeframes</li> </ul>

See OPR sect. 6.5(1)r, OPR sect. 56 g (vii), clauses 3.1.2(e) and 10.4.3.2 CSA Z662

# **B** Danger and risk assessment

# **B.1 Background**

Under Champion's Emergency Management System, documented in the company's emergency management manual, danger and risk assessments must be carried out as needed. These analyses are performed and updated either according to a set schedule or whenever there are major changes. They focus on:

- safety, as per the CSA Z246.1 standard;
- modelling of impacts/quantitative risk analysis;
- Champion Pipeline's Transmission Integrity Management Program (TIMP).

These assessments have been selected for the complementarity of their points of view, particularly in light of the objective pursued.

### **B.1.1 Objectives of the danger and risk assessment**

This danger assessment, within the context of Champion's Emergency Management System, aims to:

- Prioritize the risks and risk scenarios to be considered when creating the Emergency Management Plan;
- Clearly identify the emergency planning areas to use to develop the various elements of the Emergency Management Plan.

To this end, several types of risk analyses were performed on the Champion pipeline facilities.

The results of the risk analyses allow us to identify the scenarios likely to lead to a loss of containment on the Champion network. Ultimately, these results allow us to make adjustments to the contents of Champion's various emergency measures programs and manual, whether these entail specific interventions, awareness initiatives (including residents' awareness program), training or emergency simulations.

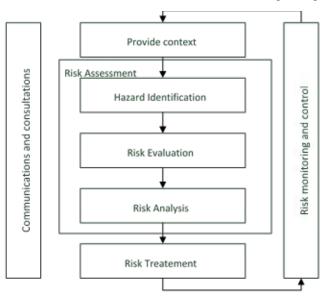
## **B.1.2 Regulatory requirements**

These analyses were implemented under the following regulatory requirements:

- Notes accompanying the Canada Energy Regulator Onshore Pipeline Regulations (OPR), including the following sections: OPR sect. 6.5(1)c, OPR sect. 6.5(1)d, OPR sect. 6.5(1)e, OPR sect. 6.5(1)f, OPR Appendix A.1
- CSA Z662 standard, and more specifically the following sections: Z662 Clause 3.1.2(f), Z662 Clause 10.2.6.1, Z662 Clause 10.5.1.1(b)
- Notice of proposal order, no. MO-006-2016

# **B.2 Risk analysis methodology**

To assess the risks associated with the facilities, persons, environment or property, a comprehensive process was developed on the basis of the ISO 31000:2009 standard regarding risk management.



#### Figure 1 – Risk management process

Based on the reality of the assets and operational processes evaluated, a certain number of specific analysis types are available (e.g. QRA, danger analysis, *Hazid*, *What-If*, *Hazop*, modelling of impacts, etc.). As for the methodology, the following can be taken into account:

- the objective or purpose and the area of application associated with the danger identification;
- the characteristics of the danger;
- the availability and reliability of the data;
- the required resources and know-how for a specific methodology, along with their availability;
- the history of incidents and emergencies at the facility in question and other related facilities;
- unavoidable process restrictions;
- the socio-political framework in which the assessment will be carried out;
- hypotheses on which the approach or method is based.

Each risk analysis performed must:

- Provide context for the analysis, including its scope, purpose, participants, reasons behind the methodology selected, etc.;
- Analyze the risks according to the chosen methodology;
- Handle risks based on the associated priority level during the risk assessment phase. Follow-up of all
  of the identified corrective measures is done using the appropriate management tool (GDE Gestion
  des évènements/event management).

Responsibility for the analyses may vary depending on the systems involved. However, the EM Coordinator should be involved, as they will need to carry out the appropriate follow-up during the development of corrective measures, if applicable.

A danger and threat analysis log is created and kept updated by the Asset Management team.

Lastly, the danger assessment process defined in the Emergency Management System includes:

- an assessment to identify the plausible incident scenarios on the Champion network;
- an analysis of emergency cases, including details of their impacts, likelihood of occurring, etc.;
- modelling of impacts in the event of a loss of containment of the substance.

These elements constitute the foundation for establishing prevention measures (seeking to eliminate or reduce the frequency of risks) or mitigation and preparation measures (seeking to limit the impacts of risks).

# **B.3 Identification of the dangers and risk assessment**

### **B.3.1** Analysis of threats using the IRAS risk analyst software module

This analysis will determine if certain sections of Champion's network require special attention in terms integrity management.

As per standard *ASME B31.8S – Managing System Integrity of Gas Pipelines*, potential threats to pipes can be grouped into three categories: time-related threats, time-independent threats, and consistent threats. These three categories include the following threats:

- Time-dependent threats:
  - o External corrosion
  - o Internal corrosion
  - Corrosion stress cracking
- Time-independent threats:
  - Manufacturing defects, for example:
    - Defective longitudinal pipe weld
    - Defective pipe
    - Construction/welding defects, for example:
      - Defective connection weld
      - Defective manufacturing weld
      - Pipe bending, curvature
      - Exposed wires, damaged pipes, assembly failure
  - Equipment defects, for example:
    - O-ring failure
    - Malfunction of pressure control or relief equipment
    - Defective pump or seal packing
    - Various
- Stable threats:
  - Damage by third parties, for example:
    - Damage by third party or employee (immediate, instantaneous failure)

- Previously damaged pipe (deferred failure)
- Vandalism
- Incorrect operations, for example:
- Factors associated with external forces or climate conditions, such as:
  - Cold
  - Lightning
  - Flooding and heavy rain
  - Ground movement

The identified risk scenarios allow for:

- Implementing prevention and mitigation measures managed within the framework of Champion's TIMP;
- Identifying plausible scenarios for other risk analyses.

## **B.3.2** Modelling of the dispersal in the event of a leak, fire or explosion

Leak dispersal calculations in the event of a complete rupture of the Champion pipeline were carried out by a specialized independent firm. The approach adopted rests on the process for calculating the emergency planning zone (EPZ) shown in section A9 of the Z246.2 standard.

Given the condition of the network analyzed, three dangerous phenomena were considered:

- leak with no ignition;
- leak with immediate ignition, causing a fireball then a torch fire; and
- leak with delayed ignition, causing a flashback.

Among other things, this made it possible to identify the EPZ that could potentially be impacted. This is the area used in the awareness program for abutting owners. It is also provided to local first responders as one of the areas they might want to consider for confirming their ability to intervene.

In practice, modelling was carried out for the two operating sections for Champion:

- Earlton–Rouyn
- Thorne–Témiscamingue

As regards the analysis conducted, the network sections are mainly differentiated by their length and pressure class. The following table depicts the evaluation of the effects for three different scenarios (flammable cloud with no ignition, fireball and torch fire) for both sections.

#### Table 1 – Modelling the impacts of a gas dispersal

	Length Dia. Ext. (km) (mm)			No ignition Flammable cloud			lgnition Fireball			Ignition Torch fire			
Network		Ext.	Dia. Int. (mm)	Pressu re categor y (kPa)	Flammability zones			Radiation (kW/m²)		Thermal load (kW/m²) <sup>4/3</sup> .s		Radiation (kW/m²)	
					UFL (15%)	LFL (5%)	1⁄2 LFL	5	3	1,000	500	5	3
Earlton–Rouyn- Noranda	97	219.1	209.5	7,000	3	4	5	240	305	50	70	210	260
Thorne– Témiscamingue	2	219.1	209.5	1,200	1	2	3	100	125	15	20	100	120

Distances are in metres.

The following figure illustrates the different flammability limits in the event of a gas cloud dispersal following a leak on a pipe in the Earlton–Rouyn section.

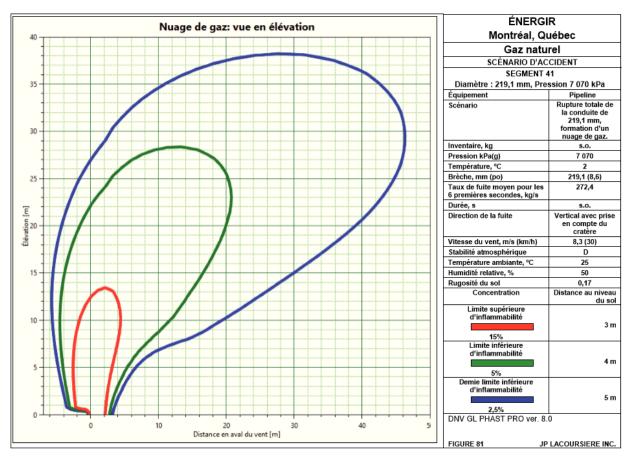


Figure 2 – Elevation drawing of the flammability limits for a leak in the Earlton–Rouyn section

Furthermore, modelling the thermal impacts of the fireball and torch fire scenarios allowed for evaluating the affected areas.

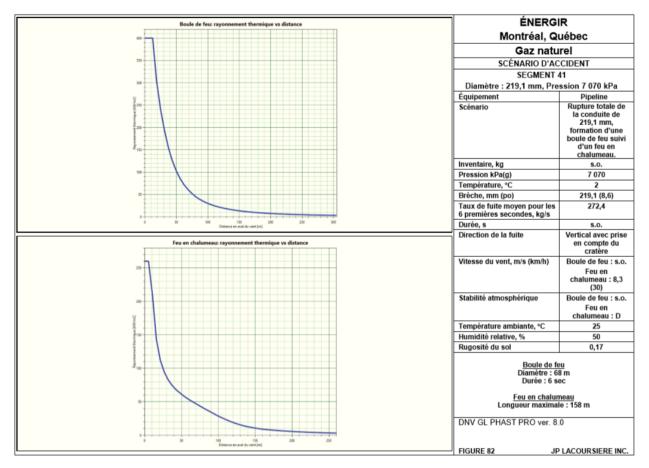


Figure 3 – Thermal radiation for fireball and torch fire scenarios

Finally, the emergency planning area selected is the maximum distance reached, among the different thresholds established, arising from modellings for each of the identified scenarios.

No.	Scenario	Scenario details	Findings
1	Leak with no ignition		A leak with no ignition would have a very little impact on health and safety.
			While the environmental impact would be significant, the result is not selected for defining the EPZ.
2a	Leak with	Resulting in a fireball	In the case of a fireball, the evaluated distance for a thermal load of 1,000 $(kW/m^2)^{4/3}$ .s (fast kinetics) is 50 m (Figure 3).
2b	ignition	Followed by a torch fire	In the case of a sustained fire (torch), the evaluated distance for a thermal load of 5 kW/m² (slow kinetics) is 210 m (Table 1).
3	Leak with delayed ignition	Resulting in a flashback	In the case of a flashback, the evaluated distance at a height of 1 m would be very weak (Figure 2) and thus not selected for the EPZ.

In this regard, the case of a torch fire is the limit scenario for the EPZ. Distance is 210 m from the pipe's centre.

## **B.3.3 Quantitative risk analysis (QRA)**

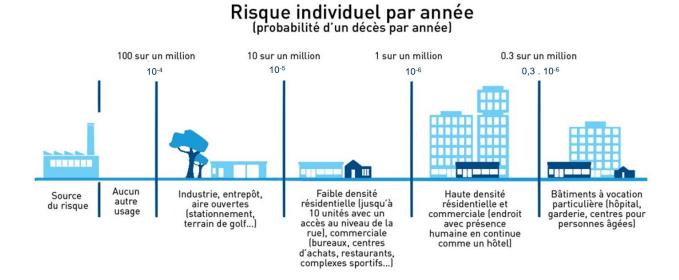
A quantitative risk analysis (QRA) of Champion's facilities was conducted.

It was carried out in accordance with the MIACC (Major Industrial Accidents Council of Canada) criteria often deemed mandatory by government authorities within the framework of certain projects<sup>1</sup>.

This analysis allows for calculating the risk from a geographical perspective (i.e. the annual risk of death for a person who is located near Champion's facilities 100% of the time). It is based on the various leak scenarios that could occur, an evaluation of the consequences of these leaks, and a quantification of the frequency of occurrence for each scenario. The results obtained make it possible to determine, by using the following graph, the acceptable level of land use based on probable risk<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup>See the following publication for reference: (See Risk-Based20Land20Use20Planning20Guidelines-1.pdf (cheminst.ca).

<sup>&</sup>lt;sup>2</sup>For example, if a facility has a level of individual risk of 1.10<sup>-6</sup> at a distance of 50 m from the pipe, a high-density facility (e.g. an office tower) could not be built in this area.



#### Figure 4 – Land use acceptability

The source of risk (to the left on the diagram) is the transmission pipe.

### B.3.4 Assessment of threats and risks to safety, as part of the Security Management Program

As part of the Security Management Program, assessments of threats and risks to safety are carried out (malicious acts). These assessments are also used to identify leak scenarios that could trigger emergency measures, and subsequently amend the contents of the Champion Pipeline's emergency measures program and manual, be it in terms of specific intervention procedures, training or emergency simulations.

Below are the main risk scenarios arising from this assessment:

- Bomb threat/Suspicious package at a station or near a pipe;
- Trespassing in a station building;
- Sabotage involving a valve (e.g. shutting off a valve);
- Theft/vandalism (equipment or vehicles);
- Arson.

Risk scenarios are subsequently used to establish emergency procedures, to implement prevention or mitigation measures, for training or awareness-raising purposes, and during simulations.

# **C** General intervention documentation

A series of intervention procedures and processes has been introduced to allow for properly managing emergency situations. These constitute Champion's Emergency Management Plan (EMP). This plan includes the following:

- General documents concerning emergency interventions (section C); These documents include:
  - The internal emergency coordination organization, outlining the emergency structure, division of roles and responsibilities during the emergency response, etc.
  - $\circ$   $\,$  Coordination with external agencies for the intervention.
- Specific intervention documentation, among them the technical specifications for the network intervention (section D).

# C.1 Background

This section presents the general documents concerning the management of emergency interventions.

The emergency structure and ensuing procedures are grouped together within the emergency management plan. This plan provides a consistent framework for the management of emergencies. The emergency measures plan rests on three essential principles:

- Agility: This is an organization's ability to quickly adapt to change. As a result, the EMP details a
  series procedures to follow in the event of emergencies in an all-risk perspective. Emergency
  response structure Therefore, adapting the response to the situation is essential. This can be done
  by adding resources to the structure (e.g. a second EOC or addition of support and expertise
  centres), adapting the messages released, and carefully choosing the representatives involved for
  the duration of the emergency.
- Subsidiarity: The term means seeking out the most appropriate hierarchical level to whom the management of emergencies should be entrusted. In other terms, the lowest hierarchical level should be mandated.
- Substitution: The notion of substitution, which goes hand in hand with the principle of subsidiarity, promotes having the upper level step in to support a small entity whenever a problem proves beyond the scope of the latter's abilities. In other words, during a major event, the ECC must provide support to the EOC for the supply of resources (e.g. material, human, etc.) as well as with regard to decision-making (e.g. decision to cut off supply to major industries clients), while complying with the previous principle.

Therefore, Champion uses a four-level incident management framework (operational, tactical, strategic and executive). Each of these levels consists of members with clearly defined roles and responsibilities to allow for coordinated control of the issues associated with the emergencies. This emergency structure:

- is based on the system developed by Public Safety Canada (ESM Emergency Site Management), a system developed according to the Incident Command System (ICS) principle;
- Meets emergency response requirements set out in the Frame of Reference Pipeline Response.

Similarly, a system of alerts and mobilization measures and alert criteria for the various types of emergencies seek to make escalation within the structure more fluid.

The roles and responsibilities of the stakeholders mandated to efficiently coordinate the measures taken with outside authorities during an intervention are described in this section.

# C.2 Emergency response structure

Champion's emergency response structure is essentially the same as that established by Énergir, which is available by clicking the following link:

#### **Emergency structure**

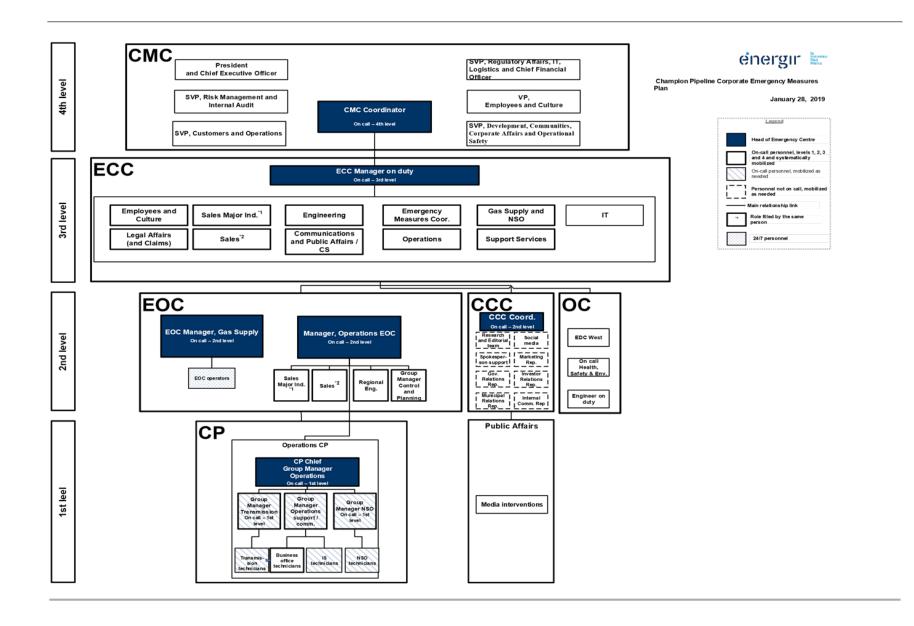
The intranet address (hyperlink to internal documentation) allowing the emergency structure to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.3, clauses 3.1.2(b) and 10.5.2.1 CSA Z662

The following diagram depicts Énergir's emergency structure. Among other things, this diagram provides further information on the following:

- The diagram presents the various levels of the structure (from the field to the executive committee).
- The direct link between the CP Head at Énergir and the CP for emergency services (particularly the fire department).

As indicated above, these principles can be tailored to a given situation.



# C.3 Description of the emergency centres

#### Description of the emergency centres

The intranet address (hyperlink to internal documentation) allowing the description of the emergency centres to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

# See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.3, clauses 3.1.2(b) and 10.5.2.1 CSA Z662

# C.3.1 Command Post (CP) or Facility Command Post (FCP)

Name and abbreviation	Command Post (CP) or Facility Command Post (FCP)			
Management level	Operational			
Location	At the site of the incident, inside the emergency operations perimeter			
Scope of the actions	Emergency operations perimeter			
Extent of anticipation of events	Between 0 and 1 hour			
Mobilized by	Head of the CP or FCP when the impact of the emergency reaches green- level criteria			
Scope of activity – CP	<ul> <li>Implementation of the immediate actions necessary to: <ul> <li>Secure the site (for example):</li> <li>Gas level readings</li> <li>Safety of the stakeholders, employees and public at the emergency site (e.g. evacuation)</li> <li>Layout of the emergency site in conjunction with external emergency services personnel</li> <li>Stop the leak/control or neutralize the danger</li> <li>Repair (restoration)</li> </ul> </li> <li>Time permitting and if there is no threat to personal safety, options for stopping the leak/neutralizing the danger are submitted to the EOC for validation</li> <li>Complying with the intervention limits (CP vs. EOC vs. ECC)</li> <li>Information sharing with the EOC or ECC (when the EOC is unavailable)</li> <li>Identification of needs as regards resources and logistics</li> </ul>			

Name and abbreviation	Command Post (CP) or Facility Command Post (FCP)
	Cooperate with public authorities (same level) at the site
	<ul> <li>Implementation of the immediate actions necessary to:</li> <li>Secure the site (for example):</li> </ul>
	<ul> <li>Safety of employees and the public at the emergency site (e.g. evacuation)</li> <li>Layout of the emergency site (in conjunction with external emergency services personnel)</li> </ul>
FCP scope of activity	<ul> <li>Use protection systems (e.g. emergency button) to neutralize or control the danger</li> </ul>
	<ul> <li>Time permitting and if there is no threat to personal safety, options for stopping the leak/neutralizing the danger are submitted to the ECC for validation</li> <li>Complying with the intervention limits (FCP vs. ECC)</li> <li>Information sharing with the ECC</li> <li>Identification of needs as regards resources and logistics</li> <li>Cooperate with public authorities (same level) at the site</li> </ul>

# C.3.2 Operations Centre (OC)

Name and abbreviation	<u>Operations Centre (OC)</u> Division or department responsible for the company's critical or high- level activities and which must continue to operate normally in an emergency situation.
Management level	Operational and tactical
Location	Telework via the Teams application, in its regular offices or at the standby site (should replacements be required)
Scope of the actions	According to the critical and high-level activities of each division or department
Extent of anticipation of events	Between 0 and 3 hours
Mobilized by	Operational at all times, according to the regular hours of operation and the times established in the business impact analysis.

Name and abbreviation	Operations Centre (OC) Division or department responsible for the company's critical or high- level activities and which must continue to operate normally in an emergency situation.			
	Can be mobilized outside of regular business hours when necessary.			
Scope of activity – EM	<ul> <li>Responding to emergency centres' (1st, 2nd and 3rd levels) requests for emergency management support.</li> <li>Anticipating the possible impacts of an event in order to plan the necessary additional resources and special logistics.</li> </ul>			
Scope of activity – BCRP	<ul> <li>Assessing the impact on its own functions.</li> <li>Advising the ECC manager of the triggering of the BCP (for 24/7 functions).</li> <li>Sharing information with the person in charge at the ECC.</li> <li>Coordinating all the business continuity activities with internal, external and special resources, in order to: <ul> <li>Ensure the ongoing activities of the impacted divisions or departments;</li> <li>Ensure the efficient and effective implementation of business continuity strategies</li> </ul> </li> <li>Ensure the return to normal activities of the divisions or departments.</li> </ul>			

# C.3.3 Emergency Operations Centre (EOC)

Name and abbreviation	Emergency Operations Centre (EOC)
Management level	Tactical
Location	Telework via the Teams application, in its regular offices or at the standby site (should replacements be required)
Scope of the actions	Emergency operations perimeter and the area in question (if applicable).
Extent of anticipation of events	Between 1 and 3 hours
Mobilized by	EOC manager (when the impact of the emergency reaches yellow-level criteria).

Name and abbreviation	Emergency Operations Centre (EOC)			
Scope of activity – General	<ul> <li>Support the CP to ensure that all required immediate actions are initiated.</li> <li>Maintain relations with local and regional authorities at the same level.</li> <li>Anticipate needs as regards resources and logistics.</li> <li>Information sharing with the acting ECC manager and the Head of the CP.</li> <li>Anticipate possible impacts of the event, to provide for the mobilization of additional resources and the necessary tactical actions.</li> </ul>			
Management level	<ul> <li>Time permitting and if there is no threat to personal safety:         <ul> <li>Validate the intervention methods, to ensure the safety of stakeholders, personnel and the public at the emergency site.</li> <li>Adequately secure the overall area and if necessary, help with the identification and development of alternate intervention plans.</li> <li>Validate the plugging alternatives (e.g. plans A, B and C) put forth by the CP and submit them to the ECC for validation.</li> <li>Validate the repair method (restoration) and help identify and develop alternate repair plans.</li> </ul> </li> </ul>			

# C.3.4 Emergency Coordination Centre (ECC)

Name and abbreviation	Emergency Operations Centre (EOC)
Management level	Strategic
Location	Telework via the Teams application, in its regular offices (Pipeline room) or at the standby site (Impact room at the ÉTG should replacements be required)
Scope of the actions	Throughout the company
Extent of anticipation of events	Between 3 and 24 hours
Mobilized by	ECC Manager (when the impact of the emergency reaches red-level criteria)

Name and abbreviation	Emergency Operations Centre (EOC)		
Scope of activity – General	Coordinated and consistent information sharing with the head of the CMC, the EOCs and the mobilized operations centres. Validate the actions proposed by the EOC and CCC. Anticipate possible impacts of the event to provide for the mobilization of additional resources and the necessary strategic actions. Corporate Business continuity of the company's other activities Relations with upper management Claims (insurance-legal proceedings) Legal impacts Internal and external communication plan (during and after the incident) Municipal Compliance with local and municipal regulations Support for the activities of municipal stakeholders Sharing of expertise Coordination of interventions with municipalities Information regarding impacts of the event Consensus building with regard to media communications (via the CCC) Government Compliance with provincial and federal regulations Support for the activities of provincial and federal workers Sharing of expertise Information regarding impacts of the event Compliance with provincial and federal regulations Support for the activities of provincial and federal workers Sharing of expertise Information regarding impacts of the event Monitoring of long-term impacts Communications Information for all Énergir personnel Information for all Énergir personnel Information for clients General public information Information watch and media relations (via the CCC)		

Name and abbreviation	Emergency Operations Centre (EOC)		
	<ul> <li>Media coverage (via the CCC)</li> <li>Support for EOC* operations</li> <li>Logistical support</li> <li>Expert support</li> <li>Anticipation of medium- to long-term needs</li> <li>Strategic planning</li> <li>Coordination of resources</li> </ul>		
Scope of activity – EM	<ul> <li>Once the immediate danger has been contained: <ul> <li>Validate the intervention methods, to ensure the safety of stakeholders, personnel and the public at the emergency site.</li> <li>Validate the security of the area and help with the identification and development of alternate intervention plans.</li> <li>Validate the method for plugging the leak or neutralizing the danger and help with the identification and development of alternate intervention plans.</li> <li>Validate the repair method (restoration) and help identify and develop alternate repair plans.</li> </ul> </li> <li>Coordinate all emergency activities with internal, external and special resources, to limit the impacts on employees, the public, the environment, and the company's assets, reputation and finances</li> <li>Time permitting and if there is no threat to personal safety, validate alternate plugging options (e.g. plans A, B and C) put forth by the EOC and submit them to the CMC for confirmation</li> </ul>		
Scope of activity – BCRP	<ul> <li>Declare the triggering of the company's business continuity and recovery plans (BCRPs) to maintain a minimum service level for the organization as a whole</li> <li>Coordinating all the business continuity and emergency management activities with internal, external and special resources, in order to:         <ul> <li>Ensure that Énergir continues its mission</li> <li>Ensure the efficient and effective implementation of business continuity strategies</li> </ul> </li> </ul>		
Scope of activity – IT	Declare the triggering of the IT recovery plan		

Name and abbreviation	Crisis Management Centre (CMC)	
Management level	Policy	
Location	Telework via the Teams application, in its regular offices (Board Room) or at the standby site (training/skills room at the ÉTG)	
Scope of the actions	The overall company, shareholders and business partners	
Extent of anticipation of events	More than 24 hours	
Mobilized by	<ul> <li>CMC Coordinator, when the impacts of an emergency lead to a real or potential crisis, e.g.:</li> <li>The resources required to respond to the emergency are significantly beyond what is normally available and planned;</li> <li>Doubt is cast on Énergir's credibility, values and basic tenets.</li> </ul>	
Scope of activity	<ul> <li>Relations with political leaders</li> <li>Public communications (e.g. spokesperson as needed)</li> <li>Company's integrity and reputation</li> <li>Relations with shareholders and business partner executives</li> <li>Unblocking of extraordinary emergency funds for event management purposes</li> <li>Decisions taken for events with a widespread impact (e.g. shutting off supply to an entire city)</li> <li>Significant voluntary interruption (e.g. long term or with major impact) of Sales Major Industries clients</li> </ul>	

# C.3.5 Crisis Management Centre (CMC)

# C.3.6 Crisis Communication Centre (CCC)

Name and abbreviation	Crisis Communication Centre (CCC)
Management level	Strategic corporate support
Location	Telework via the Teams application, in its regular offices (first floor at headquarters or room 1.1 at the ÉTG)
Scope of the actions	Overall company
Extent of anticipation of events	Between 0 and more than 24 hours
Mobilized by	CCC Coordinator

Name and abbreviation	Crisis Communication Centre (CCC)
Scope of activity	<ul> <li>Company's integrity and reputation</li> <li>Public affairs issues</li> <li>Media relations, including watch activities (traditional and social media), drafting and submission of key messages (lines), deployment of one or more spokespersons</li> <li>External communications, including contacts with the customer service team (CS)</li> <li>Government affairs issues, including municipal, provincial and federal relations</li> <li>Sustainable development issues (corporate citizen, environment)</li> <li>Internal communications</li> <li>Call response and management for the Public affairs contact number</li> <li>Support for the CP, EOC, ECC and CMC</li> </ul>

# C.3.7 Support and Expertise Centre (SEC)

Name and abbreviation	Support and Expertise Centre (SEC)	
Management level	Specific, timely and ad hoc support	
Location	According to needs, potentially external	
Scope of the actions	Response to specific questions	
Extent of anticipation of events	None	
Mobilized by	Emergency centres requiring specific support and expertise (e.g. Engineering, Public Affairs, etc.)	
Scope of activity	Support for the CP, ECO, CCC, ECC and CMC, according to needs	
Examples of SEC	<ul> <li>Engineering SEC         <ul> <li>Assessing the degree of resistance of a leaking corroded pipe</li> </ul> </li> <li>Public Affairs SEC         <ul> <li>Helping to organize press briefings</li> </ul> </li> </ul>	

Name and abbreviation	Support and Expertise Centre (SEC)
	<ul> <li>Legal Affairs SEC         <ul> <li>Responding to specific legal questions during an emergency</li> </ul> </li> </ul>

# C.4 Decision-making autonomy

In an emergency, stakeholders need to make a number of decisions, which may have varying degrees of impact.

The following guidelines show whether or not a decision should be escalated.

No.	Guideline	Details
1	The highest mobilized level makes the decisions with the highest impact.	These decisions often depend on the alert criteria in deciding whether or not to mobilize the emergency centre. For situations that meet the yellow alert criteria, the EOC is the highest mobilized level.
2	Decision-making is escalated if <b>time</b> permits and <b>the safety of individuals</b> is not at risk.	<ul> <li>Situations are identified based on the time needed to take action/validate action plans.</li> <li><i>Immediate danger</i>: Existing conditions that will have a major direct impact Action must be taken without delay. Depending on the nature of the decision, it may not be necessary to escalate the decision-making process, but the decision-maker must be advised after the event.</li> <li><i>Imminent danger</i>: There are conditions that will have impacts in the near future. However, there is enough time to consult with the various stakeholders and emergency structure levels.</li> </ul>

# C.5 Roles and responsibilities in emergency centres

The roles and responsibilities of the persons in charge of the emergency centres are described in the following sections. These checklists were designed to:

- Clearly outline the sharing of responsibilities between the various emergency structure levels;
- Be used as a reference tool in the event of an emergency.

These checklists are used to train emergency management personnel from Énergir.

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.3, clauses 3.1.2(b) and 10.5.2.1 CSA Z662

# C.5.1 CMC Coordinator

\*\*\* Read the entire list before taking action \*\*\*

Tasks can be delegated if necessary

1. Immediate actions (prior to CMC mobilization)		
CMC Coordinator		Note the preliminary information regarding the event.
		Analyze the scope of the incident.
		Prepare a brief assessment of the anticipated risks and the immediate actions required.
		Should the ECC not be mobilized, but the alert level is yellow or red due to the environmental or personal safety criteria, contact and advise the Vice President, Human Resources, of the situation.
		If the ECC is mobilized due to the environmental or personal safety criteria, contact and advise the Vice President, Human Resources, of the situation.
		Determine whether or not the CMC should be mobilized. The CMC shall be considered mobilized when there is a quorum (once three members are present, including the coordinator).
		If the CMC is mobilized, ask the EDCW to send a message (SMS) to all the employees already mobilized (e.g. ECC, Operations EOC, CCC, Public Affairs, hydraulic and mapping engineer, etc.).
		If required, advise the CMC members to proceed to the Board Room as soon as possible, join the telephone bridge or log into the Teams meeting.
		Go to the designated CMC room as quickly as possible or set up a telephone bridge.
		Make sure to have the most up-to-date on-duty personnel chart in hand.
		Open an individual activity log.

	2. Intervention (when the ECC is mobilized)
CMC Coordinator	Make a preliminary verbal report on the situation to CMC members.
	Pay special attention to the accuracy of the emergency management information received and transmitted.
	To the extent that there are no substitutes, based on the nature of the situation and the absent CMC members, form a committee to evaluate the necessity of mobilizing other resources around the table.
	Go around the table to ensure that all CMC members have properly understood the issues and consequences associated with the emergency situation. For each round table, use the APC (analysis, prioritization, coordination) chart to prioritize the issues that should be addressed during the management cycle underway:
	<ul> <li>Personal safety (public and employees);</li> <li>Environmental protection;</li> <li>Company's integrity and reputation (media impact);</li> <li>High-level relations with shareholders and business partners;</li> <li>Unblocking of extraordinary emergency funds for event management purposes;</li> <li>High-level political relations (e.g. mayors, ministers, PMs);</li> <li>Decisions taken for events with a widespread impact (e.g. shutting off supply to an entire city);</li> <li>Business continuity of the company's other activities;</li> <li>Actions to take to show due diligence (legal);</li> <li>Financial impacts;</li> <li>Corporate interests;</li> <li>Information sharing with the ECC;</li> <li>Communications to Énergir personnel, to exposed individuals and to the Board of Directors (in coordination with the Corporate Secretary).</li> </ul>
	Ensure that persons in charge are designated to the CMC to handle each of the issues as well as prepare and implement appropriate action plans.
	Consult CMC members to determine whether other resources should be mobilized and if so, which ones (internal human resources, external resources or subcontractors, special equipment, SEC).
	Confirm whether all the CMC members must remain mobilized; if not, demobilize some members, as the case may be.
	Anticipate how the situation might evolve (e.g. potential deterioration).

2. Intervention (when the ECC is mobilized)		
		Ensure that regular situation reports are provided to the ECC. After each communication with the ECC, determine the time of the next communication.
		If required, make sure that an official communication link is established and maintained with the external stakeholders at your management level (e.g. the government). As needed and at the request of the competent authorities, delegate a company representative to act as a liaison officer.
		Regularly check for messages (voicemail, email, texts).
		If required, approve extraordinary expenses for implementation of the Emergency Management Plan and the business continuity plan.
		Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
		Keep those items that could serve as proof for future investigations.

2.1 Team change			
CMC Coordinator		If the incident continues, split the CMC in two to ensure the presence of a replacement team.	
		Make sure that the other CMC members <u>and all external stakeholders</u> <u>involved</u> are notified of the team change, as agreed.	
		At the time of the change, summarize all relevant internal and external communications and actions for the replacement team.	
		Ensure that the undertaken actions that are still underway are transferred to the replacement team.	
		Make sure that the replacement team has your contact details.	

3. Demobilization of the emergency centres		
CMC Coordinator		Determine, in conjunction with the ECC, whether the CMC should be demobilized.

	If there are still unresolved issues following the CMC's demobilization (e.g. monitoring of a leak, repairs, restoration, make safe), make sure that matters are adequately taken under control and designate someone to follow up.
	If demobilizing the CMC is possible, notify the ECC and EDCW.
	Make sure to record the information required for completing the individual activity log.
	Keep all elements of proof and submit the individual activity log to the ECC Emergency Management Coordinator (for the incident report).

4. Post-mortem (debriefing)		
CMC Coordinator		Participate in debriefing sessions and validate the post-mortem report.
		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

# C.5.2 ECC Manager

\*\*\* Read the entire list before taking action \*\*\*

Tasks can be delegated if necessary

	1. Immediate action (prior to ECC mobilization)		
ECC Manager		Note the preliminary information regarding the event (including the EOC's situation report) and analyze the scope of the incident.	
		Prepare a brief assessment of the anticipated risks and the immediate actions required.	
		Establish the alert level (using alert criteria as necessary).	
		Determine whether the ECC must mobilize itself on Teams, at its primary or alternate centre, or via a telephone bridge.	
		If necessary and prior to the physical mobilization in the emergency room or by Teams, ask the EDCW to send a message to the ECC on-call personnel requesting that they join the telephone bridge so they can be presented with the situation.	
		Arrange with the Emergency Management Coordinator to have them send the Teams invitation to the mobilized employees, or do it oneself (ECC Manager).	
		If required, ask the EDCW to mobilize the ECC at the designated site. Ensure that the message is transmitted to the mobilized persons (ECC members) and persons alerted (e.g. members of the Operations, IT or Transportation EOC, on-call engineer, on-call Public Affairs personnel, CCC Coordinator).	
		Initiate the telephone bridge or Teams meeting at the scheduled time or proceed to the designated ECC room as soon as possible, depending on the option chosen.	
		Should the ECC not be mobilized, but the alert level is yellow or red due to the environmental or personal safety criteria, quickly notify the person responsible for the crisis management centre (CMC) (Vice President, Operations).	
		If necessary, notify the CMC Coordinator, including in the case of a preventive ECC, and indicate that the coordinator was notified on the management cycles table upon your arrival in the room.	

1. Immediate action (prior to ECC mobilization)		
		Make sure to have the most up-to-date on-duty personnel chart in hand.
		Open an individual activity log.

	2. Intervention (when the ECC is mobilized)
ECC Manager	When a call comes in from the EOC, note the time of the call and log it in the management cycles table upon your arrival in the room.
	If a telephone bridge is planned prior to the arrival of people to the ECC room, give a first report of the situation to members.
	Carry out an analysis and establish a list of priority issues associated with the alert criteria.
	Ask the EMC to visually identify the site of the incident (Google gas network).
	Ask the EMC to open the situation report (RAPSIT) located on the SharePoint PMUCO.
	Establish operating rules for the ECC. Notify members at the table that incoming and outgoing calls are not permitted during the round table or during the EOC's situation report on the spider telephone system (with the exception of an urgent message via text), and that the information to be shared is that which could have an important impact related to the incident.
	Submit a first situation report to the ECC personnel which lists the issues to be addressed.
	Pay particular attention to the accuracy of the emergency management information received and transmitted (make sure to confirm this information).
	Ask everyone to confirm their role within the ECC.
	Go around the table to ensure that all ECC members have understood the issues and consequences associated with the emergency situation. Prioritize the order of intervention of the various representatives at the table, according to the situation and the priority issues.

2. Intervention (when the ECC is mobilized)
For each round table, use the APC chart (analysis, planning, coordination) to prioritize the issues to be addressed during the management cycle underway concerning the following points:
<ul> <li>Personal safety (public and employees);</li> <li>Environmental protection;</li> <li>Company's integrity and reputation;</li> <li>Confirmation of the actions proposed by the second management level (EOC) or the first management level (CP) when the EOC is absent;</li> <li>Operations support (resources, logistics) for the EOC or CP (when the EOC is absent);</li> </ul>
<ul> <li>Information sharing with the CMC or EOC (or the CP when EOC is absent);</li> <li>Coordination of special resources.</li> </ul>
Corporate
<ul> <li>Business continuity of the company's other activities</li> <li>Relations with upper management</li> <li>Claims (insurance-legal proceedings)</li> <li>Legal impacts, due diligence</li> <li>Internal and external communication plan (during and after the incident)</li> </ul>
Municipal
<ul> <li>Compliance with local and municipal regulations</li> <li>Support for the activities of municipal stakeholders</li> <li>Sharing of expertise</li> <li>Coordination of interventions with municipalities</li> <li>Information regarding impacts of the event</li> <li>Consensus building with regard to media communications (via the CCC)</li> </ul>
Government
<ul> <li>Compliance with provincial and federal regulations</li> <li>Support for the activities of provincial and federal workers</li> <li>Sharing of expertise</li> <li>Information regarding impacts of the event</li> <li>Monitoring of long-term impacts</li> </ul>
Communications
<ul> <li>Information for all Énergir personnel</li> <li>Information for all of the people exposed to or affected by the incident</li> </ul>

2. Intervention (when the ECC is mobilized)
<ul><li>Information for clients</li><li>General public information</li></ul>
Ensure that persons in charge are designated to handle each of the issues as well as develop, implement and monitor appropriate action plans.
Consult the ECC members to determine whether other resources should be mobilized and if so, which ones (internal human resources, external resources/subcontractors, special equipment, SEC) within established internal guidelines (e.g. PrOHS 78 regarding hours worked).
Clarify the communication links with other emergency centres (information structure) with ECC members, to facilitate the exchange of information (e.g. links between the EOC Regional Director, Sales Development, the ECC Sales leader and the CMC Vice President, Sales) without impacting the lines of decision-making.
Confirm, on an ongoing basis, whether all the CMC members must remain mobilized; if not, demobilize some members, as the case may be.
Anticipate how the situation might evolve (e.g. potential deterioration).
<ul> <li>Ensure that regular situation reports (via the situation report) are provided to the EOC (or the CP when the EOC is absent). After each communication with the EOC, determine the time of the next update.</li> <li>During these periods, make sure to cover:</li> <li>Status of situation</li> <li>Possible scenarios</li> <li>Work plans for each group or emergency centre</li> <li>Needs or items to be validated</li> <li>Next steps</li> </ul>
Make regular situation reports to the person in charge of the CMC according to a special communication calendar.
When required, see to the development and maintenance of a communication link with strategic external stakeholders (e.g. emergency centres of a city or government departments). As needed and at the request of the competent authorities, delegate a company representative to act as a liaison officer.

2. Intervention (when the ECC is mobilized)		
		Regularly check for messages (voicemail, email, texts).
		Approve extraordinary expenses for implementation of the Emergency Management Plan and the business continuity plan.
		Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
		Keep those items that could serve as proof for future investigations.
	LN( LN(	G incident (LSRP, Transportation, Station, Fuelling, Business using G)
		In collaboration with the Director, EOC LSRP or EOC Transport, determine if the EOC team mobilization is necessary to support the EOC intervention regarding legal, governmental, media and corporate aspects.

2.1 Team change		
ECC Manager		If the event persists, notify the replacement.
		Make sure that the EOC, the other ECC members, the CMC coordinator <u>and all external stakeholders involved</u> are notified of the team change, as agreed.
		Summarize all relevant internal and external communications and actions for the replacement team.
		Ensure that the actions still underway are transferred.
		Make sure that the replacement team has your contact details.
		Submit a copy of the individual activity log to the on-call emergency management coordinator (for the incident report).

3. Demobilization of the emergency centres		
ECC Manager		In conjunction with the EOC (or the CP if the EOC is absent), establish criteria prior to the demobilization of the EOC and ECC.

3. Demobilization of the emergency centres		
		If there are still unresolved issues following the demobilization (e.g. monitoring of a leak, repairs, restoration, make safe, media watch), make sure that matters are adequately taken under control and designate someone to follow up.
		Evaluate the need to issue immediate corrective measures for the event.
		If demobilization is possible, ask the EDCW or the EDCE to send a message indicating that the ECC demobilized.
		Make sure to record the information required for completing the individual activity log.
		Keep all elements of proof and submit the individual activity log to the on- call emergency management coordinator.

4. Post-mortem (debriefing)		
ECC Manager		Participate in debriefing sessions.
		Validate the post-mortem report.
		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

# C.5.3 ECC Emergency Management Coordinator

\*\*\* Read the entire list before taking action \*\*\*

Tasks can be delegated if necessary

1. Immediate action (prior to ECC mobilization)				
Emergency Management Coordinator		Note the preliminary information regarding the event (including the situation report) and analyze the scope of the incident.		
		Prepare a brief assessment of the anticipated risks and the immediate actions required.		
		On call from the public safety centre, provide the required information for the City to manage the incident. If necessary, contact field personnel for more information on the current situation		
		If required due to the degree of severity of the situation, ensure that the ECC Manager on duty has been advised, along with all other required levels.		
		Coordinate with the ECC Manager if necessary to determine if the first call will be made using a telephone bridge or through Teams. Assist in issuing an email invitation to the necessary ECC members in Teams as required.		
		Upon receiving a message regarding ECC mobilization (via SMS), follow the instructions (e.g. go to the designated ECC room as quickly as possible, join the telephone bridge, log into the Teams meeting).		
		Make sure to have access to the most up-to-date on-duty personnel chart.		
		Start up all of the equipment in the ECC room and ensure everything is running as it should (monitors, computers, projectors, telephone systems, printers, light pencils, clock, etc.).		
		Open a shared activity log on the Teams emergency channel		

2. Intervention (when the ECC is mobilized)		
		Obtain an initial verbal situation report from the ECC Manager and look over the situation report.

	2. Intervention (when the ECC is mobilized)
Emergency Management Coordinator	Participate in the ECC Manager's round tables to ensure that all issues and consequences associated with the emergency situation have been identified.
	During these round tables (APC), ensure that ECC discussions take into consideration:
	<ul> <li>The issues associated with public safety and civil protection needs (including first responders, such as firefighters, police officers, etc.);</li> <li>Employee safety and well-being (workplace health and safety);</li> <li>The environmental issues;</li> <li>The issues related to employee safety and the security of our facilities;</li> </ul>
	The issues related to business continuity and recovery.
	Make sure to record all the principal information in the relevant tables and maps:
	<ul> <li>Complete and regularly update the situation report (RAPSIT).</li> <li>Complete and regularly update the shared activity log.</li> <li>Complete and regularly update the hours in the ECC management cycle (clock).</li> </ul>
	Share access to the shared activity log with the ECC members and ensure that it is on the Teams channel for the current incident.
	Evaluate the need to deploy a resource at the municipal emergency management centre.
	Coordinate with the ECC Public Affairs Manager.
	Ensure that the government authorities responsible for environmental issues (at the municipal, provincial and federal levels) are notified by the on-call person for workplace health and safety/environmental matters if necessary (e.g. ECC mobilization in the event of a leak).
	Refer to procedure PMU CORPO OP 01 Avis aux autorités en cas de rejet accidentel à l'environnement ou autre urgence.
	Ensure that the government authorities responsible for workplace health and safety (e.g. CNESST in Québec and WSIB/TSSA in Ontario) are notified by the on-call person responsible for environmental matters and OHS, if necessary. Quickly advise the CNESST whenever one (1) of the following four (4) criteria is met:
	Death of a worker (employee or contractor);

2. Intervention (when the ECC is mobilized)
<ul> <li>For a worker, partial or total loss of a limb or use of a limb or significant physical trauma;</li> <li>Injuries to several workers such that they can no longer accomplish their duties for one business day;</li> <li>Material damage of \$150,000 or more.</li> </ul>
Ensure an ongoing communication link with government authorities responsible for environmental matters and workplace health and safety. If applicable, provide them with a written report following the incident.
If necessary, submit a NOTAM request to NAV CANADA to have air traffic rerouted. The information communicated must include a start and end time, the location of the leak, a terrain elevation, a radius and an altitude.
<ul> <li>If burning is required in the response, contact the local fire department (Technical Specification 33.03.02).</li> <li>Address of site where burning will occur</li> <li>Estimated duration of operation</li> <li>Name of field manager in charge of operation</li> </ul>
Ensure the safety rules are respected by those involved throughout the intervention (e.g. securing of the site, workplace health and safety golden rules).
Ensure that the employee assistance program is offered and deployed depending on the nature of the event and the request.
Ensure that regular situation reports (via the SP PMUCO) are provided to the EOC (or the CP when the EOC is absent).
Keep a record of the mobilized personnel in the various emergency centres.
Ensure that all members document their activity logs.
Respond to delegated requests and provide a status update during the next round table.
Anticipate how the situation might evolve (e.g. potential deterioration).
Submit all relevant information to the ECC Manager.

		2. Intervention (when the ECC is mobilized)
		Pay particular attention to the accuracy of the emergency management information received and transmitted (confirm the source of this information).
1		Remain available to meet the needs of ECC members.
1		For each round table, provide support and work in close cooperation with the ECC Manager.
1		Regularly check for messages (voicemail, email, texts).
1		Make sure that all weather information (conditions and forecasts) is up to date.
1		Ensure security and control access to the ECC.
		Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
I		Keep those items that could serve as proof for future investigations.
0	Cha	mpion Pipeline Network Incident
		In the event of an incident on the Champion network, ensure that the EM Coordinator is kept apprised of all developments, even in the absence of an ECC, to be able to transfer requests to the appropriate resources (e.g. workplace health and safety issue reported to on-call personnel).
		In the event of an incident on the Champion Pipeline network, make sure that government authorities (CER, TSB) are advised, according to PMU CORPO 01 Avis aux autorités en cas de rejet accidentel à l'environnement ou autre urgence. The various communications with authorities must abide by the criteria indicated in the Champion Pipeline Emergency Manual (Appendix). Ensure an ongoing communication link with the authorities. If applicable,
		provide them with a written report following the incident. As regards the incidents that must be reported via the CER-TSB online system, they must be reported immediately and <u>at the latest within</u> <u>24 hours of discovering the incident</u> .
		When an incident is in fact a major incident that must first be reported by telephone to the TSB, this telephone call (to the TSB) (see contact details in the on-duty personnel chart), along with the input of information in the CER-TSB online reporting system ( <u>Canada Energy Regulator – Event</u>

	2. Intervention (when the ECC is mobilized)
	Reporting System – Welcome [cer-rec.gc.ca]) must be completed within 3 hours of discovering the incident.
	When an initial report is submitted to the TSB or the CER, the information in question must thereafter be transmitted to:
	<ul> <li><u>@energir.com</u> The first part of the email adress has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.</li> </ul>
	<ul> <li>On-call Legal Affairs employee – ECC</li> <li>On-call OHS/Env employee</li> </ul>
	Subsequently, a meeting must be organized with Legal Affairs and all relevant stakeholders to complete the final report (no later than 30 days after discovery of the incident).
	If the leak occurs in Ontario, on the Champion Pipeline network, a notice must be transmitted to the ONTARIO SPILL ACTION CENTRE (see contact details in the on-duty personnel chart).
	In the event of an emergency involving this network, a notice must be transmitted as soon as possible to:
	<ul> <li>a) the Ontario Ministry of the Environment and Climate Change;</li> <li>b) the municipality on whose territory the spill occurred or if the spill was within the boundaries of a regional municipality, the latter;</li> <li>c) the owner of the polluting element, when the party submitting the notice is not this owner but knows the owner's identity or can easily learn it;</li> <li>d) the person responsible for the polluting element, when the party submitting the notice is not this person but knows the person's identity or can easily learn it.</li> </ul>
Trai	nsport EOC
	Participate in the phone meetings and take note of the necessary information regarding the status of the incident and focus on issues related to emergency measures and public safety.
	Provide advice to Director, Transport EOC on emergency plans related to the current situation (PUE, PIU, OP-01, etc.).
	Act as liaison between the EDCW and the Director, Transport EOC for the mobilization duration (ex.: liaison with neighbours).

 	2. Intervention (when the ECC is mobilized)
	At the request of the Director Transport EOC, revise the available risk analyses in order to confirm the potential scope of the impacts based on the incident nature and location.
BC	RP
	In the context of a business continuity situation, make sure to stay in touch with the OC (Environment and Workplace Health and Safety) to update them on how the circumstances could impact their activities and monitor BCRP deployment.
	In the event of a pandemic, ensure that:
	<ul> <li>Priority is given to maintaining critical, prominent functions.</li> <li>The elements deployed are based on the established procedures (e.g. remote access, BCRP).</li> </ul>

2.1 Team change		
Emergency Management		If the event persists, notify the replacement.
Coordinator		Make sure that the EOC, the other ECC members, <u>and all external</u> <u>stakeholders involved</u> are notified of the team change, as agreed, and ensure that all internal stakeholders have access to Teams for the event.
		Summarize all relevant internal and external communications and actions for the replacement team.
		Ensure that the actions still underway are transferred.
		Make sure that the replacement team has your contact details.
		Save a copy of the individual activity log (for the incident report).

3. Demobilization of the emergency centres		
Emergency Management Coordinator		Make sure to record the information required for completing the individual activity log.
Coordinator		If there are still unresolved issues following the demobilization (e.g. monitoring of a leak, repairs, restoration, make safe, media watch) ensure

3. Demobilization of the emergency centres		
		coordination and document the actions to be taken in conjunction with the different managers.
		If immediate corrective measures relating to the event are proposed, ensure these are followed up by the different managers.
		Keep all elements of proof and the individual activity log.
		Gather the individual activity logs of all other ECC members.
		Submit the ECC's shared activity log to ECC members so that they can validate its contents prior to the debriefing session.

4. Post-mortem (debriefing)		
Emergency Management Coordinator		As required, organize a debriefing session with each of the emergency centres involved.
		Liaise with Directors involved in EOC mobilization to document mobilizations for which the EM coordinator is not involved.
		After the debriefing, archive the event documents located in Teams in the DFS.
		If there is no need to prepare a report in due form for the event, document the information in the GDE (Gestion des évènements/event management) database to keep a written record of the actions taken.
		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

# C.5.4 ECC Operations Manager

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to ECC mobilization)			
ECC – Operations		Note the preliminary information regarding the event.	
		Analyze the scope of the incident.	
		Prepare a brief assessment of the anticipated risks and the immediate actions required.	
		Upon receiving a message regarding ECC mobilization (via SMS), follow the instructions (e.g. go to the designated ECC room as quickly as possible or join the telephone bridge).	
		Make sure to have the most up-to-date on-duty personnel chart in hand.	
		Open an individual activity log.	

2. Intervention (when the ECC is mobilized)				
ECC – Operations		Obtain an initial verbal situation report from the ECC Manager.		
		Participate in the ECC Manager's round tables to ensure that all issues and consequences associated with the emergency situation have been identified.		
		If asked to do so by the ECC Manager, take responsibility for ongoing communications with the EOC (role of liaison officer with the EOC Manager).		
		During these round tables (APC), ensure that ECC discussions take into consideration:		
		<ul> <li>Situation reports from the EOC, including specific issues associated with special-purpose buildings;</li> </ul>		
		<ul> <li>Intervention plans proposed by the EOC (e.g. A, B and C) for validation;</li> </ul>		
		<ul> <li>Medium- and long-term needs as regards operations employees (3 hours and more);</li> </ul>		

	2. Intervention (when the ECC is mobilized)
	• Requests for equipment/material from the EOC and their transfer to the person in charge of EOC support.
	Ensure that regular situation reports are provided to the EOC (or the CP when the EOC is absent).
	In conjunction with the EOC, discuss and do an initial validation of the intervention plans proposed by the latter (e.g. plans A, B and C) and provide this information to the ECC during the round table to assess the business impact of these interventions.
	Respond to delegated requests and provide a status update during the next round table. If applicable, coordinate actions with your operations centre (OC).
	Anticipate how the situation might evolve (e.g. potential deterioration).
	Participate in union discussions with HR (agreement with the EOC), as needed. Ensure compliance with maximum hours guidelines for field crews (PrOHS 78).
	Pay special attention to the accuracy of the emergency management information received and transmitted.
	Between round tables, submit all relevant information to the ECC Manager.
	Remain available to meet ECC needs.
	Regularly check for messages (voicemail, email, texts).
	Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
	Keep those items that could serve as proof for future investigations.
Bus	iness Continuity Event
	In the context of a business continuity situation, make sure to stay in touch with the OC (Network Technical Services and Network Operations, Transmission, BO, EDCW and EDCE) to update them on how the circumstances could impact their activities and monitor BCRP deployment.

2.1 Team change		
ECC – Operations		If the event persists, notify the replacement.
		Make sure that the EOC, the other ECC members, and all external stakeholders involved are notified of the team change, as agreed.
E		Summarize all relevant internal and external communications and actions for the replacement team.
		Ensure that the actions still underway are transferred.
		Make sure that the replacement team has your contact details.
		Submit a copy of the individual activity log to the ECC emergency management coordinator (for the incident report).

3. Demobilization of the emergency centres		
ECC – Operations		In conjunction with the EOC (or the CP if the EOC is absent), establish criteria for demobilization of the EOC.
		If there are still unresolved issues following the demobilization (e.g. monitoring of a leak, repairs, restoration, make safe, media watch), make sure that matters are adequately taken under control and designate someone to follow up.
		Make sure to record the information required for completing the individual activity log.
		Keep all elements of proof and submit the individual activity log to the ECC emergency management coordinator who helped cover the event.

4. Post-mortem (debriefing)		
ECC – Operations		Participate in debriefing sessions.
		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

# C.5.5 ECC – Engineering

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to ECC mobilization)			
ECC – Engineering		Contact the hydraulic and mapping engineer and the regional engineer to obtain details of the problem. Enquire as to the hydraulic and mapping engineer's and the regional engineer's workload and determine whether an SEC is necessary.	
		Note the preliminary information regarding the event.	
		Analyze the scope of the incident.	
		Prepare a brief assessment of the anticipated risks and the immediate actions required.	
		Upon receiving a message regarding ECC mobilization (via SMS), follow the instructions (e.g. go to the designated ECC room as quickly as possible or join the telephone bridge).	
		Make sure to have the most up-to-date on-duty personnel chart in hand.	
		Open an individual activity log.	

2. Intervention (when the ECC is mobilized)		
ECC – Engineering		Obtain an initial verbal situation report from the ECC Manager.
		Participate in the ECC Manager's round tables to ensure that all issues and consequences associated with the emergency situation have been

2. Intervention (when the ECC is mobilized)
identified. Anticipate the actions that will need to be taken within the upcoming 3 to 24 hours. Explain the situation's technical issues.
During these round tables (APC), ensure that ECC discussions take into consideration:
<ul> <li>Validate the technical intervention methods (interruption, plugging, repairs) to ensure the safety of stakeholders, personnel and the public.</li> <li>Develop an alternative intervention plan if needed.</li> <li>The integrity of the gas network over the entire franchise.</li> <li>Ensure mapping services and access to network plans.</li> <li>Advise the ECC on technical matters related to the gas network, in particular by explaining the technical options being analyzed by the ECC</li> </ul>
<ul> <li>EOC.</li> <li>If required, remain in close cooperation with the technical and scientific teams.</li> </ul>
If required by virtue of the situation or at the request of other engineering representatives, convene a meeting of the SEC and work with the centre to generate regular situation reports.
Make sure that the OP6 Request for environmental declaration is applied when required (e.g. wetlands or water).
The intranet address (hyperlink to internal documentation) allowing the OP6 to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.
Respond to delegated requests and provide a status update during the next round table. If applicable, coordinate actions with your operations centre (OC).
Anticipate how the situation might evolve (e.g. potential deterioration).
Pay special attention to the accuracy of the emergency management information received and transmitted.
Between round tables, submit all relevant information to the ECC Manager.
Remain available to meet ECC needs.
Regularly check for messages (voicemail, email, texts).

	2. Intervention (when the ECC is mobilized)
	Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
	Keep those items that could serve as proof for future investigations.
Business Continuity Event	
	In the context of a business continuity situation, make sure to stay in touch with the OC (Engineering, Geomatics and Major Projects) to update them on how the circumstances could impact their activities and monitor BCRP deployment.

2.2 Team change		
ECC – Engineering		If the event persists, notify the replacement.
		Make sure that the other ECC members and all external stakeholders involved are notified of the team change, as agreed.
		Summarize all relevant internal and external communications and actions for the replacement team.
		Ensure that the actions still underway are transferred.
		Make sure that the replacement team has your contact details.
		Submit a copy of the individual activity log to the ECC emergency management coordinator (for the incident report).

3. Demobilization of the emergency centres		
ECC – Engineering		If there are still unresolved issues following the demobilization (e.g. monitoring of a leak, repairs, restoration, make safe, media watch), make sure that matters are adequately taken under control and designate someone to follow up.
		Make sure to record the information required for completing the individual activity log.

3. Demobilization of the emergency centres		
		Keep all elements of proof and submit the individual activity log to the ECC emergency management coordinator who helped cover the event.

4. Post-mortem (debriefing)		
ECC – Engineering		Participate in debriefing sessions.
		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

## C.5.6 ECC – Communications and Public Affairs

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to ECC mobilization)			
Person in charge of Communications and		Note the preliminary information regarding the event.	
Public Affairs		Analyze the scope of the incident.	
		Prepare a brief assessment of the anticipated risks and the immediate actions required.	
		If the emergency is caused by a media event, contact the ECC Manager on duty and open the CCC.	
		Upon receiving a message regarding ECC mobilization (via SMS), follow the instructions (e.g. go to the designated ECC room as quickly as possible or join the telephone bridge).	
		Make sure to have the most up-to-date on-duty personnel chart in hand.	
		Open an individual activity log.	
		Establish initial contact with the person in charge of the CCC and/or with the on-call media officer to notify them of the ECC's immediate mobilization and, if necessary, obtain a preliminary brief on the current situation.	

2. Intervention (when the ECC is mobilized)			
Person in charge of Communications and Public Affairs		Obtain an initial verbal situation report from the ECC Manager.	
		Participate in the ECC Manager's round tables to ensure that all issues and consequences associated with the emergency situation have been identified.	
		During the round tables on APC matters, ensure that the ECC discussions take into consideration the organization's reputation issues within the context of this situation, in particular:	

		2. Intervention (when the ECC is mobilized)
		<ul> <li>Social and traditional media communications (issuing of press releases, Q&amp;As, etc.)</li> <li>Needs in terms of naming and dispatching a spokesperson to the incident site (as required)</li> <li>Communications with government representatives and other municipal leaders concerned by the event (as required)</li> <li>The coordination of communications between civil security stakeholders and the EM Coordinator</li> <li>Communications with citizens (answers to questions, etc.)</li> <li>Internal communications with employees in conjunction with the persons responsible for Employees and Culture and for Legal Affairs (as required) – Foresee posting information on the intranet (or any other available platform such as emails, xMatters, etc.)</li> <li>Customer communications/messages to be forwarded to CS and Sales</li> <li>Communications to the Board of Directors (situation status and messages) in conjunction with the Corporate Secretary</li> <li>Organization of press relations (as required)</li> <li>Impact of any marketing campaigns (advertising, etc.) underway.</li> <li>The need to increase awareness about the smell of gas and the actions to be taken if the smell of gas is detected (distribution of scratch-and-sniff leaflets, letters, targeted social media, etc.).</li> </ul>
_		Make sure a translator is available, if needed. Ensure liaison with the Public Affairs representative on call, the Crisis Communication Centre (CCC) and the Vice President responsible for Public Affairs matters at the CMC.
	I	Respond to delegated requests and provide a status update during the next round table. Coordinate action with your operations centre (CCC), if applicable.
		Anticipate how the situation might evolve (e.g. potential deterioration) (3 to 24 hours).
		Pay particular attention to the accuracy of the emergency management information received and transmitted (validate information).
		Between round tables, submit all relevant information to the ECC Manager.
		Remain available to meet ECC needs.

2. Intervention (when the ECC is mobilized)		
		Regularly check for messages (voicemail, email, texts).
		Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
		Keep those items that could serve as proof for future investigations.
	Bus	siness Continuity Event
		In the context of a business continuity situation, make sure to stay in touch with the OC (SD, AP, G and Marketing) to update them on how the circumstances could impact their activities and monitor BCRP deployment.
		When the IT systems are down, consider the computer services available for sending communications (e.g. if email is down, etc.).

2.1 Team change		
Person in charge of Communications and Public Affairs		If the event persists, notify the replacement and ensure that CCC members have alternates/can be replaced.
		Make sure that the other ECC members and all external stakeholders involved are notified of the team change, as agreed.
		Summarize all relevant internal and external communications and actions for the replacement team.
		Ensure that the actions still underway are transferred.
		Make sure that the replacement team has your contact details.
		Submit a copy of the individual activity log to the on-call emergency management coordinator (for the incident report).

3. Demobilization of the emergency centres		
	Make sure to record the information required for completing the individual activity log.	

3. Demobilization of the emergency centres		
Person in charge of Communications and Public Affairs		Keep all elements of proof and submit the individual activity log to the emergency management coordinator who helped cover the event.

4. Post-mortem (debriefing)			
Person in charge of Communications and		Participate in debriefing sessions.	
Public Affairs		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.	

#### C.5.7 ECC – Legal Affairs

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to ECC mobilization)			
Person in charge of		Note the preliminary information regarding the event.	
Legal Affairs and Claims at the ECC		Analyze the scope of the incident.	
		Prepare a brief assessment of the anticipated risks and the immediate actions required.	
		Upon receiving a message regarding ECC mobilization (via SMS), follow the instructions (e.g. go to the designated ECC room as quickly as possible or join the telephone bridge).	
		Make sure to have the most up-to-date on-duty personnel chart in hand.	
		Open an individual activity log.	

2. Intervention (when the ECC is mobilized)		
C	Obtain an initial verbal situation report from the ECC Manager.	

	2. Intervention (when the ECC is mobilized)
Person in charge of Legal Affairs and Claims at the ECC	Participate in the ECC Manager's round tables to ensure that all issues and consequences associated with the emergency situation have been identified.
	<ul> <li>During these round tables (APC), ensure that ECC discussions take into consideration:</li> <li>Legal compliance and due diligence;</li> <li>Possible claims and proceedings.</li> </ul>
	During the round tables (APC), ensure that the legal opinions provided are accurately transcribed in the APC chart and the shared activity log. Also, and as required, ensure that the necessary measures are taken to preserve the confidentiality of these opinions should these documents be released or circulated (e.g. redaction).
	Respond to delegated requests and provide a status update during the next round table. If applicable, coordinate actions with your operations centre (OC).
	Help the person in charge of Communications and Public Affairs draft the necessary internal (e.g. for employees) and external (e.g. for clients, the media, government authorities) communications.
	Anticipate how the situation might evolve (e.g. potential deterioration).
	Pay special attention to the accuracy of the emergency management information received and transmitted.
	Notify the Privacy Officer (Executive Director of Legal Affairs) of any incident relating to the protection of personal information (leak, destruction, seizure, etc.), notably by email at vieprivee@energir.com.
	Ensure a regular communication link between the ECC, internal resources (Privacy Officer) and external consultants for litigation purposes (e.g. insurance adjusters, outside legal counsel, etc.) and insurers.
	If necessary, consult outside legal counsel to ensure privilege is maintained (and to benefit our insurer).
	Between round tables, submit all relevant information to the ECC Manager.

		2. Intervention (when the ECC is mobilized)
		Remain available to meet ECC needs.
		Regularly check for messages (voicemail, email, texts).
		Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
		Keep those items that could serve as proof for future investigations.
	Bus	siness Continuity Event
		In the context of a business continuity situation, make sure to stay in touch with the OC (Legal Affairs, Corporate Control and Budget, Finance and Treasury, Corporate Secretariat and Internal Audit) to update them on how the circumstances could impact their activities and monitor BCRP deployment.

2.1 Team change			
Person in charge of Legal Affairs and Claims at the ECC		If the event persists, notify the replacement.	
		Make sure the other ECC members <u>and all external stakeholders</u> <u>involved</u> are notified of changes to the team.	
		Summarize all relevant internal and external communications and actions for the replacement team.	
		Ensure that the actions still underway are transferred.	
		Make sure that the replacement team has your contact details.	
		Submit a copy of the individual activity log to the on-call emergency management coordinator (for the incident report).	

3. Demobilization of the emergency centres		
		Make sure to record the information required for completing the individual activity log.

3. Demobilization of the emergency centres		
Person in charge of Legal Affairs and Claims at the ECC		Keep all elements of proof and submit the individual activity log to the emergency management coordinator who helped cover the event.

4. Post-mortem (debriefing)			
Person in charge of Legal Affairs and Claims at the ECC		Participate in debriefing sessions.	
		Review the APC chart and activity log of the ECC to preserve, as the case may be, the confidentiality of the legal opinions transcribed therein.	
		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.	

### C.5.8 ECC – Gas Supply

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to ECC mobilization)			
Person in charge of Gas Supply and NSO at the ECC		Note the preliminary information regarding the event.	
		Prepare a brief assessment of the anticipated risks and the immediate actions required.	
		If an emergency involves a major interruption of the gas supply, get in touch with the ECC Manager on duty.	
		Upon receiving a message regarding ECC mobilization (via SMS), follow the instructions (e.g. go to the designated ECC room as quickly as possible or join the telephone bridge).	
		Make sure to have the most up-to-date on-duty personnel chart in hand.	
		Open an individual activity log.	

	2. Intervention (when the ECC is mobilized)
Person in charge of Gas Supply and NSO	Obtain an initial verbal situation report from the ECC Manager.
at the ECC	Participate in the ECC Manager's round tables to ensure that all issues and consequences associated with the emergency situation have been identified.
	<ul> <li>During these round tables (APC), ensure that ECC discussions take into consideration:</li> <li>The issues associated with our gas suppliers and our ability to continue to supply clients on an ongoing basis (e.g. supplies/inventory available at our LSR plant, in Pointe-du-Lac or St-Flavien and at our suppliers);</li> <li>The impact on interruptible clients;</li> </ul>
	The issues pertaining to Network Surveillance Operations (NSO).
	<ul> <li>Depending on the situation, coordinate with the EOC gas supply manager to:</li> <li>Develop the strategies and available options to help manage the emergency situation;</li> <li>Evaluate the need to mobilize other resource persons to help deploy the solution (e.g. sales resource persons for calling clients).</li> <li>Follow up on the deployment of alternative gas supply solutions implemented at the EEC.</li> </ul>
	In situations affecting gas supply, be sure to inform NSO of any significant actions taken by the emergency structure (e.g. for a significant part of the network [transmission, Sales Major Industries clients, many customers] plugging and restoration).
	If necessary, contact the Transport Canada emergency structure via Calgary Gas Control to communicate with the OnCall Manager Est Region (on-duty personnel chart).
	Respond to delegated requests and provide a status update during the next round table. If applicable, coordinate actions with your operations centre (OC).
	Pay particular attention to the accuracy of the information received and transmitted.
	Anticipate how the situation might evolve (e.g. potential deterioration).

		2. Intervention (when the ECC is mobilized)
		Remain available to meet ECC needs.
		Regularly check for messages: voicemail, email, texts.
		Keep a comprehensive and precise record of the exchanges with various internal and external partners, as well as the details of the decisions taken (individual activity log).
		Keep those items that could serve as proof for future investigations.
E		siness Continuity Event
		In the context of a business continuity situation, make sure to stay in touch with the OC (Gas Supply and Network Surveillance Operations) to update them on how the circumstances could impact their activities and monitor BCRP deployment.

2.1 Team change		
Person in charge of Gas Supply and NSO at the ECC		If the event persists, notify the replacement.
		Make sure that the other ECC members and all external stakeholders involved are notified of the team change, as agreed.
		Summarize all relevant internal and external communications and actions for the replacement team.
		Ensure that the actions still underway are transferred.
		Make sure that the replacement team has your contact details.
		Submit a copy of the individual activity log to the on-call emergency management coordinator (for the incident report).

3. Demobilization of the emergency centres		
C	Make sure to record the information required for completing the individual activity log.	

3. Demobilization of the emergency centres		
Person in charge of Gas Supply and NSO at the ECC		Keep all elements of proof and submit the individual activity log to the emergency management coordinator who helped cover the event.

4. Post-mortem (debriefing)		
Person in charge of Gas Supply and NSO		Participate in debriefing sessions.
at the ECC		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

### C.5.9 ECC – Employees and Culture

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to ECC mobilization)			
Person in charge of		Note the preliminary information regarding the event.	
Employees and Culture		Analyze the scope of the incident.	
		Prepare a brief assessment of the anticipated risks and the immediate actions required.	
		Upon receiving a message regarding ECC mobilization (via SMS), follow the instructions (e.g. go to the designated ECC room as quickly as possible or join the telephone bridge).	
		Notify the replacement team of the opening of an ECC.	
		Make sure to have the most up-to-date on-duty personnel chart in hand.	
		Open an individual activity log.	

	2. Intervention (when the ECC is mobilized)
Person in charge of Employees and	Obtain an initial verbal situation report from the ECC Manager.
Culture	Participate in the ECC Manager's round tables to ensure that all issues and consequences associated with the emergency situation have been identified.
	<ul> <li>During these round tables (APC), ensure that ECC discussions take into consideration:</li> <li>Other human resources issues (any necessary communications with the union, compliance with the collective agreement to the greatest possible extent, and internal communications).</li> </ul>
	Respond to delegated requests and provide a status update during the next round table. If applicable, coordinate actions with your operations centre (OC).
	Anticipate how the situation might evolve (e.g. potential deterioration).
	Pay special attention to the accuracy of the emergency management information received and transmitted.
	Help the person in charge of Communications and Public Affairs draft any necessary internal communications for employees.
	Ensure that the level of fatigue of all personnel involved in the management of the emergency situation is respected, particularly in terms of:
	<ul> <li>Observing the recommendation to replace resources in the field (see PrOHS 78);</li> <li>Ensuring the people mobilized in the emergency centres are scheduled to be replaced or to take a break, as required.</li> </ul>
	Check with the emergency centre managers if the immediate corrective measures should be communicated to employees.
	Between round tables, submit all relevant information to the ECC Manager.
	Remain available to meet ECC needs.
	Regularly check for messages (voicemail, email, texts).

2. Intervention (when the ECC is mobilized)		
		Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
		Keep those items that could serve as proof for future investigations.
	Bus	siness Continuity Event
		In the context of a business continuity situation, make sure to stay in touch with the OC (Environment and Workplace Health and Safety) to update them on how the circumstances could impact their activities and monitor BCRP deployment.

2.1 Team change		
Person in charge of Employees and Culture		If the event persists, notify the replacement.
		Make sure that the other ECC members and all external stakeholders involved are notified of the team change, as agreed.
		Summarize all relevant internal and external communications and actions for the replacement team.
		Ensure that the actions still underway are transferred.
		Make sure that the replacement team has your contact details.
		Submit a copy of the individual activity log to the on-call emergency management coordinator (for the incident report).

3. Demobilization of the emergency centres		
Person in charge of Employees and Culture		Make sure to record the information required for completing the individual activity log.
		Keep all elements of proof and submit the individual activity log to the emergency management coordinator who helped cover the event.

4. Post-mortem (debriefing)		
Person in charge of		Participate in debriefing sessions.
Employees and Culture		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

#### C.5.10 ECC – Customer Service

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to ECC mobilization)			
Person in charge of		Note the preliminary information regarding the event.	
Customer Service		Analyze the scope of the incident.	
		Prepare a brief assessment of the anticipated risks and the immediate actions required.	
		Upon receiving a message regarding ECC mobilization (via SMS), follow the instructions (e.g. go to the designated ECC room as quickly as possible or join the telephone bridge).	
		Make sure to have the most up-to-date on-duty personnel chart in hand.	
		Open an individual activity log.	

2. Intervention (when the ECC is mobilized)			
Person in charge of Customer Service		Obtain an initial verbal situation report from the ECC Manager.	
		Participate in the ECC Manager's round tables to ensure that all issues and consequences associated with the emergency situation have been identified.	
		<ul> <li>During these round tables (APC), ensure that ECC discussions take into consideration:</li> <li>Customer issues (as a complement to the ECC customer sector);</li> <li>Impact of decisions on communications with customers;</li> </ul>	

	2. Intervention (when the ECC is mobilized)
	<ul> <li>Labour force needs (telephone receptionists/clerks);</li> <li>Ongoing customer services;</li> <li>Invoicing and collection issues for customers (who could have their supply disconnected), and the development of strategies in keeping with the situation.</li> </ul>
	At the ECC's request, oversee the implementation of a communication tool for outbound telephone calls (My Own Telco) and approve the telephone message prepared by the customer information service (SIC). Prior to launching outbound calls, ensure that:
	<ul> <li>The communication strategy is clear and that it will not cause any additional issues (e.g. calls from customers);</li> <li>There is enough relevant, concrete information for the mass communication;</li> <li>Tools for CSRs have been developed (e.g. Q&amp;As).</li> </ul>
	At the ECC's request, obtain the list of clients (and telephone numbers) from Engineering for outbound calls, and hand over this list to the SIC.
	Ensure that the management of client openings/closures follows the usual procedures to facilitate subsequent follow-up (e.g. via the technicians' PDAs).
	Respond to delegated requests and provide a status update during the next round table. If applicable, coordinate actions with your operations centre (OC).
ſ	Anticipate how the situation might evolve (e.g. potential deterioration).
	Pay special attention to the accuracy of the emergency management information received and transmitted.
ſ	Between round tables, submit all relevant information to the ECC Manager.
C C	Remain available to meet ECC needs.
ſ	Regularly check for messages (voicemail, email, texts).
	Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.

	2. Intervention (when the ECC is mobilized)
	Keep those items that could serve as proof for future investigations.
Business Continuity Event	
	In the context of a business continuity situation, make sure to stay in touch with the OC (Client Information, GCR and Billing and Deposits) to update them on how the circumstances could impact their activities and monitor BCRP deployment.

2.1 Team change		
Person in charge of Customer Service		If the event persists, notify the replacement and ensure that CS Operations centre (OC) members have alternates/can be replaced.
		Make sure that the other ECC members and all external stakeholders involved are notified of the team change, as agreed.
		Summarize all relevant internal and external communications and actions for the replacement team.
		Ensure that the actions still underway are transferred.
		Make sure that the replacement team has your contact details.
		Submit a copy of the individual activity log to the on-call emergency management coordinator (for the incident report).

3. Demobilization of the emergency centres		
Person in charge of Customer Service		Make sure to record the information required for completing the individual activity log.
		Keep all elements of proof and submit the individual activity log to the emergency management coordinator who helped cover the event.

4. Post-mortem (debriefing)		
	Participate in debriefing sessions.	

4. Post-mortem (debriefing)		
Person in charge of Customer Service		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

# C.5.11 ECC – Support Services

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to ECC mobilization)			
Person in charge of		Note the preliminary information regarding the event.	
Support Services		Analyze the scope of the incident.	
		Prepare a brief assessment of the anticipated risks and the immediate actions required.	
		Upon receiving a message regarding ECC mobilization (via SMS), follow the instructions (e.g. go to the designated ECC room as quickly as possible or join the telephone bridge).	
		Make sure to have the most up-to-date on-duty personnel chart in hand.	
		Open an individual activity log.	

2. Intervention (when the ECC is mobilized)			
Person in charge of Support Services		Obtain an initial verbal situation report from the ECC Manager.	
		Participate in the ECC Manager's round tables to ensure that all issues and consequences associated with the emergency situation have been identified.	
		<ul> <li>During these round tables (APC), ensure that ECC discussions take into consideration:</li> <li>Logistics needs and goods and services procurement for the EOC (and ECC), in conjunction with the EOC Head of Planning;</li> <li>Integrity of Énergir buildings and facilities;</li> </ul>	

		2. Intervention (when the ECC is mobilized)
		Availability and good condition of Énergir's rolling stock;
_		Business safety issues (security officers, SOC).
		Receive and confirm credit card status (emergency status) change requests from Accounts Payable.
		Ensure a communication link with the suppliers required for the intervention.
		Respond to delegated requests and provide a status update during the next round table. If applicable, coordinate actions with your operations centre (OC).
		Anticipate how the situation might evolve (e.g. potential deterioration).
		Pay special attention to the accuracy of the emergency management information received and transmitted.
		Between round tables, submit all relevant information to the ECC Manager.
		Remain available to meet ECC needs.
		Regularly check for messages (voicemail, email, texts).
		Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
		Keep those items that could serve as proof for future investigations.
	Bus	siness Continuity Event
		In the context of a business continuity situation, make sure to stay in touch with the OC (Procurement and Logistics, Buildings and SOC) to update them on how the circumstances could impact their activities and monitor BCRP deployment.

2.1 Team change	
	If the event persists, notify the replacement.

2.1 Team change		
Person in charge of Support Services		Make sure the other ECC members <u>and all external stakeholders</u> <u>involved</u> are notified of changes to the team, as agreed.
		Summarize all relevant internal and external communications and actions for the replacement team.
		Ensure that the actions still underway are transferred.
		Make sure that the replacement team has your contact details.
		Submit a copy of the individual activity log to the on-call emergency management coordinator (for the incident report).

3. Demobilization of the emergency centres		
Person in charge of Customer Service		Make sure to record the information required for completing the individual activity log.
		Keep all elements of proof and submit the individual activity log to the emergency management coordinator who helped cover the event.

4. Post-mortem (debriefing)		
Person in charge of Customer Service		Participate in debriefing sessions.
		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

# C.5.12 ECC – Energy Solutions

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to ECC mobilization)		
		Note the preliminary information regarding the event.

1. Immediate action (prior to ECC mobilization)		
Person in charge of Sales at ECC		Analyze the scope of the incident.
		Prepare a brief assessment of the anticipated risks and the immediate actions required.
		Upon receiving a message regarding ECC mobilization (via SMS), follow the instructions (e.g. go to the designated ECC room as quickly as possible or join the telephone bridge).
		Make sure to have the most up-to-date on-duty personnel chart in hand.
		Open an individual activity log.

	2. Intervention (when the ECC is mobilized)		
Person in charge of Sales at ECC		Obtain an initial verbal situation report from the ECC Manager.	
		Participate in the ECC Manager's round tables to ensure that all issues and consequences associated with the emergency situation have been identified.	
		During these round tables (APC), ensure that ECC discussions take into consideration:	
		<ul> <li>Information received directly from clients (Sales Major Accounts and DATECH, Residential Sales and Business Partners, and Sales Major Industries);</li> </ul>	
		The list of impacted or potentially impacted clients;	
		• Specific impacts and actions associated with the impacted clients (communications, interruption requests, etc.).	
		If an Operations EOC is mobilized:	
		Check with the Operations EOC manager if someone from Sales is required for the EOC.	
		Ensure that a Salesperson will be available for the EOC table, if needed.	
		When an event includes one or several Sales Major Industries clients and involves the opening of an EOC, the Sales Major Industries representative assigned to ECC duty must always be included. The	

	2. Intervention (when the ECC is mobilized)
	objective of this approach is to ensure a communication link between the Major Industries clients and the committee responsible for operations.
C	From the list of clients affected:
	<ul> <li>Sort the clients by category (residential, commercial, institutional, Energy Solutions Major Industries).</li> </ul>
	<ul> <li>Identify special-purpose buildings (hospitals, seniors' homes, schools) and contact them first.</li> </ul>
	• Identify buildings where there is an emergency gas generator and contact them first.
	Identify the clients who have a heating profile.
C	I Inform Gaz Métro Plus of the incident. Provide them with all relevant information, particularly:
	Location of the incident – network affected
	• Types and number of clients affected (the objective being that if clients contact their customer service [Dialog], they will be able to confirm that there is an issue with the gas supply)
	Depending on the location of the emergency measure, identify the dedicated Certified Natural Gas Partners (CNGPs) who could assist us, if required (e.g. temporary conversion to propane, temporary installation of electrical devices).
	• If necessary, contact the CNGPs identified to inform them about the situation and check their availability to assist us.
	<ul> <li>If necessary, contact Gaz Métro Plus to inform them of the situation and check their availability to assist us by contacting the Gaz Métro Plus on-duty manager (provided on the Emergency Dispatch Centre list).</li> </ul>
E	Ensure and maintain ongoing contact with impacted (or potentially impacted) clients, in particular to keep the ECC Manager apprised of any situation that could require specific action.
	Respond to delegated requests and provide a status update during the next round table. If applicable, coordinate actions with your operations centre (OC).
C.	Anticipate how the situation might evolve (e.g. potential deterioration).

	2. Intervention (when the ECC is mobilized)
	Pay special attention to the accuracy of the emergency management information received and transmitted.
	Between round tables, submit all relevant information to the ECC Manager.
	Remain available to meet ECC needs.
	Regularly check for messages (voicemail, email, texts).
	Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
	Keep those items that could serve as proof for future investigations.
Bus	siness Continuity Event
	In the context of a business continuity situation, make sure to stay in touch with the OC (Sales Major Industries, DATECH and Customer service centre) to update them on how the circumstances could impact their activities and monitor BCRP deployment.

2.1 Team change		
Person in charge of Sales at ECC		If the event persists, notify the replacement.
		Make sure the other ECC members <u>and all external stakeholders</u> <u>involved</u> are notified of changes to the team, as agreed.
		Summarize all relevant internal and external communications and actions for the replacement team.
		Ensure that the actions still underway are transferred.
		Make sure that the replacement team has your contact details.
		Submit a copy of the individual activity log to the on-call emergency management coordinator (for the incident report).

3. Demobilization of the emergency centres		
Person in charge of Sales at ECC		Make sure to record the information required for completing the individual activity log.
		Keep all elements of proof and submit the individual activity log to the emergency management coordinator who helped cover the event.

4. Post-mortem (debriefing)		
Person in charge of Sales at ECC		Participate in debriefing sessions.
		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

# C.5.13 Manager, Operations EOC

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to ECC mobilization)				
Manager, Operations EOC		Note the preliminary information regarding the event.		
		Analyze the scope of the incident.		
		Prepare a brief assessment of the anticipated risks and the immediate actions required.		
		Establish the alert level (using alert criteria as necessary).		
		Determine whether the Operations EOC must mobilize itself at its main or alternate centre, or via the telephone bridge (e.g. in the event EOC is spread out).		
		If necessary, ask the EDCW to mobilize the EOC at the designated location. Provide the dispatcher with the names of the EOC members who must be mobilized (head of planning, regional engineer, Sales, Sales Major Industries).		
		In the event of a Transport EOC, ensure that the BO Director for the region in question is advised.		
		If necessary, alert the on-duty ECC Manager.		
		Go to the designed EOC room as soon as possible or establish a telephone bridge.		
		Make sure to have the most up-to-date on-duty personnel chart in hand.		
		Open an individual activity log.		

2. Intervention (when the ECC is mobilized)		
		Provide an initial verbal situation report to the EOC members.

		2. Intervention (when the ECC is mobilized)
Manager, Operations EOC		Go around the table to ensure all EOC members have identified all of the emergency's consequences and other associated issues.
		Advise the relevant authorities of the event.
		Pay special attention to the accuracy of the emergency management information received and transmitted.
		Using the APC chart (analysis, planning, coordination), prioritize the issues that should be handled during the management cycle underway.
		Lead the EOC discussions and decision-making process (round table) concerning:
		Personal safety (public and employees);
		Company's integrity and reputation;
		<ul> <li>Business continuity and ongoing activities (e.g. repairs, restoration of gas, make safe);</li> </ul>
		Environmental protection;
		Due diligence (legal);
		Financial impacts;
		<ul> <li>Support for the CP, to ensure implementation of the necessary immediate actions;</li> </ul>
		<ul> <li>Validation of intervention methods, to ensure the safety of stakeholders, personnel and the public at the emergency site;</li> </ul>
		• Assurance that the site was appropriately secured and if necessary, help with the identification and development of alternate intervention tactics;
		• Validation of the method adopted to plug/neutralize the danger and help with the identification and development of alternate intervention tactics;
		• Validation of the adopted repair (restoration) method and help with the identification and development of alternate intervention tactics;
		Sharing of information with the on-duty ECC Manager;
		Relations with the local authorities at the same level;
		Anticipation of needs in terms of resources and logistics.
		Confirm whether all EOC members must remain mobilized; if not, demobilize some members as the case may be.

2. Intervention (when the ECC is mobilized)
When an event includes one or several Sales Major Industries clients and involves the opening of an EOC, the Sales Major Industries representative assigned to ECC duty must always be included. The objective of this approach is to ensure a communication link between the Sales Major Industries clientele and the committee responsible for operations.
Consult the EOC members to determine whether other resources should be mobilized and if so, which ones (internal human resources, external resources [subcontractors], special equipment, SEC, Operations EOC support).
Communicate directly with the union president if unionized resources are required. Notify the ECC member responsible for HR of this communication.
If additional teams are mobilized (e.g. Network Technical Services), ensure that they have planned for replacements should a second network emergency require their support.
Make sure that persons in charge are designated to handle each issue, and that they prepare and implement action plans.
Anticipate how the situation might evolve (e.g. potential deterioration).
Ensure that regular situation reports are provided to the CP. After each communication with the CP, determine the time of the next update.
Provide regular situation reports to the ECC Manager (clock – special communication calendar). Indicate:
The status of the situation;
The action plan;
The resources required (material and human);
• The queries concerning the decisions that must be taken;
<ul> <li>Whenever possible, include a drawing reflective of the situation and any visual materials that are available (e.g. photos);</li> </ul>
The time of the next communication.
Make sure to maintain a regular communication link with the external stakeholders at a regional management level (e.g. Ville de Montréal, MTQ). As needed and at the request of the competent authorities, delegate a company representative to act as a liaison.

	2. Intervention (when the ECC is mobilized)
C	Regularly check for messages (voicemail, email, texts).
	In conjunction with the CP, discuss and do an initial validation of the intervention plans proposed by the latter (plans A, B and C). Coordinate the development of an action plan for a safe intervention and share the details with the ECC to assess the business impact of these interventions. Involve partners (e.g. construction, contractors) for any tasks where their intervention is required.
C	In collaboration with the CP, anticipate medium-term needs as regards operations employees (1 to 3 hours). Note:
	• Observe the recommendation to replace field crews according to the guidelines (PrOHS 78).
	• Support group leader(s) (dedicated to communications, logistics and site layout, etc.)
C	Anticipate and address requests for equipment/material from the CP and transfer them to the ECC whenever necessary.
C	Inform the on-call person for workplace health and safety/environmental matters of the mobilisation of the Operation EOC in the event of a leak.
C	Advise Public and Government Affairs of all relevant details, according to existing criteria.
C	Provide support to the CP Head responsible for operations at the site.
C	Confirm with the field that the safety rules are respected throughout the intervention (securing of sites 59.01.01 and workplace health and safety golden rules).
C	Submit the details of requirements directly to the ECC Manager.
C	Make sure that all weather information (conditions and forecasts) is up to date.
	Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
C	Keep those items that could serve as proof for future investigations.
In	cident on the Champion Pipeline network

2. Intervention (when the ECC is mobilized)		
	In the event that an incident on the Thorne–Témiscamingue section affects the capacity to maintain the gas supply, thus affecting Union Gas customers, contact the NCC so that they may make the connection.	

	2.1 Team change		
Manager, Operations		If the event persists, notify the replacement.	
EOC		Make sure the other ECC members <u>and all external stakeholders</u> <u>involved</u> are notified of changes to the team, as agreed.	
		Summarize all relevant internal and external communications and actions for the replacement team.	
		Submit a copy of:	
		<ul> <li>The individual activity log to the replacement team, to ensure continuity of information gathering;</li> </ul>	
		• All of the documentation concerning the emergency created thus far (e.g. drawings of the work areas).	
		Ensure that the actions still underway are transferred.	
		Make sure that the replacement team has your contact details.	
		Submit a copy of the individual activity log to the on-call emergency management coordinator (for the incident report).	

3. Demobilization of the emergency centres		
Manager, Operations EOC		In conjunction with the CP, establish criteria for demobilization of the EOC.
		If there are still unresolved issues following the demobilization (e.g. monitoring of a leak, repairs, restoration, make safe, media watch), make sure that matters are adequately taken under control and designate someone to follow up.
		If demobilization is possible, ask the EDCW or the EDCE to demobilize the EOC (via SMS) to notify the entire emergency structure.

3. Demobilization of the emergency centres		
		Ensure that persons in the field who require psychological support are identified, demobilized and taken in hand by the on-call person in charge of Employees, Culture at the ECC.
		Make sure to record all the information required for completing the individual activity log and the shared activity log of the EOC.
		Keep all elements of proof and submit the individual activity log to the ECC emergency management coordinator.

4. Post-mortem (debriefing)		
Manager, Operations EOC		In conjunction with the on-call ECC Emergency Management Coordinator, do a hot and cold debriefing of the EOC.
		Provide the on-call ECC Emergency Management Coordinator with all of the details obtained during the debriefings, to enable preparation of the post-mortem report.
		Validate the post-mortem report.
		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.
		In the case of a transport incident for which an initial report has already been filed with authorities, prepare and submit the follow-up report within 30 days of the accidental spill (Table 6 of the Transport ERP and Table 8).

## C.5.14 Head of Planning, Operations EOC

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to EOC mobilization)		
Head of Planning,		Note the preliminary information regarding the event.
Operations EOC		Analyze the scope of the incident.
		Prepare a brief assessment of the anticipated risks and the immediate actions required.
		Upon receiving a message regarding the EOC's mobilization (via SMS), follow the instructions (e.g. go to the designated EOC room as quickly as possible or join the telephone bridge).
		Make sure to have the most up-to-date on-duty personnel chart in hand.
		Open an individual log and a shared activity log to document the EOC's actions and decisions.

2. Intervention (when the EOC is mobilized)		
Head of Planning, Operations EOC		Obtain an initial verbal situation report from the EOC Manager.
		Participate in the EOC Manager's round tables to ensure that all issues and consequences associated with the emergency situation have been identified.
		Fulfil the role of assistant to the EOC Manager.
		During the round tables (APC), ensure that EOC discussions take into consideration:
		<ul> <li>Support for the CP, to ensure implementation of the necessary immediate actions;</li> </ul>
		<ul> <li>Validation of intervention methods, to ensure the safety of stakeholders, personnel and the public at the emergency site;</li> </ul>
		• Validation of the security of the overall area and help with the identification and development of alternate intervention tactics;

2. Intervention (when the EOC is mobilized)
<ul> <li>Validation of the method adopted to plug/neutralize the danger and help with the identification and development of alternate intervention tactics;</li> <li>Validation of the adopted repair (restoration) method and help with the identification and development of alternate intervention tactics;</li> <li>Anticipation of needs in terms of resources and logistics.</li> </ul>
After each round table, update the situation report with the EOC and make it available to all participants on the RPEMBC SharePoint site ("Event underway" section).
Respond to and coordinate requests for resources from the CP Head responsible for operations at the site.
Serve as a link with the distribution team (EDC West or EDC East) for labour requirements, the call-out, sending messages via SMS, etc.
Depending on requirements, seek out information in Fieldview, Gnet, Google gas network, etc.
Ensure that the EOC obtains all lists of impacted clients (from the regional engineer or the hydraulic and mapping engineer) and that these are transmitted to the ECC manager, as the case may be.
Make sure to record all of the principal technical information in the EOC room tables and maps.
Respond to delegated requests and provide a status update during the next round table (APC).
Anticipate how the situation might evolve (e.g. potential deterioration).
Keep an individual log and a shared activity log of the EOC to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
Remain available to meet the needs of the EOC.
Pay special attention to the accuracy of the emergency management information received and transmitted. The Head of Planning, Operations EOC is, among other things, responsible for confirming whether or not the location request had been executed prior to the incident.
Regularly check for messages (voicemail, email, texts).

2. Intervention (when the EOC is mobilized)		
		Keep those items that could serve as proof for future investigations.
		Record any changes to the CP and EOC teams in the situation report.

2.1 Team change		
Head of Planning,		If the event persists, notify the replacement.
Operations EOC		Make sure that the other EOC members <u>and all external stakeholders</u> <u>involved</u> are notified of changes to the team.
		Summarize all relevant internal and external communications and actions for the replacement team.
		Ensure that the actions still underway are transferred.
		Make sure that the replacement team has your contact details.
		Submit a copy of the individual activity log and the shared activity log of the EOC to the on-call Emergency Management Coordinator (for the incident report).

	3. Demobilization of the emergency centres		
Head of Planning, Operations EOC		Make sure to record all the information required for completing the individual activity log and the shared log of the EOC.	
		Keep all elements of proof and submit the individual activity log and the shared log of the EOC to the on-call Emergency Management Coordinator.	
		Notify the EOC Manager of any situation with the potential of impacting the EOC's activities (room, equipment, tools, etc.).	

4. Post-mortem (debriefing)		
	Participate in debriefing sessions.	

4. Post-mortem (debriefing)		
Head of Planning, Operations EOC		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

## C.5.15 Regional Engineer, Operations EOC

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to ECC mobilization)			
Regional engineer		Note the preliminary information regarding the event.	
		Analyze the scope of the incident.	
		Prepare a brief assessment of the anticipated risks and the immediate actions required.	
		Upon receiving a message regarding the EOC's mobilization (via SMS), follow the instructions (e.g. go to the designated EOC room as quickly as possible or join the telephone bridge).	
		Make sure to have the most up-to-date on-duty personnel chart in hand.	
		Open an individual log and a shared activity log to document the EOC's actions and decisions.	

2. Intervention (when the EOC is mobilized)		
Regional engineer		Obtain an initial verbal situation report from the EOC Manager.
		Participate in the EOC Manager's round tables to ensure that all issues and consequences associated with the emergency situation have been identified.
		Pay special attention to the accuracy of the emergency management information received and transmitted.
		Provide technical knowledge about the network to the EOC.

2. Intervention (when the EOC is mobilized)
During the round tables (APC), ensure that EOC discussions take into consideration:
Support for the CP, to ensure implementation of the necessary immediate actions;
• Validation of intervention methods, to ensure the safety of stakeholders, personnel and the public at the emergency site;
• Validation of the security of the overall area and help with the identification and development of alternate intervention tactics;
• Validation of the method adopted to plug/neutralize the danger and help with the identification and development of alternate intervention tactics;
• Validation of the adopted repair (restoration) method and help with the identification and development of alternate intervention tactics;
Anticipation of needs in terms of resources and logistics.
Develop technical solutions in conjunction with the engineers mobilized within the emergency structure.
Obtain the requested technical opinions, depending on the situation.
Coordinate all of the necessary actions with the hydraulic and mapping engineer (prioritize requests) and the head of engineering at the EEC.
Consult OP6 Request for environmental declaration to see if an environmental declaration is required and contact the Environment Engineer if necessary (e.g. wetlands or water). If required, consult the Environment Engineer via the Support and Expertise Centre (SEC).
Approve the technical feasibility of the solutions considered according to the impact they have on network integrity, if the EEC has not been mobilized.
Ensure coordinated and adequate deployment of technical solutions in the field (e.g. inform NSO during restoration).
Request a drawing from the field technicians/stakeholders.
Make sure to record all of the principal technical information in the EOC room tables and maps.

	2. Intervention (when the EOC is mobilized)
	Respond to delegated requests and provide a status update during the next round table. If applicable, coordinate actions with your operations centre (OC).
	Anticipate how the situation might evolve (e.g. potential deterioration).
	Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
	Remain available to meet the needs of the EOC.
	Regularly check for messages (voicemail, email, texts).
	Keep those items that could serve as proof for future investigations.

2.1 Team change		
Regional engineer		If the event persists, notify the replacement.
		Make sure that the other EOC members <u>and all external stakeholders</u> <u>involved</u> are notified of changes to the team, as agreed.
		Summarize all relevant internal and external communications and actions for the replacement team.
		Ensure that the actions still underway are transferred.
		Make sure that the replacement team has your contact details.
		Submit a copy of the individual activity log to the on-call emergency management coordinator (for the incident report).

3. Demobilization of the emergency centres		
Regional engineer		Make sure to record the information required for completing the individual activity log.
		Keep all elements of proof and submit the individual activity log to the on- call emergency management coordinator.

4. Post-mortem (debriefing)		
Regional engineer		Participate in debriefing sessions.
		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

## C.5.16 Operations EOC – Energy Solutions

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to ECC mobilization)			
Person in charge of		Note the preliminary information regarding the event.	
Regional Sales		Analyze the scope of the incident.	
		Prepare a brief assessment of the anticipated risks and the immediate actions required.	
		Upon receiving a message regarding the EOC's mobilization (via SMS), follow the instructions (e.g. go to the designated EOC room as quickly as possible or join the telephone bridge).	
		Make sure to have the most up-to-date on-duty personnel chart in hand.	
		Open an individual log and a shared activity log to document the EOC's actions and decisions.	

2. Intervention (when the EOC is mobilized)		
Person in charge of Regional Sales		Obtain an initial verbal situation report from the EOC Manager.
		Participate in the EOC Manager's round tables to ensure that all issues and consequences associated with the emergency situation have been identified.

2. Intervention (when the EOC is mobilized)
<ul> <li>During the round tables (APC), ensure that EOC discussions take into consideration:</li> <li>Information received directly from clients;</li> </ul>
The list of impacted or potentially impacted clients;
Specific impacts and actions associated with the affected clients (communications, interruption requests, etc.).
Ensure and maintain ongoing contact with impacted (or potentially impacted) clients, in particular to keep the EOC Manager notified of all situations that could require specific action.
When an event includes one or several Sales Major Industries clients and involves the opening of an EOC, the Energy Solutions Major Industries representative assigned to the ECC on duty must always be included. The objective of this approach is to ensure a communication link between the Energy Solutions Major Industries clients and the committee responsible for operations.
Respond to delegated requests and provide a status update during the next round table. If applicable, coordinate actions with your operations centre (OC).
During individual work periods, stay in regular contact with the sales leader at the ECC (if mobilized).
Anticipate how the situation might evolve (e.g. potential deterioration).
Pay special attention to the accuracy of the emergency management information received and transmitted.
Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
Remain available to meet the needs of the EOC.
Regularly check for messages (voicemail, email, texts).
Keep those items that could serve as proof for future investigations.

2.1 Team change			
Person in charge of Regional Sales		If the event persists, notify the replacement.	
		Make sure that the other EOC members, the sales leader at the ECC <u>and</u> <u>all external stakeholders involved</u> are notified of changes to the team, as agreed.	
		Summarize all relevant internal and external communications and actions for the replacement team.	
		Ensure that the actions still underway are transferred.	
		Make sure that the replacement team has your contact details.	
		Submit a copy of the individual activity log to the on-call emergency management coordinator (for the incident report).	

3. Demobilization of the emergency centres		
Person in charge of Regional Sales		Make sure to record the information required for completing the individual activity log.
		Keep all elements of proof and submit the individual activity log to the on- call emergency management coordinator.

4. Post-mortem (debriefing)		
Person in charge of		Participate in debriefing sessions.
Regional Sales		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

## C.5.17 Crisis Communication Centre Coordinator

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate action (prior to ECC mobilization)			
CCC Coordinator		Note the preliminary information regarding the event.	
		Analyze the scope of the incident.	
		Prepare a brief assessment of the anticipated risks and the immediate actions required.	
		If not already done, communicate with the on-call media officer to record any additional information and provide preliminary instructions.	
		Depending on the situation, mobilize the CCC in the main emergency room (Public Affairs room) or an alternate room (ÉTG – Room 1).	
		Contact the Emergency Dispatch Centre to mobilize the CCC members.	
		Make sure to have the most up-to-date on-duty personnel chart in hand.	
		Open an individual activity log.	

2. Intervention (when the CCC is mobilized)				
CCC Coordinator		Provide the CCC members with an initial verbal situation report.		
		Pay special attention to the accuracy of the emergency management information received and transmitted.		
		Ensure the liaison with the Public Affairs representative on call and the Emergency Coordination Centre (ECC).		
		Ensure that persons in charge are designated to handle each issue, and that they prepare and implement action plans with regard to each of the following:		
		• the logbook;		
		media watch;		
		• research;		
		writing;		
		spokesperson support;		
		<ul> <li>press relations (if necessary and if there are very many requests from the media);</li> </ul>		
		relations with first responders and municipalities;		

2. Intervention (when the CCC is mobilized)
<ul> <li>relations with governments and various agencies;</li> <li>employees;</li> <li>customers (CS and Sales).</li> </ul>
<ul> <li>Lead CCC discussions and decision-making (round table – APC), while bearing in mind the company's integrity and reputation, through the following actions:</li> <li>Assessment of all types of communication issues;</li> <li>Definition of the communication approach such as: <ul> <li>Social and traditional media communications (issuing of press releases, answering questions, organization of press briefings, etc.);</li> <li>Needs in terms of naming and dispatching a spokesperson to the incident site (as required);</li> <li>Communications with government representatives and other municipal leaders concerned by the event (as required);</li> <li>Coordination with the EM Coordinator for communications with the municipal public safety stakeholders;</li> <li>Communications with citizens (answers to questions, etc.)</li> <li>Internal communications with employees, in conjunction with the person in charge of Employees and Culture (as required) – Foresee posting information on the intranet;</li> <li>Client communications/messages to be forwarded to CS and Sales;</li> <li>Organization of press relations (as required);</li> <li>The need to increase awareness about the smell of gas and the actions to be taken if the smell of gas is detected (distribution of scratch-and-sniff leaflets, letters, targeted social media, etc.).</li> </ul> </li> <li>Definition of communication tools (key messages, drafting of various internal and external releases or memos;</li> <li>CSR lines;</li> <li>Sales lines;</li> <li>Sales lines;</li> <li>Status of situation and messages to the Board of Directors (sent via the Corporate Secretary).</li> </ul>

2. Intervention (when the CCC is mobilized)
<ul> <li>Develop, in collaboration with the SVP, Public Affairs (if CMC underway), relations with first responders, government and municipal representatives, and all other stakeholders deemed relevant.</li> <li>Carry out general and technical research to document the problem underway.</li> <li>Media watch (social and traditional media).</li> <li>Sharing the information and advice imparted by the person in charge of Public Affairs to the CMC and ECC (according to APC round table).</li> </ul>
Have all final communications approved by the ECC (if mobilized). If not, approve them.
Consult the CCC members to determine whether other resources should be mobilized and if so, which ones (internal human resources, external resources/subcontractors, special equipment, SEC, translator) or if additional tools are required (ex.: printing of incident's network map). It is also possible to ask the SIC person on duty to join the CCC.
Confirm, on an ongoing basis, whether all the CCC members must remain mobilized; if not, demobilize some members, as the case may be.
Dispatch a resource to the mobilized EOC, as required.
Respond to delegated requests and provide a status update during the next round table.
Ensure that regular situation reports are provided to the ECC and CMC. After each communication, determine the time of the next update. Depending on the situation, disseminate relevant visual information (e.g. photos).
Anticipate how the situation might evolve (e.g. potential deterioration) (1 to 24 hours).
Remain available to meet the needs of the ECC and CMC.
Regularly check for messages (voicemail, email, texts).
Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.

	2. Intervention (when the CCC is mobilized)
	Keep those items that could serve as proof for future investigations.

2.1 Team change		
CCC Coordinator		If the event persists, notify the replacement and ensure that CCC members have alternates/can be replaced.
		Make sure that the other CCC members <u>and all external stakeholders</u> <u>involved</u> are notified of changes to the team, as agreed.
		Summarize all relevant internal and external communications and actions for the replacement team.
		Ensure that the actions still underway are transferred.
		Make sure that the replacement team has your contact details.
		Submit a copy of the individual activity log (for the incident report) to the replacement.

3. Demobilization of the emergency centres		
CCC Coordinator		Make sure to record the information required for completing the individual activity log.
		Keep all elements of proof and submit the individual activity log to the emergency management coordinator who helped cover the event.

4. Post-mortem (debriefing)		
CCC Coordinator		Hold a debriefing session of the CCC.
		Participate in debriefing sessions.
		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

## C.5.18 CP Head

\*\*\* Read the entire list before taking action \*\*\*

	1.	Immediate actions (before arriving at the scene)
CP Head		Upon receiving a message regarding mobilization, follow instructions (e.g. go to the designated address) and confirm that the intervention is being taken in charge.
		Note the preliminary information regarding the event. If needed, ask the EDCW/EDCE to take note of actions/information.
		Use Fieldview to gather information on the gas network adjacent to the site of the break.
		Obtain an initial verbal situation report from Énergir personnel or the contractor.
		Ensure that the site is secured by Énergir personnel, if required.
		Notify Énergir personnel heading to the site of the incident of the location of the command post.

2. Intervention (CP is mobilized upon arriving at the scene)		
CP Head		Report to public emergency service representatives (in particular the site coordinator, most often the head of the fire department) upon arrival if they are at the scene. Clearly identify yourself to the site coordinator, in particular by wearing a distinctive sign (yellow vest). If necessary, ask the EDCW to call 911.
		Confirm that the site is secure with fire department representatives, if they are on site. Ensure to comply with technical specifications, for example spec #59.01.01.
		Ensure the personnel's health and safety, anticipate the incident's duration and ensure that the OHS golden rules are respected throughout the intervention.
		Obtain a drawing of our gas lines and give it to the public services representatives.

2. li	ntervention (CP is mobilized upon arriving at the scene)
C	Obtain an initial verbal situation report from the witnesses at the site (e.g. emergency services, Énergir personnel, contractor).
C	Prepare a brief assessment of the anticipated risks and the immediate actions required. Use alert criteria as necessary (manager checklist).
C	<ul> <li>If necessary, ask the EDCW to mobilize additional resources (ex.: support group leader, NTS team, technicians, equipment, etc.) or to contact the EOC Operation Director on-duty and execute the following:</li> <li>Keep the Director informed about the emergency</li> </ul>
	<ul> <li>Ask for special resources needed for the emergency (tools, technicians, etc.)</li> </ul>
	<ul> <li>Planning of team replacement (4 p.m.)</li> <li>Ensure the safety and integrity of the gas network with the help of the hydraulic and mapping engineer</li> </ul>
C	Inform the on-call person for Public Affairs, Media Interventions via the EDCW of any relevant information (e.g. media presence, special-purpose buildings [SPBs], industries, road blockage, airports, etc.).
C	Inform the on-call person for workplace health and safety/environmental matters of any incident involving the health or safety of a worker (injury, death, spillage of hazardous material, etc.)
E	Contact the on-duty EOC Regional Engineer, or the Environment Engineer if needed, to confirm whether an environmental declaration is required (as per OP6 <i>Request for environmental declaration</i> – e.g. wetlands or water).
	The intranet address (hyperlink to internal documentation) allowing the OP6 to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.
	Ensure that the actions are shared among all the Énergir resource persons present in the field, including the Support/Communications group manager, if applicable. The CP head remains the field manager for the incident, but may delegate certain tasks (e.g. communication with the FD, damaged area to be covered, management of plugging operations, etc.).
C	In collaboration with the EOC, anticipate medium-term needs as regards operations employees (1 to 3 hours) if required. In particular, observe the

2.	Int	ervention (CP is mobilized upon arriving at the scene)
		recommendation to replace technicians after a 16-hour work period over a 24-hour cycle.
		Note down the primary actions and communications executed during the intervention and send this information to the Control Office, so that the emergency form can be filled out (SRP RD FR).
		Agree on an action plan which includes different alternatives with the EOC Director, if needed, and depending on the emergency, transmit the information to the EOC-Operation Director and to the CP stakeholders.
		Anticipate how the situation might evolve (e.g. potential deterioration). Prepare a plan B (back-up plan) if necessary.
		Submit regular status reports to the Director, Business Office (or Manager, Operations EOC, depending on the situation) in order to keep them apprised of the evolution of the situation. Depending on the situation, if there are no emergency services restrictions, disseminate relevant visual information (e.g. photos) to the EOC Manager, while complying with PrOHS 53 regarding intrinsic tools.
		Make sure the selected plugging method is performed according to technical specification 59.02.01.
		Pay special attention to the accuracy of the emergency management information received and transmitted. The CP Head is responsible for validating the information relating to: the number of injured persons or deaths (Énergir, clients, public, contractors), the role of gas in the fire, the state of affairs at the site (e.g. extent of damages), evacuation of the area (e.g. number of people evacuated, geographical scope, etc.).
		Regularly check for messages (voicemail, email, texts).
		Keep those items that could serve as proof for future investigations. Take clear photographs of the site of the incident and the damage. Use the "hit kit" to capture the specific location and the height of the pipeline, if required.
		Establish the division of responsibilities (e.g. link to emergency services, communication links to different stakeholders such as public affairs, emergency services, the Manager – Operations EOC, NTS, hydraulic and mapping engineer, etc.).
		Coordinate all Énergir stakeholders on the site.

2.	Int	ervention (CP is mobilized upon arriving at the scene)
		Ensure personnel safety and well-being, through specific intervention methods, estimation of the emergency situation's duration, planning replacement teams, meal management, assessment of the need for street closures in close proximity to the work area, etc.
		Ensure the safety and integrity of the gas network.
		During a restoration in a situation that has a significant impact on the gas network (e.g. affecting many customers, Sales Major Industries, transmission), ensure that NSO is contacted.
	Cha	ampion Pipeline Network Incident
		Ensure that the Emergency Management Coordinator is notified (notice to TSB).
		In the case of an environmental incident or one involving worker health or safety, notify the on-call person for workplace health and safety/environmental matters (notice to authorities)

2.1 Team change			
CP Head		If the event lasts for more than 16 hours of work, ask the Manager, Operations EOC to provide for replacements.	
		Make sure that the other CP members and <u>all external stakeholders</u> <u>involved</u> are notified of changes to the team, as agreed.	
		Summarize all relevant internal and external communications and actions for the replacement team.	
		Ensure that the actions still underway are transferred.	
		Make sure that the replacement team has your contact details.	
		Submit a copy of all notes to the replacement.	

	3. Demobilization of the emergency centres
CP Head	Communicate with the Emergency Dispatch Centre (EDC West or EDC East) at the time of the final plugging, to send the information.
	Ensure the planning of the repair steps (i.e. have all the necessary resources, for example material, labour, equipment).
	Keep all elements of proof and notes concerning the event and submit them to the on-call Emergency Management Coordinator.

4. Post-mortem (debriefing)		
CP Head		Organize hot debriefing sessions with the team.
		Participate in the debriefing organized by the ECC Emergency Management Coordinator (whenever necessary).
		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

## C.5.19 Hydraulic and Mapping Engineer

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate actions		
Hydraulic and Mapping Engineer		Upon receiving an alert message (via SMS), confirm its receipt by calling the requester.
		Note the preliminary information regarding the event.
		Prepare a brief assessment of the anticipated hydraulic issues and the immediate actions to be undertaken.
		If necessary, ask the EDCW to contact the various resources (head of engineering, regional engineer).
		Open an individual activity log.

	2. Intervention (during the mobilization)
Hydraulic and Mapping Engineer	<ul> <li>In the event where:</li> <li>Only a CP is mobilized, respond to the questions from the requester (e.g. CP Head);</li> <li>An EOC is mobilized, dedicate a limited communication line to the regional engineer.</li> </ul>
	<ul> <li>Based on the requests prioritized by the identified contact point along with the type of event, make sure the following is done when required:</li> <li>Engineering emergency plan/Procedure to lower the pressure/Station closure procedure;</li> <li>Network analysis (line pack calculation, purge time, time available);</li> <li>Analysis of possible hydraulic options;</li> <li>List of clients;</li> <li>By-pass calculation;</li> <li>Calculations for regulators, stations, etc.;</li> <li>Connection plans/pipe plans;</li> <li>Confirmation of cooling times.</li> </ul>
	Regularly follow up with the regional engineer regarding pending requests and the expected response time (e.g. time necessary to generate a final list of clients).
	Depending on the scope of the situation, request additional resources through the head of engineering at the ECC to better comply with the requests of the regional engineer (e.g. by creating an engineering SEC).
	Anticipate how the situation might evolve (e.g. potential deterioration).
	Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
	Keep those items that could serve as proof for future investigations.

2.1 Team change		
C	If the event persists, notify the replacement.	

2.1 Team change		
Hydraulic and Mapping Engineer		Make sure that all of the <u>stakeholders involved</u> are notified of the team change, as agreed.
		Summarize all relevant internal and external communications and actions for the replacement team.

3. Demobilization of the emergency centres		
Hydraulic and Mapping Engineer		Make sure to record the information required for completing the individual activity log.
		Keep all elements of proof and submit the individual activity log to the on- call emergency management coordinator.

4. Post-mortem (debriefing)		
Hydraulic and Mapping Engineer		Participate in various debriefing sessions as per the requests from the persons in charge of emergency centres.
		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

## C.5.20 On-call Media Officer

\*\*\* Read the entire list before taking action \*\*\*

1. Immediate actions		
On-call Media Officer		Note the preliminary information regarding the event.
		Analyze the scope of the incident.
		Prepare a brief assessment of the anticipated risks (e.g. magnitude of impact, customers, media effects, political impact, etc.) and the immediate actions required.
		If the situation is deemed critical, notify the CCC Coordinator of the situation and the brief assessment of the event, so they can determine whether a CCC should be opened.

Make sure to have the most up-to-date on-duty personnel chart in hand. Can refer to the CCC Manual. The intranet address (hyperlink to internal documentation) allowing the OP6 to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.
Open an individual activity log.

2. Intervention		
On-call	In the eve	ent of CP or EOC mobilization, without CCC mobilization:
Media		Pay special attention to the accuracy of the emergency management
Officer	0	information received and transmitted.
	0	Anticipate how the situation might evolve (e.g. potential deterioration?) (1 to 24 hours).
	0	<ul> <li>Depending on the magnitude of the situation, ensure that the following aspects are covered:</li> <li>Liaise with relevant stakeholders (e.g., government affairs, municipal affairs, on-call CS person, etc.)</li> <li>Respond to requests received from: <ul> <li>External sources (e.g., media requests, questions on social media)</li> <li>Internal sources (e.g., requests from group leader, EOC, CCC, ECC)</li> </ul> </li> <li>Implement information tools (key messages, questions and answers for customer service and the media, robocall scripts, internal messages, etc.).</li> <li>Perform watch (e.g., traditional and social media watch)</li> </ul>
	0	In case of a significant event, notify the on-call CCC person of the situation and, if necessary, obtain CCC approval for final communications.
	0	In situations affecting the gas network, be sure to inform the on-call customer service officer.
	0	Remain available to meet the needs of the CP or EOC.
	0	Regularly check for messages (voicemail, e-mail, texts).
	0	Keep an individual activity log to record the exchanges with various internal and external partners, as well as the details of the decisions taken.
	0	Keep those items that could serve as proof for future investigations and liaise with government and municipal relations advisors.
		In the event of CCC mobilization:
	0	Attend meetings and remain available for any CCC requests, depending on the new role assigned.

2.1 Team change		
On-call	0	If the event persists, notify the replacement.
Media		Make sure that all of the external stakeholders involved are notified of
Officer	0	the team change, as agreed.

$\sim$	Summarize all relevant internal and external communications and actions for the replacement team.
0	Ensure that the actions still underway are transferred.
	Ensure that the person replacing you has your contact information and that of internal and external contacts.
0	Send the link to the tools produced and written as part of the event.

3. Demobilization of the emergency centres		
On-call Media	$\circ$	Make sure to record the information required for completing the individual activity log.
Officer	0	Keep all elements of proof and submit the individual activity log to the emergency management coordinator who helped cover the event.

		4. Post-mortem (debriefing)
On-call	0	Participate in debriefing sessions.
Media Officer		Follow up on and implement the recommendations put forth in the debriefing report and which fall under your responsibility.

# C.6 Roles and responsibilities of external stakeholders during an incident

This section aims to provide Énergir stakeholders with clear information regarding:

- Possible interactions with external emergency intervention services;
- The role that such external stakeholders could take on.

This section aligns with the <u>Frame of Reference – Pipeline Response (FRPR)</u> (in French only) and <u>Guide</u> relative aux operations incendie (fire operations guide) of the MSPQ.

These external organizations or agencies are responsible for:

- Preparing their intervention plan and requesting any necessary information from Champion;
- Sharing all relevant information with Champion;
- Notifying Champion of any necessary changes or adjustments.

See OPR sect. 32(1.1), OPR sect. 33, OPR Appendix A.2, OPR Appendix A.3, OPR Appendix A.4, Clauses 3.1.2(b) and 10.5.2.1 CSA Z662

## C.6.1 Local public authorities

#### The municipality

Should an event have impacts that extend beyond the limits of Champion's property, there could be an effect on the people, property, and environment of the municipalities touched. A coordinated intervention

by the various organizations would then be required. The responsibilities of municipal/city stakeholders include:

- Declaring a local state of emergency, as the case may be;
- Coordinating the intervention of private and public organizations on the territory;
- Implementing measures to prevent or minimize harm to persons, property and the environment within the territory;
- Submitting requests to adjoining municipalities, as the case may be;
- Organizing public alerts.

#### Sûreté du Québec

The Sûreté du Québec describes its role as follows: "[Translation]... The Sûreté du Québec [...] contributes [...] to upholding the peace and public order, preserving the life, safety and fundamental rights of people while protecting their property."<sup>[1]</sup>

The responsibilities of Sûreté du Québec stakeholders include:

- Setting up a security perimeter around the site;
- Directing traffic outside of the company site;
- Intervening to assist company stakeholders (e.g. evacuation, bomb threat);
- Leading operations for certain interventions (trespassing, discovery of a bomb, etc.).

#### Fire department (FD)

The responsibilities of the fire department include:

- Directing the operations during a fire within a municipality, outside of the site.
- Helping emergency brigades in the event of a fire or hazardous product spill.

In Québec, Champion provides its support to the FD, which is the authority in such an event<sup>3</sup>. In fact, under the guidelines developed by the Ministère de la sécurité publique du Québec to support interventions during incidents involving natural gas, "...the fire department, once at the site of an incident involving natural gas, is responsible for coordinating the activities of the various stakeholders. The head of operations must establish a strategy that complies with accepted practices to control the intervention in the safest possible manner."

In the same vein, the fire operations guide outlines the fire response measures for natural gas facilities.

These are essentially guidelines for the development and coordination of such an emergency plan.

CORPORATE EMERGENCY MANAGEMENT SYSTEM MANUAL

<sup>&</sup>lt;sup>[1]</sup> Excerpt from the Sûreté du Québec website (in French only) at <u>http://www.suretequebec.gouv.qc.ca</u>

<sup>&</sup>lt;sup>3</sup>See section 39 of the *Fire Safety Act*.

#### Ambulance service

The responsibilities of ambulance service stakeholders include:

- Dispatching the necessary pre-hospital resources to the disaster site as quickly as possible;
- Coordinating the first aid required by injured persons outside of the danger zone;
- Transporting the injured persons to regional hospitals.

## C.6.2 Federal public authorities

#### Environment Canada

Environment Canada requires that the company notify its emergency call centre whenever an incident involves substances <sup>4</sup>targeted by the *Environmental Emergency Regulations* (CEPA 200).

The responsibilities of Environment Canada stakeholders include:

- Acting as technical and scientific advisors;
- Ensuring that all adequate measures are taken promptly to protect the environment.

#### Canada Energy Regulator

The CER's absolute priority in the event of an emergency is to ensure the safety and security of people as well as protecting property and the environment. CER inspectors are authorized to make their way to the site of a major incident to monitor a company's immediate response. The CER requires that all possible reasonable measures be taken to protect employees, the general public and the environment. Furthermore, the CER ensures that regulated companies do the necessary clean-up and implement appropriate corrective measures whenever an incident has an environmental impact.

<sup>&</sup>lt;sup>4</sup>In Champion's case, mercaptan is concerned by this Regulation.

As the primary regulatory agency in this regard, the CER also:

- Monitors and evaluates the overall efficiency of a company's emergency intervention for the following:
  - emergency management;
  - o safety;
  - o security;
  - o environment;
  - o integrity of the operations and facilities;
  - o power supply.
- Investigates the event, either in cooperation with the Transportation Safety Board of Canada (by virtue of the *Canada Labour Code*, or under the *Canadian Energy Regulator Act* or the *Canada Oil and Gas Operations Act* (depending on which one applies).
- Inspects the pipeline or facility.
- Examines the integrity of the pipeline or facility.
- Ensures that appropriate repair methods are adopted.
- Makes sure that the appropriate environmental corrective measures are implemented within the contaminated areas.
- Coordinates feedback from stakeholders and Aboriginal communities on the cleaning and corrective measures.
- Confirms that the company complies with the provisions of its emergency management manual, its commitments, its plans and procedures, as well as CER regulations, and identifies instances of noncompliance.
- Applies action measures as needed.
- Approves the resumption of pipeline operations.

#### Transport Canada (TC)

- For the restriction of carrier movement, and transportation of merchandise and people subject to transport regulations (for example, deviated flight plan due to reduced air visibility after the emergency);
- The supply of intervention technical service in case of emergency and the formulation of a regulatory opinion regarding the transport of hazardous materials;
- Information exchange with partners and the rest of the industry;
- Facilitation for obtaining security clearances and access to regulated areas for the emergency staff;
- Issuing recommendations regarding the use and the availability of civil transportation or goods from Transport Canada; and
- Availability of temporary facilities, equipment or resources related to transport in order to increase the number of national transportation networks (for example: subsidies and contributions after the event, among others).

#### Natural Resources Canada (NRCAN)

 Collect, appraise and transmit information regarding the damage caused to the energy system and the estimate of the consequences of the system breakdown in affected areas. Also, provide information and opinions about the energy recovery process, if needed.

#### Public Services and Procurement Canada (PSPC)

• If required, provide continuous and efficient delivery of various goods and emergency services from the ministry in order to support the ministry (or ministries) involved in the intervention.

Other ministries or government departments may be affected by the event (e.g. Employment and Social Development Canada (ESDC), Canadian Armed Forces (CAF), Canada Post.

## C.6.3 Provincial public authorities – Québec

#### Direction régionale de la sécurité civile du Québec

The Direction régionale de la sécurité civile du Québec coordinates public safety planning actions.

The responsibilities of regional public safety stakeholders include:

- Warning the Québec municipalities that could possibly be impacted by the situation;
- Establishing a link with other provincial and federal departments;
- If applicable, advising municipal bodies and private organizations during the course of an emergency situation;
- Making the Direction régionale de la sécurité civile du Québec resources available to the organizations involved;
- Taking control of public safety management when the event takes on a regional scope.

#### Government operations centre (COG)

The government operations centre (COG) is a service offered by the Ministère de la Sécurité publique du Québec. The centre's mission is to ensure a continual watch over the Québec territory while facilitating the transfer of necessary information during emergency situations.

The COG allows the Government of Québec to:

- foresee events that could compromise the safety of citizens through an ongoing surveillance of the territory;
- notify and warn the stakeholders concerned;
- coordinate operations during emergencies, crises or major disasters.

## Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC)

Generally speaking, the Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques du Québec takes on a technical advisory role through its Urgence-Environnement service. This service ensures that all adequate measures are taken promptly to protect the environment. For major environmental emergencies, the government intervention is coordinated by the Direction générale de la sécurité et de la prévention du Québec.

When a situation requires it, Urgence-Environnement establishes a link with other provincial and federal departments and:

- Acts as a technical and scientific advisor;
- Ensuring that all adequate measures are taken promptly to protect the environment.

#### Commission des normes, de l'éthique et de la santé et de la sécurité au travail (CNESST)

#### <u>Mission</u>

The CNESST is an agency that promotes and ensures compliance with the labour rights and obligations of Québec's workers and employers.

To do so, it:

- supports fair and balanced labour relations;
- ensures the implementation and maintenance of pay equity;
- encourages control of health and safety in the workplace, compensates workers who suffer employment injuries and sees to the latter's rehabilitation.

#### **Roles and responsibilities**

The CNESST provides a unique portal for accessing all services concerning occupational health and safety measures, standards and equity.

Its services cover the following:

- Labour standards;
- Pay equity;
- Occupational health and safety:
  - Helping employers and workers improve workplace safety;
  - Conducting workplace inspections to ensure compliance with the rights and obligations provided for under the *Act respecting occupational health and safety*;
  - o Making information available on the risks relating to specific workplaces;
  - o Compensating workers who suffer an employment injury (reimbursing the eligible fees incurred);
  - Making sure that workers with an employment injury receive the necessary medical and rehabilitation services;
  - Collaborating with employers to ensure a prompt and lasting return to work for workers who suffer an employment injury;
  - o Establishing the conditions for employer insurance coverage and ensuring registration;
  - Helping employers apply and comply with the conditions of their insurance coverage.

Under section 62 of the *Act respecting occupational health and safety*, the Commission must be notified whenever:

• an accident causes the death of a worker;

- the worker suffers a significant physical trauma (e.g. loss of a limb);
- several injured workers must leave;
- the event causes material damage valued at \$150,000 or more.

In that case, a **written report** of the incident must be transmitted to the CNESST within 24 hours. A **copy** of this report must be submitted to the occupational health and safety committee and the safety representative.

Furthermore, the CNESST's Service du répertoire toxicologique makes it possible to receive information on chemical products by telephone.

## C.6.4 Provincial public authorities – Ontario

#### Ministry of Community Safety and Correctional Services

The Ministry of Community Safety and Correctional Services is committed to supporting and protecting Ontario's communities through application of the law and public safety systems.

The ministry's responsibilities fall into three broad categories:

#### **Correctional Services**

#### Public Safety and Security

- Ensure the physical and economic safety of Ontario, under the Commissioner of Emergency Management and by coordinating public safety initiatives of municipal service organizations and fire and emergency departments within and outside of the province.
- Offer programs and develop partnerships to minimize or eliminate the risks to individuals and property through public awareness-raising initiatives, emergency measures, scientific investigations, and by coordinating the activities of the fire-safety services and medical coroners.

#### **Police Services**

- Oversee all police services in Ontario, and most particularly those of the Ontario Provincial Police (OPP).
- Deliver permits, regulate and oversee the activities of agencies and individuals that offer private investigative and security services in Ontario.

Emergency Management Ontario defines its role as follows:

- To support municipalities in times of emergency, the province maintains an extensive emergency management capacity that is coordinated through the Provincial Emergency Operations Centre (PEOC).Staffed at all times, the PEOC constantly monitors evolving situations inside and outside Ontario to ensure that decision makers and provincial resources are able to respond as quickly as possible if required.
- Emergency Management Ontario and the PEOC are directly supported by provincial departments that have been assigned the responsibility of developing an emergency management program for specific hazards. For example, the Ministry of Natural Resources is responsible for floods and wildfire response, while the Ministry of the Environment is responsible for emergencies related to water

quality. During an emergency, the PEOC ensures that the response to any event is coordinated in support of the ministry in charge.

- During large-scale emergencies, the premier and cabinet may declare a provincial emergency and give special emergency orders to protect public safety.
- If the province requires specialized or large-scale assistance from the federal government, it will be requested through Emergency Management Ontario.

In an emergency situation, EMO will ask that 911 be called<sup>5</sup>.

#### Workplace Safety and Insurance Board (WSIB)

The Workplace Safety and Insurance Board (WSIB) is an independent trust organization that administers the no-fault employment injury insurance program for Ontario workplaces.

The roles and responsibilities of the WSIB are as follows:

- Promote the prevention of occupational injuries and illnesses;
- Compensate workers for work-related injuries or illnesses.
- Administer a no-fault collective liability system. Workers waive their right to file proceedings against their employer for work-related injuries in exchange for guaranteed compensation of authorized claims. Employers are in turn protected from lawsuits in exchange for paying the premiums that help fund the program;
- Offer workers benefits for lost wages and healthcare-related expenses;
- Give employers and workers support and assistance upon return to work after an injury;
- Oversee the Ontario occupational safety education and training system by establishing standards for the certification of members of a joint committee and the approval of training programs;
- Monitor the quality of healthcare services offered to workers receiving disability benefits, and helping these same workers enjoy a quick and safe return to work by establishing standards for supervision, roles and activities;
- Fund occupational health and safety research, and advise the Ministry of Labour and increasing public awareness.

#### Ontario Spill Center

Under the *Environmental Protection Act* (EPA), spills must immediately be reported to the Spills Action Centre<sup>6</sup>.

This centre will take the necessary actions. Among other things, *Environmental officers from the Ministry* of the Environment and Climate Change take your report and:

- document the information and actions taken
- gather further information

<sup>&</sup>lt;sup>5</sup>See reference: <u>https://www.ontario.ca/page/emergency-information</u>, consulted on April 12, 2017

<sup>&</sup>lt;sup>6</sup>See reference <u>https://www.ontario.ca/page/report-spill</u>, consulted on April 12, 2017

- ensure those responsible are taking action as per their legislative responsibility
- · provide advice and information related to spills or drinking water events
- conduct a field visit during business hours or an after-hours response
- liaise with other agencies as required

District-level Response: 1st level field response is provided by environmental officers working out of the ministry's district or area offices.

For example, when an accident involving a tanker truck has spilled a load of chemicals onto a highway:

- district response staff assess the situation
- determine what actions need to be taken
- what additional resources may be needed

Each district office has an on-call environmental response person who is sent out by the Spills Action Centre under certain conditions.

Regional-level response: In some cases, a regional-level response will be needed to support a Districtlevel response bringing in technical support and resources from the ministry's 5 regional offices.

For example, region-level support may be required for a significant chemical fire. Regional assistance or expertise may include:

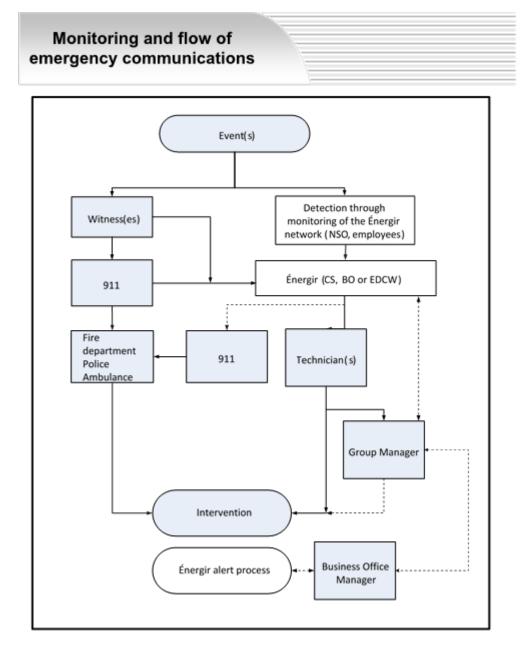
- staff
- equipment
- technical expertise
- air or water monitoring or modelling and interpretation (a picture of existing and projected conditions)
- responsibility for issuing directions, approvals or orders under the Environmental Protection Act.

## C.7 General alert and mobilization diagram

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.3, OPR Appendix A.7

## C.7.1 Initial emergency action

The process below presents the surveillance system in place for emergency situations as well as the channels used to ensure efficient emergency communications.



Specific actions during the initial network intervention are defined in the technical specifications, namely documents 59.01.01 – First responder – general information (D.3) and 59.02.01 – Emergency response to a natural gas pipeline leak (D.6).

## C.7.2 Surveillance and reporting of unusual situations

Énergir has several surveillance systems for detecting unusual situations on its territory. These systems are also designed to enable initiating the appropriate corrective measures in the event of an incident. The following table lists each of these systems and briefly explains their respective functions. Contact details for getting in touch with system operators are included in the on-duty personnel chart.

System	Monitoring
Network Surveillance Operations (NSO) 24/24	Controls the flow and pressure over the entire transmission and supply network.
	Monitors trespassing in certain strategic locations (e.g. primary delivery stations).
Customer service/Incoming call	Monitors the type, volume and origin of customer service calls.
centre (8 a.m. to 6 p.m.) 1-800-361-8003	Receives and handles calls from the 911 emergency service.
Emergency Dispatch Centre	Receives and handles calls from the 911 emergency service.
(24/24)	Dispatches teams in the field.
EDC West and EDC East	The EDC West:
	• Ensures customer service (6 p.m. to 8 a.m.);
	• Provides EDC East services (4:00 p.m. to 7:30 a.m.).
	Contacts 911 emergency services, when necessary.
Guard post/Security/Gate house 24/24	Monitors buildings and facilities by means of regular rounds, camera and alarm systems.
xMatters 24/24	IT services surveillance tool.
LSR plant control centre	Surveillance of the LSR plant process.
Public affairs	Performs traditional and social media watch activities.
1-866-598-3449	
communications@energir.com	

## C.7.3 When to notify Public Affairs

As noted in the corporate procedures, the Emergency dispatch centres must contact the person on call in the following instances:

• Gas network incident involving:

Evacuation and/or;	Fire or explosion and/or;
Fire or explosion and/or;	Carbon monoxide poisoning and/or;
Traffic at a halt and/or;	Loss of control over the site and/or;
Intervention near a sensitive site (e.g. airport, public place, highway, etc.) or building with a specific purpose (e.g. hospital, school, embassy, parliament building, seniors' residence, daycare centre, historic building, etc.) and/or;	Intervention near a sensitive site (e.g. airport, public place, highway, etc.) or building with a specific purpose (e.g. hospital, school, embassy, parliament building, seniors' residence, daycare centre, historic building, etc.) and/or;
Underground infiltration and/or;	Gas supply cut off for customers who may contact customer service (CS).

- Any request from a media representative and/or;
- Media at the site, or;
- If uncertain, contact us.

## C.7.4 Information to be transmitted to the emergency dispatch centre

If an emergency centre needs to be mobilized, the emergency centre manager is expected to:

- Contact the Emergency Dispatch Centre (EDC West or EDC East)
- Send the following information to the dispatcher:
  - The emergency centre to be mobilized (e.g. ECC, EOC, CCC, CMC)
  - The type of emergency underway (e.g. network incident, transport incident, LSR plant incident, BCRP)
  - The emergency centre mobilization message, including:
    - A brief description of the emergency (e.g. incident site, substance involved)
    - The implementation of a telephone bridge OR physical mobilization meeting place (e.g. Pipeline room)
    - Time of meeting
  - o The dispatcher may have additional questions, depending on the emergency situation.
- At the time of demobilizing, contact the Emergency Dispatch Centre (EDC West or EDC East) to ask that the emergency centre be demobilized so that all stakeholders are properly informed.

Note that the emergency centre manager is required to:

- Mobilize the entire emergency centre and, during the initial telephone bridge, decide whether all emergency centre members will be required for further assistance.
- Limit exception cases when mobilizing an emergency centre (e.g. request that messages are not sent to other emergency centres, say that it is not a real ECC).
- Give a reasonable amount of time for mobilization (e.g. 15 min)

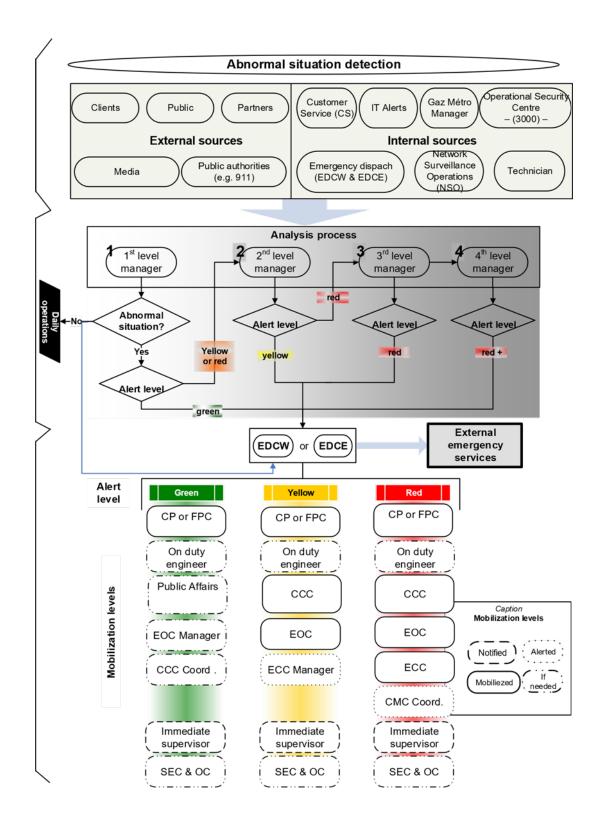
## C.7.5 General alert and mobilization diagram

The alert and mobilization diagram used by Champion stakeholders is the same as that established by Énergir, which is available at:

#### Alert and mobilization diagram

The intranet address (hyperlink to internal documentation) allowing the alert and mobilization diagram to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

The alert and mobilization diagram illustrates the mobilization steps, based on the alert criteria defined in the following section. Therefore, once a red level criterion is reached, an EEC is mobilized.



## C.7.6 Advise, alert and mobilize

The goal of the mobilization mechanism is to allow for a speedy mobilization when a given situation calls for it, and to transmit the necessary information to the various stakeholders that may need to be mobilized if the situation worsens. Therefore, the alert mechanism incorporates three mobilization levels (notified, alerted and mobilized). This calls for setting up an efficient transmission mechanism or other means or relaying information to the stakeholders concerned. The following table lists the notification methods and generic actions to take for each mobilization level.

Mobilization Level	Notification	Contact Method/Media	Action to undertake
Mobilized	Emergency centre members make their way to the designated decision- making centre or join the telephone bridge. They are prepared to take all necessary actions.	SMS/(Email) Work telephone (cellular/office) Personal telephone (cellular/home)	Acknowledge receipt of the message.
Alerted	Emergency centre members are notified of the situation. They make themselves available for mobilization. They are able to make the necessary calls from their location. If necessary, they might take certain actions from their location.	SMS/(Email)	None, except knowing a situation is going on
Notified	Emergency centre members are made aware of the situation. Relevant information is transmitted to them.	SMS/(Email)	None, except knowing a situation is going on

In the event of mobilization, it will be necessary to acknowledge receipt of the message. If this action is not taken, matters will escalate to allow for reaching the person in question. A replacement will be contacted if necessary.

The media used for the various communications can be adapted to the situations. Hence, while most messages are sent by SMS, emails can be used for OC mobilization.

# C.7.7 EOC or CCC mobilization

	Phases of the process – EOC or CCC Mobilization
EOC Manager CCC Coordinator	After obtaining details of the current situation and discussing it with the resource persons involved, the EOC Manager or CCC Coordinator can, if necessary, initiate a yellow alert and advise the EDCW/EDCE to mobilize its emergency centre.
	The Manager, Operations EOC must tell the EDC West/EDC East whether or not they want to mobilize the regional engineer and Regional Director, Sales (both of whom are not officially on call).
Control Office	The Control Office gets in touch with EOC/CCC members via:
(EDCW and EDCE)	<ul> <li>SMS: You will be sent a text message on your cellular phone (SMS).</li> <li>Cellular phone: If you fail to confirm (either via SMS or by returning the call) within 5 minutes, you will receive a call on your cellular work number.</li> <li>Home: If you fail to confirm (either via SMS or by returning the call) within another 10 minutes, you will receive a call on your work number (during regular business hours) and your personal home or cellular telephone (outside of regular business hours).</li> </ul>
	Lastly, if an EOC member does not respond, the Control Office will escalate matters and contact the person with the same role (on their work cellular telephone) the following on-call week.
EOC members	Upon receiving the message, emergency centre members must acknowledge having read it, as per the instructions received via SMS or cellular.
EOC Manager CCC Coordinator	The EOC Manager or CCC Coordinator prepares a <i>situation report</i> which they then verbally share with EOC/CCC members during a conference call. If possible, an electronic copy is sent by email prior to the conference call.
Persons	When alerted or mobilized by SMS, the persons must:
mobilized	<ul> <li>Immediately confirm receipt of the message to the Control Office via SMS</li> <li>Be ready to mobilize at any time while on call, according to the established rules (PMU CORPO 03), by telephone, virtual meeting or in person, based on the instructions received in the notification message</li> </ul>
	For the Operations EOC, the EOC room of any business office is acceptable.
	The persons mobilized must join the others as soon as possible and initiate the EOC/CCC management cycle as soon as the EOC Manager or CCC Coordinator determines that there are enough participants.

# C.7.8 ECC mobilization

	Phases of the process – ECC Mobilization
ECC Manager on duty	After having obtained details of the situation underway and exchanged with the resource persons involved, the EOC Manager on duty can, if necessary, initiate a red alert and advise the EDCW/EDCE to mobilize its emergency centre.
Control Office (EDCW and EDCE)	<ul> <li>The Control Office gets in touch with ECC members via:</li> <li>SMS: You will be sent a text message on your cellular phone (SMS).</li> <li>Cellular phone: If you fail to confirm (either via SMS or by returning the call) within 5 minutes, you will receive a call on your cellular work number.</li> <li>Home: If you fail to confirm (either via SMS or by returning the call) within another 10 minutes, you will receive a call on your work number (during regular business hours) and your personal home or cellular telephone (outside of regular business hours).</li> <li>Lastly, if an ECC member does not respond, the emergency dispatch centre will escalate matters and contact the person with the same role (on their work cellular telephone) the following on-call week.</li> </ul>
ECC members	Upon receiving the message, emergency centre members must acknowledge having read it, as per the instructions received via SMS or cellular.
Manager on duty	The ECC Manager on duty prepares a <i>situation report</i> which they then verbally share with ECC members during a conference call. If possible, the Emergency Management Coordinator sends an electronic copy by email to the ECC members on duty prior to the conference call.
ECC members	During the conference call, the ECC members agree on:
	<ul> <li>The immediate actions that will be taken by ECC members and/or their collaborators;</li> <li>The persons that will be physically mobilized to the designated ECC room (at du Havre or Boucherville for replacement) and at what time. Note that those persons who are not mobilized must remain available for a future mobilization, as needed;</li> <li>The hour at which a follow-up will be carried out with the non-mobilized ECC members and\ how (email, conference call, etc.).</li> </ul>

Phases of the process – ECC Mobilization							
Persons mobilized	<ul> <li>When alerted or mobilized by SMS, the persons must:</li> <li>Immediately confirm receipt of the message to the EDC via SMS</li> <li>Be ready to mobilize at any time while on call, according to the established rules (PMU CORPO 03), by telephone, virtual meeting or in person, based on the instructions received in the notification message</li> <li>For the ECC, the designated rooms are at du Havre (Pipeline) and Boucherville.</li> <li>The persons mobilized must join the others as soon as possible and initiate the ECC management cycle as soon as the ECC Manager determines that there are enough participants in attendance.</li> </ul>						

# C.7.9 CMC mobilization

	Phases of the process – CMC Mobilization
CMC Coordinator	After having obtained details of the situation underway and exchanged with the resource persons involved, the <i>CMC Coordinator</i> can, if necessary, mobilize its emergency centre and advise the EDCW.
Control Office (EDC West)	<ul> <li>The Control Office gets in touch with CMC members via:</li> <li>SMS: You will be sent a text message on your cellular phone (SMS).</li> <li>Cellular phone: If you fail to confirm (either via SMS or by returning the call) within 5 minutes, you will receive a call on your cellular work number.</li> <li>Home: If you fail to confirm (either via SMS or by returning the call) within another 10 minutes, you will receive a call on your work number (during regular business hours) and your personal home or cellular telephone (outside of regular business hours).</li> </ul>
CMC members	Upon receiving the message, emergency centre members must acknowledge having read it, as per the instructions received via SMS or cellular.
Manager on duty	The CMC Coordinator prepares a <i>situation report</i> which they then verbally share with CMC members during a conference call. If possible, an electronic copy is sent by email prior to the conference call.

	Phases of the process – CMC Mobilization
CMC members	During the conference call, the CMC members agree on:
	<ul> <li>The immediate actions that will be undertaken by CMC members and/or their collaborators;</li> <li>The persons that will be physically mobilized to the designated CMC room (at du Havre or Boucherville for replacement) and at what time. Note that those persons who are not mobilized must remain available for a future mobilization, as needed;</li> <li>The hour at which a follow-up will be carried out with the non-mobilized CMC members and how (email, conference call, etc.).</li> </ul>
Persons	When alerted or mobilized by SMS, the persons must:
mobilized	<ul> <li>Immediately confirm receipt of the message to the Control Office via SMS</li> <li>Be ready to mobilize at any time while on call, according to the established rules (PMU CORPO 03), by telephone, virtual meeting or in person, based on the instructions received in the notification message</li> <li>For the CMC, the designated rooms are at du Havre (Board Room) and Boucherville.</li> </ul>
	The persons mobilized must go to the designated CMC room and initiate the CMC management cycle as soon as the CMC Coordinator determines that there are enough participants in attendance (quorum).

# C.8 Criteria for triggering each alert level

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.3.

### Criteria for triggering each alert level

The intranet address (hyperlink to internal documentation) allowing the OP6 to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

These criteria enable the persons in charge of emergency centres to determine the mobilization level within the emergency structure. In fact, these persons base themselves on the level of potential or actual consequences to decide whether or not to bring together various experts to help manage an emergency situation.

For example, if an EOC Manager, based on the information received, feels that the consequences of a situation underway for a section of the gas network and the manager's direct clients is at a yellow level, the manager can decide to mobilize the relevant members of the EOC; the manager then notifies the emergency centre manager at the next level of the decision. In this specific example, it would be the ECC Manager.

All network situations are different, and these criteria are thus only presented for information purposes and to assist with decision-making.

Details of the criteria for triggering alert levels have been removed since their disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

	Criteria for triggering alert levels Based on the potentially impacted business value	Green Level	Yellow Level	Red Level	Red Level +
	Gas supply (impacted according to the season)				
1		•			
				•	
	Type of equipment impacted (transmission and distribution network)		T		
2		<b></b>			
	Type of equipment impacted (transmission and distribution network)			<b></b>	
3					
	Transportation of hazardous materials	<u> </u>	<u>.                                    </u>		I
4					

	Criteria for triggering alert levels Based on the potentially impacted business value	Green Level	Yellow Level	Red Level	Red Level +
	Personal safety (clients, public, employees and subcontractors)				
5					
					<b>A</b>
	Environment				
6			•		
				•	
	Énergir buildings and facilities				
7					
			•		

	Criteria for triggering alert levels Based on the potentially impacted business value	Green Level	Yellow Level	Red Level	Red Level +
				•	
	Reputation and media	<u> </u>	<u> </u>		
8			•		
				•	
					<b>A</b>
	Impact on client and public buildings and facilities				
		•			
9					
				▲	
					<b>A</b>
	IT loss				
10		•			

Criteria for triggering alert levels Based on the potentially impacted business value	Green Level		Red Level +

# C.9 Notifying authorities of the event

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.4, CER Event Reporting Guidelines sect. 2

# C.9.1 Incidents that call for notifying the TSB and CER

Below are <u>the major incidents</u> addressed by the guidelines (see Appendix E.1 - Procedure to notify and report to authorities for further details):

- Serious injury or death (including fractures, strains involving nerves, muscles or tendons, lesion of an organ, loss of consciousness, loss of eyesight, internal hemorrhage, burns, exposure to infectious matter or harmful radiation, injury likely to require hospitalization, loss of a body part or a body part's function).
- Pipeline operations beyond the design limits established under the CSA Z662 or CSA Z276 standards, or beyond the operating limits imposed by the CER.
- Release of natural gas or other contaminants, as well as any other event with a major negative environmental impact (e.g. destruction of a key habitat for an endangered species).
- Explosion, rupture or fire.
- Risk to the safe operations of a pipeline (e.g. to follow up on damage, a fire, an explosion, ignition caused by sources other than normal operations, geotechnical, hydraulic or environmental activity, third-part activity, etc.).
- Pipeline hindering the safe operations of any transportation method.
- Interruption of the operations of a pipeline section due to a situation or condition that poses a risk to the safety of the persons, property or the environment.
- Toxic plume.
- An unauthorized activity carried out by a third-party inside the 30-metre safety zone (measured from the centre of the pipeline).
- Any damage to the pipeline occurring or identified during the construction or development of a facility, the operations, maintenance or dismantling of a facility, or the execution of excavation works that, according to Champion, could pose a risk to the security of a pipe.

Consistent with the cautious event reporting approach advocated by the CER, Champion reports events as soon as it is reasonable to believe that such reporting is necessary, even if there is some doubt.

## C.9.2 Incident notification procedures

Champion's process for notifying the authorities about emergencies is as follows:

 For any type of minor or major incident (see Appendices E.1 and E.2) at Champion's facilities or during activities at Champion's facilities, any person working for Énergir must immediately contact the Control Office of Grand Montréal (EDCW) and ask to immediately speak with the Emergency Management Coordinator on call.

- The Emergency Management Coordinator on call quickly returns the witness's call and notes down the relevant information regarding the incident. The coordinator then determines whether the incident must be reported to the CER and Transportation Safety Board (TSB).
- Subsequently, the usual internal mobilization process can be followed, depending on the type of incident.
- The Emergency Management Coordinator on call, in cooperation with Legal Affairs, is also
  responsible for drafting the various notices and written reports that must be submitted to the CER
  under the existing guidelines.

In the event that the situation is discovered during an inspection of Champion's transmission network, Asset Management is responsible for reporting the incident (table section E.2). The reporting process is described in the management procedure GDA 021 Rapport des évènements for reporting events to the CER.

The tables in Appendices E.1 and E.2 summarize the procedure to follow when reporting an incident, either to the CER or TSB.

# C.10 Management and communication cycles

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.3

Champion's management and communications cycles are essentially the same as those established by Énergir, which are available at:

### Management and communication cycles

The intranet address (hyperlink to internal documentation) allowing the management and communication cycles to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

These management and communication cycles allow for the fluid, organized and reliable sharing of information. If needed, these regulations can be repeated by the emergency centre manager at the onset of mobilization.

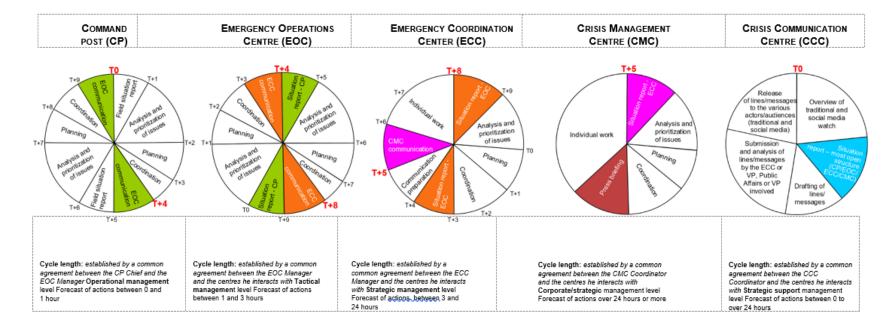
### C.10.1 Main steps

The following table outlines the main steps to follow during the mobilization of an emergency centre (e.g. EOC, CCC, ECC and CMC). This table must be read alongside the cycle diagram in the following section.

During the round tables, the APC chart is used (see E.5.2 – Analysis, Planning, Coordination – APC).

Phase		Actions				
Situation report		perative that information be obtained from the lower-level tre so as to have an overview of the situation status. This should:				
	• Address the main points regarding the situation in the field, the progress of the action plan for securing the facilities, the repairs, etc.					
		n status				
		ios contemplated g work plan for each of the emergency centres (lower and higher				
		items for validation				
	<ul> <li>Next st</li> </ul>					
	system) so	tted audibly to all centre members (e.g. via a spider telephone that they all hear the same information in an uninterrupted manner, keep this step short (around 5 min).				
	End by agr	eeing on the exact time of the next communication.				
Communication	<b>Communication of relevant emergency management information</b> to a <b>superior management level:</b> i.e. progress reports, resource requests, decision-making requirements.					
Round table		re led by the person in charge of the emergency centre. This person e brainstorming process is efficient and that everyone present arious rules.				
	Analysis	Definition of the situation by the group:				
		• Overview of the situation and its impacts carried out by the emergency centre manager (if not already done).				
		• Round table, by each member and according to a sequence determined by the emergency centre manager (based on the issues involved).				
		• Feedback on the actions and requests identified during the prior round table.				
		• Identification of <b>issues and potential consequences</b> of the event (brainstorming).				
	Planning	Classification of potential consequences by <b>order of priority</b> and selection of the <b>priority issues/consequences</b> that must be addressed by the group during the current cycle (if the group does not have the capacity needed to handle all of the issues). Clarification of the objectives and setting of priorities for each issue				
		(if necessary).				
		If required, development of <b>simple action plans</b> for each problem identified, including the result. Otherwise, it is delegated to the person in charge of the issue.				

Phase		Actions					
	<b>Coordination</b> Delegation of tasks and anticipated start and end dates.						
	During the rour among them:	During the round tables, it is critical that a certain number of rules be complied with, among them:					
	That no one	e answer any calls during the round tables;					
	That no one	e leave the emergency room during the round tables;					
	• That round tables and individual work sessions are clearly established by the emergency centre manager;						
	That the AF     by:	PC table and shared activity log be (as is usually the case) filled out					
	○ the Gro	up Manager, Planning, Operations EOC;					
	<ul> <li>the EM Coordinator at the ECC;</li> </ul>						
	○ any oth	er person assigned to this task.					
Individual work sessions		specific communications and actions by each member, based on roles and responsibilities.					



### C.10.2 Coordination of communications between emergency centres

# C.10.3 Rules for the approval of information

When communicating with other emergency centres or any other emergency stakeholder (internal or external), it may be necessary to specify whether a particular action is expected. Among other things, another emergency centre may be requested to approve the information. For example, it could be:

- An action plan proposed by the EOC to the ECC;
- Media or client guidelines, submitted by the CCC to the person in charge of Public Affairs at the ECC;
- A by-pass solution to a leak, submitted by the regional engineer and the engineering SEC to the person in charge of engineering at the ECC.

It is critical that requests made via these types of communications be very clear. Hence, during exchanges carried out:

- by email, it is necessary to include, alongside the identified elements or in the subject line and very visibly (e.g. in red and bold), the mention For Approval. Depending on the situation, it may be indicated to specify a time by which a response is desired;
- by telephone, it is necessary to specify that the message concerns a request for approval and depending on the situation, to mention the time by which a response is expected.

# C.10.4 Validation of information

Certain critical information in managing emergencies must be validated before it can be widely disseminated and used to resolve the situation. To clarify certain situations, the following details how different types of information must be validated.

No.	Situation type	Information to be validated	Source	Validating resource
1	Gas network	Injury/death depending on the resource affected (Énergir, customers, public, contractor)	Fire departments	Group Manager
2	Gas network	Site	InfoEx	Head of Planning
3	Gas network	Involvement of gas in fire	Fire departments	Group Manager
4	Gas network	Field situation (extent of damage)	Fire departments Group Manager	Group Manager
5	Gas network	Evacuation of the area (number of people evacuated, radius)	Fire department	Group Manager

# C.10.5 Rules for managing virtual meetings

- Refrain from sharing confidential information in the chat.
- Do not share files via the platform.
- No recording without express permission.
- Mute your microphone unless you wish to speak.
- Raise your hand when you want to speak.

- Do not connect with multiple devices (e.g. phone AND laptop).
- Do not share the meeting link without express permission.

# C.11 Emergency communications

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.3

### **C.11.1 Internal communications**

Internal channels for emergency communications are established by the emergency structure. This structure formalizes the interactions between the various management levels involved (operational, tactical and strategic).

## C.11.2 External communications

During emergency situations involving Champion infrastructure, external communications to warn the impacted population and regarding evacuation of the area in question are carried out with the emergency services at the site.

Énergir's Crisis Communication Centre (CCC) (internal to the emergency structure) is responsible for all media relations. The CCC bases itself on the crisis communication plan (E.4 – Crisis communication plan) to ensure that communications are properly managed during the emergency.

The Emergency Management Coordinator or OHS/Env. officer ensures the link with competent authorities, as per our internal procedures:

- Canada Energy Regulator situation report;
- Canada Transportation Safety Board situation report;
- OP12 Contacting Urgence-Environnement in the event of a gas leak
- OP16 Interventions in case of a leak, spill or fire involving hazardous materials or contaminants

# C.11.3 Means of communication

During an emergency, all of the stakeholders can turn to additional communication systems, be it for the alert phase or during the intervention or in the recovery phase, among which:

				bersEOC membersmembersmembersXXXXXXXXXX		
No.	Peripheral devices	CMC members	ECC members	EOC		
1	Intrinsically safe telephones					х
2	Smartphones (including telephones, email and SMS text messages)	х	x	x	х	х
3	Telephones (landline)	х	x	х	х	
4	Satellite telephones					х
5	Email	х	x	х	х	х

These communication methods allow for the dissemination of internal and external information.

The Bell network and satellite telephones enable coverage of those areas where the telecommunications network coverage is weaker (e.g. Earlton to Rouyn).

No problem with the interoperability of the communication systems (internal or external) is anticipated. In fact:

- Emergency centres that must communicate directly with external stakeholders (e.g. municipalities, media, government departments, agencies) will do so by telephone or email.
- Field stakeholders report directly to and communicate directly with the command post set up by the fire department (note that Énergir stakeholders do not use radio systems).

## C.11.4 On-duty personnel chart

A chart of on-duty personnel is produced once a week by the EDC West and is continually updated. This chart:

- includes all the people on call who could be asked to intervene during an emergency;
- is used by the Emergency Dispatch for dispatching purposes during an emergency;
- a list of equipment and service suppliers that could prove helpful in an emergency can be found on the corporate Control Office's SharePoint site.

### An example of this is found on the following pages.

The details of the on-duty personnel chart have been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

Emergency Dispatch Centre West (EDCW)	514-598-XXXX
Toll-free:	1-877-598-XXXX
In the event of a	
telephone system	
failure:	514-527-XXXX



energir dez Métro

(ORGANIZATION OF EMERGENCY MEASURES) <u>Week of March 7, 2022</u> version 3

EME	RGENCY INTERVENTION	NAME	PAGER	CELLULAR	НОМЕ
	CMC (Crisis Management Centre) Coordinator				
1	Level 3 (on call) (Manager on duty)				
2	Emergency Management (Coordinator)				
3	Public Affairs, Media Interventions				
5	On-Duty Engineer				
6	Environment / Health and Safety				
7	M. Beaupied Dynamitage				
8	MRR - Mercaptan spill				
COR	PORATE - OPERATIONS	NAME	PAGER	CELLULAR	НОМЕ
	Emergency Dispatch Centre West		-		
	Mechanical workshops				
11	LSR, Saint-Sophie plant				
12	Transmission (Saint-Maurice)				
13	NEKSYS (Control/electrodynamics)				
OPEF	RATIONS EOC	NAME	PAGER	CELLULAR	НОМЕ
15a	Level 2 (on call) - Manager - Regional Zone				
15b	Level 2 (on call) – Group Manager, Control and Planning				
15c	Level 2 (on call) - Regional Engineer				
15d	Level 2 (on call) - Sales				

CORPORATE EMERGENCY MANAGEMENT SYSTEM MANUAL

15d	Level 2 (on call) - SMI				
16	Montréal West territory – Area 2 Montréal East	•			
	Level 1 (on call) – Montréal West - Area 2 Montréal East				
	Laurentides territory/Area 3 Montréal East				
17	Level 1 (on call) – Laurentides – Area 3 Montréal East				
	Emergency coverage (Val Morin to Mont Tremblant)				
	Emergency coverage (Sainte-Adèle, Piedmont, Saint-Sauveur				
	des Monts, Saint-Sauveur, Sainte-Anne-des-Lacs, Prévost,				
	Bellefeuille, Lafontaine, Saint-Jérôme, Mirabel J7J, Sainte-				
	Sophie and Saint-Lin-des-Laurentides				
	Emergency coverage (J0K and J6E: Lanoraie, Saint-Thomas,				
	Joliette, Saint-Pierre, Saint-Charles-Borromée, Notre-Dame-				
	des-Prairies, Notre-Dame-de-Lourdes, Sainte-Mélanie,				
	Berthierville, Sainte-Geneviève-de-Berthier, Sainte-Élisabeth, Saint-Félix-de-Valois)				
					1
10	Montérégie territory/Area 1 Montréal East Level 1 (on call) – Montérégie – Area 1 Montréal East	i l			
10	Emergency coverage Sorel, Tracy and Contrecœur				
امده	UISITION AND OPERATIONS – EASTERN REGION	NAME	PAGER	CELLULAR	HOME
ACQ	Eastern Townships		PAGER	CELLULAR	НОМЕ
10	Level 1 (on call)	1			
13	Excavation company (Eastern Townships)				
	Mauricie				L
20		] [			
20	Groupe Maco – Emergency work – Priority 1 (see regional	ł <b>–</b>			
	specifications for Priorities 2 and 3)				
	Québec	,			
•	Level 1 (on call)				
	Emergency coverage (sector: Saint-Georges, Beauceville,				
	Saint-Victor, Saint-Joseph-de-Beauce, Vallée Jonction,				
	Sainte-Marie-de-Beauce)				
	Same-mane-de-Deauce/				
	,				
21	Emergency coverage Thetford Mines (sector: Saint- Frederic, Tring- Jonction, East-Broughton, Thetford Mines)				
21	Emergency coverage Thetford Mines (sector: Saint- Frederic, Tring- Jonction, East-Broughton, Thetford Mines)				
21	Emergency coverage Thetford Mines (sector: Saint- Frederic, Tring- Jonction, East-Broughton, Thetford Mines) Emergency coverage Thetford Mines(sector: Saint-Frederic,				
21	Emergency coverage Thetford Mines (sector: Saint- Frederic, Tring- Jonction, East-Broughton, Thetford Mines) Emergency coverage Thetford Mines(sector: Saint-Frederic, Tring-Jonction, East Broughton, Thetford Mines, Sainte-				
21	Emergency coverage Thetford Mines (sector: Saint- Frederic, Tring- Jonction, East-Broughton, Thetford Mines) Emergency coverage Thetford Mines(sector: Saint-Frederic,				
21	Emergency coverage Thetford Mines (sector: Saint- Frederic, Tring- Jonction, East-Broughton, Thetford Mines) Emergency coverage Thetford Mines(sector: Saint-Frederic, Tring-Jonction, East Broughton, Thetford Mines, Sainte-				

	Groupe Maco – Emergency work – Priority 1 (see regional specifications for Priorities 2 and 3)				
	Saguenay-Lac St-Jean				
	Level 1 (on call)				
	Emergency coverage Lac-Saint-Jean (Alma, Saint-Bruno,				
	Larouche,				
22	Hébertville and Hébertville-Station, Métabetchouan, Desbiens,				
	Saint-André-du-Lac-Saint-Jean)				
	Emergency Coverage Lac-Saint-Jean				
	(Chambord, Saint-Prime, Roberval, Saint-Félicien)				
	Abitibi-Témiscamingue		<b>I</b>	<b>I</b>	
	Level 1 (on call)				
	City Supervisor: Témiscamingue				
	Emergency coverage (Val-D'Or)				
	Emergency coverage (Témiscamingue)				
	Emergency coverage (sector: Amos, La Motte, Saint-Mathieu-				
	d'Harricana, Rivière-Héva)				
	PORATE - OTHER	NAME	PAGER	CELLULAR	HOME
	Building management				
	Logistics & Distribution Centre				
	EOC Manager, Gas Supply (NSO)				
	Customer Service				
	Accounts Receivable Management				
	Gaz Métro Plus Service & Maintenance				
	EOC Manager LNG Transport and LNG/CNG station				
	Mobility Support & CLICK				
	IT and Telephone Failure				
	Serrurier Latour				
34	CCC Coordinator				
35	security;				

Note: When an ECC is triggered, a text message will be sent to your cell phone. You must confirm receipt of the message at 514-598-xxxx. If no confirmation of receipt is received by the EDCW after 5 minutes, you will receive a call on your cell phone. If no confirmation of receipt is received by the EDCW after 10 minutes, you will receive a call at your home.

Note: After the date mentioned above, all changes to this list will need to be communicated to the EDCW, which will follow up and save an amended copy. The changes will not appear on this list.

\*



# EMERGENCY COORDINATION CENTRE (ECC)

### Week of:

Conference call (telephone bridge): 1-877-284-xxxx

	Title	<u>Name</u>	Pager	<u>Cellular</u>	Home
1	ECC Manager				
	Additional information:				
2	Person in charge: Emergency measures				
	Additional information:				
3	Person in charge: Operations				
	Additional information:				
4	Person in charge: Engineering				
	Additional information:				
5	Person in charge: Support services				
	Additional information:				
	Person in charge: Communications & Public Affairs				
6	& Customer Service				
	Additional information:				
7	Person in charge: Gas Supply & NSO				
	Additional information:				
8	Person in charge: Sales				
9	Person in charge: Sales Major Industries				
	Additional information:				
10	Person in charge: Legal Affairs				
	Additional information:				
11	Person in charge: Human resources				
	Additional information:				

12	Person in charge: Information technology Additional information:				
	<b>CMC Room</b> Board Room – Du Havre Room 212 – Training/Skills – Boucherville (replacement)	Normal line 514-598- XXXX 514-598- XXXX	<b>Polycom</b> 514-598-XXXX	<b>Telephone bridge</b> 1-877-808-XXXX	Email
	<b>ECC Rooms</b> Pipeline Room – Du Havre	Normal line	Polycom	Telephone bridge	Email
	Impact Room – Boucherville (replacement)				
	CCC Rooms	Normal line	Polycom	Telephone bridge	
	Public Affairs Room – Du Havre				
	Room 1.1 – Boucherville (replacement)				
	EOC	Normal line	Hard line	Telephone bridge	Email

EMERC	GENCY RESPONSE	Number 1	Number 2
1	<b>AIEM</b> (Association industrielle de l'est de Montréal)		
2	Armstrong TWP, Timmins, Ontario, 911 (Champion sector, Earlton) * and **		
3	TSB – Transportation Safety Board - Emergency		
4	CANUTEC		
5	Carrefour du Camion RDL		
6	Government operations centre (COG)		
7	Enbridge Gas Distribution – Gas control		
8	HYDRO-QUÉBEC System Control Centre		
9	HYDRO-QUÉBEC Emergency measures request		
10	<b>HYDRO-QUÉBEC</b> Daniel Simard - Corporate emergency plan		
11	<b>MD-UN</b> – Transportation emergency contractor		
12	Ministère du développement durable, environnement et lutte contre les changements climatiques (MDDELCC) Québec – <b>Urgence Environnement</b>		

EMER	GENCY RESPONSE	Number 1	Number 2
13	Environment and Climate Change Canada		
14	Ministry of the <b>Environment</b> and Climate Change – <b>Ontario</b>		
15	Ministry of Labour Health and Safety Contact Centre – Ontario		
16	Ministry of Transportation – Ontario		
17	National Response Center (NRC) – USA		
18	North Bay fire department 911 – Ontario (Champion sector, Thorne) **		
19	CER – Canada Energy Regulator 24/7 emergency		
20	Ontario Provincial Police ( <b>OPP</b> )		
21	Ontario Spills Action Centre		
22	Prosystech		
23	National Security Information Network		
24	Sécurité civile, Ville de Québec [Québec City public safety] (on-duty borough coordinator)		
25	Centre de sécurité civile Ville Montréal [City of Montreal public safety centre]		
26	SÉMER (24-hour security)		

EMERG	GENCY RESPONSE	Number 1	Number 2
27	<b>SPVM</b> (Section antiterrorisme et mesures d'urgence – 24/7) [antiterrorism and emergency measures]		
28	Sûreté du Québec (SQ) - Centre de caméra Cartier-Champlain		
29a	TCPL – Gas Control Centre		-
29b	TCPL – Emergency structure		
30	LSR plant – Control Centre		
31	Union Gas – Gas Control		
32	Union Gas - Utility services manager, Thorne (Champion)		
33	CNESST		
34	MTQ Traffic Control		
34 a	Montreal Island Laval Eastern Townships Montérégie		
34 b	Abitibi-Témiscamingue Laurentides-Lanaudière		
34 c	Mauricie Centre-du-Québec		
34 d	Capitale-Nationale Chaudière-Appalaches Bas St-Laurent		

EMERG	GENCY RESPONSE	Number 1	Number 2
	Gaspésie Iles de la Madeleine Côte-Nord Saguenay Lac St-Jean		
35	EXO, 24/7 EMERGENCY		
36	Méqualtech-Specialized Inspection (Méqualtech)		
37	LNG carriers		
37 a	Somavrac		
37 b	Jacques Auger Transport		
37 c	Rollex		
37 d	LP Transportation		
38	NAV CANADA Québec flight information centre		
39	SOPFEU		
40	Ministry of Natural Resources and Forestry – Ontario (Northeast Region – Aviation, Forest Fire and Emergency Services)		
41	Electrical Safety Authority (Ontario)		
		Hydrogen Project	
42	ETG		

# Concerning the nouveau Gaz Metro ON-DUTY PERSONNEL CHART (ORGANIZATION OF EMERGENCY MEASURES)

EMERGENCY RESPONSE		Number 1	Number 2			
43	<b>ÉCCU</b> Direct line available 24/7 to all operations and administration phone extensions					
44	ÉCCU – On-call H2 emergency person)					
45	Air Liquide (H2 emerency response plan)					
Contact information for Quebec aerodromes located close to Énergir network						
Amos airport						
Dolbeau-Mistassini-Normandin-St-Félicien airport						
Drummondville airport						
Lachute airport						
Saint-Roch-de-l'Achigan airport (Mascouche)						
Mont-Laurier						
Saint-Georges de Beauce airport						

# C.12 Mutual assistance in the event of an emergency (CGA)

A number of companies that are members of the Canadian Gas Association have entered into an agreement with regard to mutual assistance in the event of an emergency. Champion is not a member of this association, nor has it signed this agreement. However, should there be an emergency, Champion could ask one or more of the companies that have signed this agreement for assistance; these organizations are then free to respond, of their own volition, by providing materials or labour. This agreement, were all signatories to concur, would then govern the assistance provided to Champion. Also, a separate agreement between Champion and the organization willing to provide assistance could also be entered into.

An emergency mutual assistance agreement has been established between the various member companies of associations such as the American Gas Association (AGA), American Public Gas Association (APGA), Northeast Gas Association (NGA), Southern Gas Association (SGA), and MEA Energy Association (MEA).

# C.13 Demobilization process

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.3

Based on the impact level of an emergency situation, several emergency centres could be mobilized. Each emergency centre then intervenes according to the following broad principles: its responsibility scope, the notions of subsidiarity and substitution, ongoing fluid and sustained communications to ensure that the actions undertaken are coherent.

Over time, however, situations evolve and issues are eventually resolved. In fact, the emergency structure mobilized for the purpose of emergency management will itself change over time. Some emergency centres, through a concerted decision by the person in charge, could be demobilized.

This demobilization must comply with certain criteria and processes so as to ensure that this withdrawal will not have negative consequences (e.g. during a premature demobilization).

## C.13.1 Demobilization steps

The demobilization steps of an emergency centre are as follows:

- The person in charge evaluates the situation based on demobilization criteria, in cooperation with the managers at their own centre, the managers of other emergency centres and, depending on the situation, the heads of the associated external agencies involved in the emergency management process.
- The person in charge of the emergency centre evaluates, in conjunction with the members of the emergency centre, if the follow-up actions can be performed without periodic support from the emergency centre. If actions are not completed, the Emergency Management Coordinator should follow up on them if the emergency centre is demobilized.
- The person in charge of the emergency centre evaluates if immediate corrective measures should be recommended for the event.
- The person in charge ensures that the provisions of the employee assistance program have been considered and proposed depending on the nature of the event.

- This same individual announces the decision to demobilize to the members of their emergency centre and the persons in charge of the associated mobile emergency centres (via the relevant Control Office).
- The members of the demobilized emergency centre inform their internal contacts (e.g. substitutes, experts) and external contacts (e.g. organizations, experts) who have been contacted as part of the emergency management process that they have been demobilized.
- Prepare the steps of the post-mortem.

While an emergency centre can demobilize itself, it is critical that personnel stay available to manage future emergency situations (whether or not they are related to the emergency that was just managed).

## C.13.2 Demobilization criteria

The following table indicates the demobilization criteria. To demobilize a facility, an emergency centre manager must make sure the following three criteria are met:

No.	Demobilization criteria	Explanations	
1	None of the <b>criteria for mobilization</b> are met.	All mobilization criteria are assessed on the basis of the current situation. They are no longer met.	
2	Actions of the emergency centre are completed.	The direct actions of the emergency centre are completed. Among other things, no additional action is taken by the emergency centre.	
3	There is no risk of the situation reoccurring ( <b>resurgence</b> ).	The situation no longer constitutes an immediate threat and the risk of resurgence of the emergency situation is negligible. An emergency centre at a lower level might be mobilized in the future but would not require assistance.	

# **D** Specific intervention documentation

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.3, OPR Appendix A.7

This section includes all the specific intervention plans, i.e. all the plans specifically developed to respond to particular emergencies.

# **D.1 Emergency response**

### **D.1.1 Emergency response strategies**

Given a major emergency situation (e.g. complete rupture of a pipe) such as that mentioned in the risk analysis, the emergency structure would find itself having to implement an intervention strategy. The highlights would consist of:

 Isolation of the impacted pipe section by closing the valves (valve stations, delivery stations) upstream and downstream. • Repair operations to allow for resuming the transport of natural gas.

In the event of a minor emergency situation, namely with no direct impact on gas supply or transmission, repair operations could be carried out as per the following general approach:

- Installation of a by-pass pipe, if the site can be accessed, then isolation of and repairs to the damaged section (8-in. pipe and connector plug). It could be a leaking weld joint.
- Introduction of a PLIDCO repair coupling to plug the leak. It normally is a small leak (picolo). Repairs are temporary and need to be followed by a permanent repair job (Z662).

A detailed list of emergency equipment is appended for this purpose (E.3 – **Inventory list – Emergency materials** [inventory list – emergency equipment]).

# **D.1.2 Control points**

### SCADA (Supervisory Control and Data Acquisition) and NSO

The transmission network is monitored by the automated Supervisory Control and Data Acquisition (SCADA) system. It monitors the network continuously (24/7) and transmits a series of critical data to Network Surveillance Operations (NSO), where staff are notified by alarms whenever an operating parameter (pressure, flow, temperature, etc.) deviates from the setpoints. As soon as an anomaly is detected, technical personnel assigned to each region are dispatched to the site, and Engineering may also be notified. The setpoints used by NSO are determined by network management personnel in collaboration with the specialists concerned and reviewed as needed.

### Spacing of sectionalizing valves

Sectionalizing valves are located all along the transmission network. They are used, as necessary, to isolate a section of the network that may be affected by a major incident.

The distance between the valves was determined according to the criteria in Clause 4.4.4 of the CSA Z662 standard and the requirements indicated in Table 4.7 of the same standard. Table 4.7 specifies the maximum spacing between valves based on the pipeline's class location. The class locations are evaluated each year according to Clause 10.7.1 of the same standard.

## **D.1.3 Emergency equipment**

The technicians deployed to emergency areas travel with their truck, which contains most of the equipment required for emergency responses. Should specialized equipment be needed, it can either be found in another region and is urgently sent or agreements previously entered into with service suppliers will enable us to obtain the required equipment quickly.

The list of equipment available for emergency responses (including both network and emergency room equipment) is included in Appendix E.3 – Liste inventaire – matériel d'urgence.

### **D.1.4 Emergency site evacuation**

The fire department is responsible for the site in the event of an emergency situation. As such, the following roles and responsibilities must be kept in mind:

• Champion provides early services to abutting owners (evacuation zone);

- The fire department establishes the actual evacuation zone with detection and measuring instrumentation;
- The police department sets up security perimeters as per fire department instructions;
- The evacuation of buildings is performed by fire and police departments, ideally with the help of Champion employees.

These elements are as follows:

- All discussed and agreed upon during training sessions with the fire and police departments concerned
- Build on the Cadre de coordination de site de sinistre au Québec

See OPR sect. 32(1.1), OPR Appendix A.3, OPR sect. 35.

# **D.1.5 Public safety**

In an emergency situation, members of the public should:

- Call 911
- Evacuate the area and try to prevent others from entering it
- Avoid flame and sparks
- If the gas catches fire, not try to put it out

This information is periodically communicated to residents living near the transmission network as part of the awareness program.

See OPR sect. 32(1.1), OPR Appendix A.3, OPR sect. 35

# **D.2 Facilities map**

### See OPR sect. 32(1.1), OPR Appendix A.2

The entire distribution network was mapped out using the ESRI Geomatics tool. This is available on the company Intranet at: Emergency measures map.

# This map allows for accessing a variety of useful information for the emergency planning and intervention activities of Énergir teams:

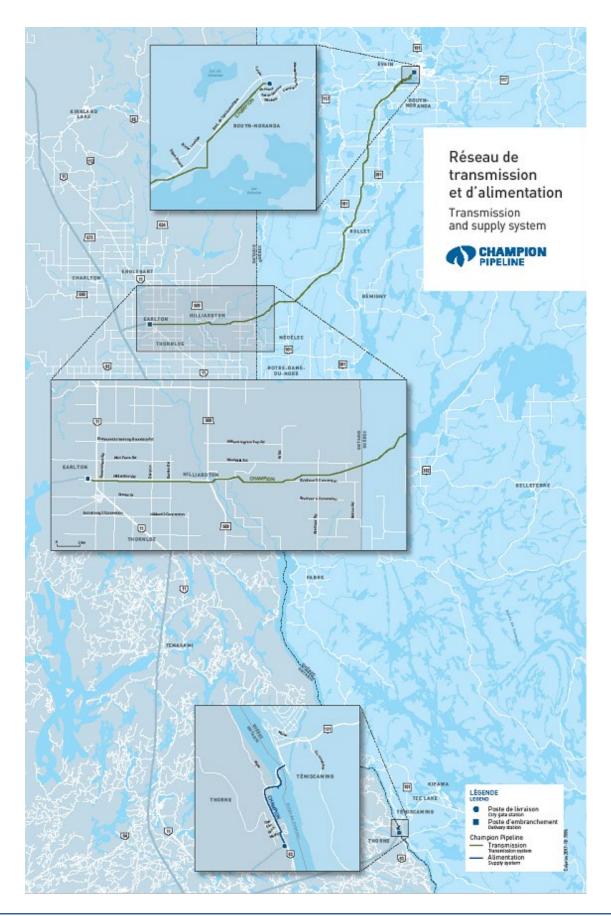
The intranet address (hyperlink to internal documentation) allowing the emergency measures map to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

- Network route;
- Pressure categories;
- Emergency planning areas (EPAs) and residents;
- Types of pipes (i.e. materials and diameters).

The volume (flow) in these network sections is monitored in real time by Network Surveillance Operations (NSO).

The information is then provided to external stakeholders during organized meetings. Additional data (e.g. network route) can be obtained by submitting a request to the Énergir Geomatics team.

A general map of the supply and transmission network is available on the Champion Pipeline website. It is reproduced below, in accordance with CER requirements.



No.	Section	Pressure category	Diameter	Max. flow rate <i>(winter peak)</i>
1	Earlton–Rouyn-Noranda	7,000 kPa	220 mm	28.10 <sup>3</sup> m <sup>3</sup> .h <sup>-1</sup>
2	Thorne-Témiscamingue	1,200 kPa	220 mm	28.10 <sup>3</sup> m <sup>3</sup> .h <sup>-1</sup>

The following characteristics of the Champion network are important to remember:

The mercaptan is stored at the Earlton station.

# D.3 Technical specification No. 59.01.01 – First responder – General information

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.7

This Champion technical specification refers to that of Énergir.

#### 1. OBJECTIVE

This section sets out the general instructions that Énergir's first responders must follow when making their way to the site of a potentially risky situation as a result of an emergency call. It describes a series of rules and the necessary actions to secure the site and control the situation. All the persons (e.g. employees, contractors) likely to intervene in such situations must familiarize themselves with the appended intervention procedures. They must, among other things, have been specifically trained in this regard and have all the necessary equipment to effectively and safely take action.

#### 2. COVERAGE

These procedures apply when the emergency situations described below are reported to or identified by Énergir.

#### 3. DEFINITION AND PRIORITY

An emergency situation is an event requiring immediate attention and with actual or potential impacts on personal health and safety (internal or external actors), the environment, public property or that of Énergir.

Priority 1 (35-min. response time):

- Fire and/or explosion (C16/VS0016) Reference 59.01.02
- Leak and/or internal odour (C60/VS0060) Reference 59.01.03
- Leak and/or external odour External call (C63/VS0063) Reference 59.01.03
- Third-party damage (R02/VS0001) Reference 59.01.03 and 59.02.01
- Calls concerning carbon monoxide (CO); detector (C61/VS0061); symptoms (C62/VS0062) Reference 59.01.04
- Delayed ignition and/or flashback (C64/VS0064) Reference 59.01.06
- Flooding/water damage (C68/VS0068) Reference 59.02.08
- High pressure (C69/VS0069) Reference 59.01.05

Priority 2 (1-hour response time):

- Leak and/or external odour Internal call (R01/VS0063) Reference 59.01.03
- Low pressure (C65/VS0065) Reference 59.01.05

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Designed:	Collaborator: S. Vaier Courses	FIRST RESPONDER – GENERAL INFORMATION			
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#### 1. <u>BUT</u>

Cette section énonce les directives générales à suivre pour le 1<sup>er</sup> intervenant d'Énergir appelé à se rendre sur les lieux d'une situation potentiellement à risque suite à un appel d'urgence. On y décrit un ensemble de règles et d'interventions nécessaires pour sécuriser les lieux et maîtriser la situation. Chacune des personnes (ex : employés, entrepreneurs, etc.) susceptible d'intervenir en pareilles situations doit se familiariser avec les procédures d'intervention ci-jointes. Elle doit, entre autres, avoir reçu une formation spécifique à ce sujet et avoir en sa possession tous les équipements nécessaires afin d'être en mesure d'intervenir efficacement et en toute sécurité.

#### 2. CHAMP D'APPLICATION

Ces procédures s'appliquent lorsque les situations d'urgence décrites ci-dessous sont rapportées à Énergir ou identifiées par Énergir.

#### 3. DÉFINITION ET PRIORITÉ

Une situation d'urgence est un événement qui nécessite une attention immédiate qui porte ou qui peut porter atteinte à la santé ou à la sécurité des personnes (internes ou externes), à l'environnement, ou aux biens du public ou d'Énergir.

Les situations d'urgence ont priorité sur tout autre « ordre de travail » et elles doivent être traitées avec diligence. Les situations d'urgence (type de travail/clé de référence) visées par ces procédures sont les suivantes :

Priorité 1 (délai de couverture de 35 min.) :

- Feu et/ou explosion (C16/VS0016) Référence 59.01.02
- Fuite et/ou odeur intérieure (C60/VS0060) Référence 59.01.03
- Fuite et/ou odeur extérieure Appel externe (C63/VS0063) Référence 59.01.03
- Bris par les tiers (R02/VS0001) Référence 59.01.03 et 59.02.01
- Appels reliés au CO : détecteur (C61/VS0061); symptômes (C62/VS0062) Référence 59.01.04
- Ignition retardée et/ou retour de flamme (C64/VS0064) Référence 59.01.06
- Inondation/dégâts d'eau (C68/VS0068) Référence 59.02.08
- Haute pression (C69/VS0069) Référence 59.01.05

Priorité 2 (délai de couverture de 1 heure):

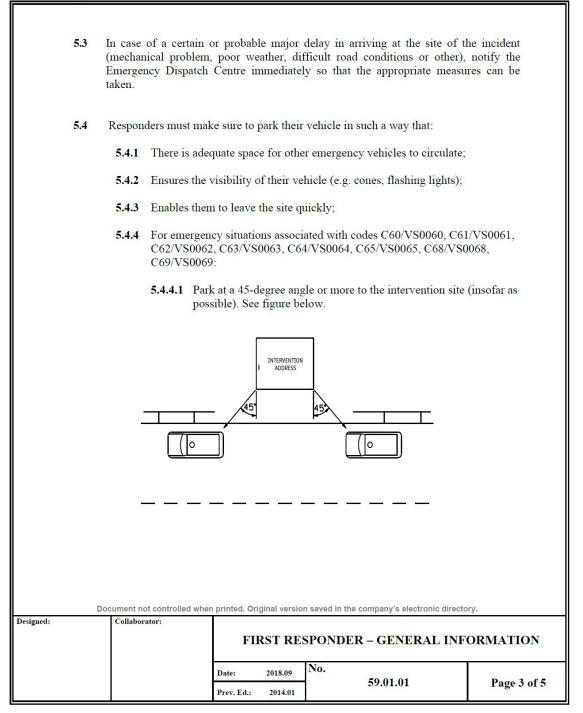
Fuite et/ou odeur extérieure – Appel interne (R01/VS0063) Référence 59.01.03
 Basse pression (C65/VS0065) Référence 59.01.05

Document non contrôlé lorsque imprimé. Version originale conservée dans le répertoire électronique de l'entreprise.

Conçu:	Collaborateur:	PREMIER INTERVENANT - GÉNÉRALITÉS				
		Date:	2018.09	No. 59.01.01	Page 1 de 5	
		Éd.préc.:	2014.01	55.01.01	Tage Tue 5	

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4.	ETHICS R	REGARDING EMER	GENCY SITUAT	IONS			
	-	ersonnel involved in h ct ethically. This will	0	ing an emergency situation must, a t they:	as part of their		
	e	1 Take immediate action to control the emergency situation while complying with established laws and standards, best practices and the requirements of their role and prioritizing the safety of the persons involved.					
		Ensure a safe and reliable supply for clients by upholding or quickly resuming service, but not at the expense of safety.					
	4.3	Gather all relevant info	ormation regarding	the information needed to prepare	reports.		
	4.4	Quickly notify the Em	ergency Dispatch C	Centre of the type and magnitude of	f the situation.		
			•	forward all information requests fro ablic Affairs department.	om the		
		Act in the best interests and meet all obligations to the public, the company's clients, the company itself and public safety services.					
		Create, through the quality and effectiveness of interventions, a public image that reflects competence and professionalism.					
5.	<b>GENERA</b>	L INSTRUCTIONS I	OR EMERGENC	CY SITUATIONS			
		ases where natural gas he responder must:	is clearly not invol	lved (given the location or type of	emergency		
		Upon receiving a call emergency as soon as		y Dispatch Centre, get to the site o	of the		
		Ensure an adequate res raffic safety laws.	ponse, based on pr	iority level, and act diligently and	as per		
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	5.4.5		ey situations associa (third-party damag	ated with codes C16/VS0016 (fire) e):	) and	
		the co mana	ommand station (or ger: firefighters, po	s are <b>present</b> : Park as close as pos as per the instructions provided by lice), taking into consideration the inside a gas cloud.	y the site	
		ft.) ft.)	from the leak ca	es are <b>not present</b> : Park around used by third-party damage, ta direction, to avoid being inside a gine.	aking into	
5.5	Once at	the site:				
	Sequen	tial steps to fol	low:			
3	5.5.1	Confirm arriva	l at the Emergency	Dispatch Centre;		
		<b>5.2</b> Put on the fireproof and anti-static garments and all other protective equipment required by other procedures or deemed appropriate;				
		<b>5.3</b> Put on the thermal protective clothing (TPC) and the self-contained breathing apparatus (SCBA) if you have to pass through the hot zone (red or exclusion) established by the fire safety service according to technical specification 59.02.01 – <i>Emergency intervention in response to a leak in the gas network.</i>				
:				ent used is intrinsically safe (explo ST_53 – Intrinsically safe devices;		
	5.5.5	Eliminate all ig	mition sources (e.g.	electric arc, open flame, device pi	ilot);	
	5.5.6	Assess the mag	nitude of the situat	ion;		
	<b>5.5.7</b> Determine whether internal and/or external assistance is required. If applicable, notify the manager in charge who will take the necessary measures.					
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			Prev. Ed.: 2014.01	59.01.01	Page 4 of 5	

5		Depending on the seve equired order:	erity of the situation	, apply the following measures in	the
				c services or any other person who f upcoming interventions;	requested
	-	Inform the other ac	tors on site, to ensu	re a concerted intervention;	
	-			on, to be able to provide a preliminence of the manager, if required;	nary report
	-	valve cannot be rea	ached (due to accun valve, etc.), notify th	rupting a client's gas supply and t nulated snow, obstacles that canno ae manager immediately. They wil	t manually
		<ul><li>clients; or</li><li>Obtaining :</li></ul>	an excavator and pi	est network and interrupting servic nching the by-pass valve; or ure to resolve the problem.	es for other
			ing any other measu	ne to resolve the problem.	
	2	Providing assistance	e to the public serve	ices at the site;	
	-	000		h the various actors (e.g. Emergen er the corporate Emergency Mana	-
	8			nat could help identify the circums clude them in the appropriate repo	
	-			eports and submit them as quickly ate Emergency Management Plan.	
5	C	oordinate the interve	entions as soon as	naintain communication to assist, it is established, according to the uation requires their presence.	
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### D.4 Technical specification No. 59.01.02 – Fire explosion

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.7

This Champion technical specification refers to that of Énergir.

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1.	OBJE	CTIVE			
		ocedure defines the splosion (code 16).	steps to follow when	responding to an eme	rgency call regarding a fire
2.	PROC	EDURE			
		in cases where natur n), the responder mu		nvolves (given the loc	ation or type of emergency
	Sequen	tial steps to follow:			
		Jpon arriving at the s epartment.	site, report to the Cor	nmand post or to the	person in charge of the fire
					atch Centre to report on the ely in the following cases:
			volving natural gas; o ice; or	r not natural gas is inv r	olved); or
			of the main valve or y a connecting wall);		acted building and adjacent
		<ol> <li>A visual insp</li> <li>The FieldVie</li> <li>The BR1212</li> </ol>	w software; and software; and		
		4. The on-duty	engineer as regards a	ljacent buildings or in	case of doubt.
		request for assistant whenever necessary.	nce can also be sul	omitted to Énergir E	mergency Dispatch Centre
				12160	
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#### Note :

- The FieldView software includes updated information on all of the main pipes (C.P.) based on the as-built (T.Q.C.) plans received, as well as symbols (red squares) indicating the construction projects underway.
- The BR1212 application (list of SAP connections) includes all existing and proposed building connections (B.I.) found in SAP, along with those that are separated (cut at the C.P. (Code 2)) or out of service (cut at the foundation (Code 15)).
- The data in these two applications is updated on the last Friday of every month, so that it can be made available to technicians in the field. The technicians download the information on their laptop when they are the Business Office (e.g., for a group meeting).
- The building connection information digitized to date, along with the centroid of
  properties with turquoise civic numbers (on the Island of Montréal), only constitutes
  partial and complementary information on the presence or lack of such connections.
  The list of SAP connections or BR1212 application has always been and remains the
  most comprehensive reference tool for identifying building connections.
- 2.4 Shut off and seal the main valve connection of the impacted building and adjacent buildings (separated by a connecting wall), if accessible, and protect the building connections with support from the fire department (if necessary).

Other valve connections of adjacent buildings in the sector can also be shut off and sealed if deemed necessary by the responder at the site.

Before shutting off a connecting valve, make sure that it does not supply:

- An emergency generator; or
- An industrial complex (production); or
- A hospital; or
- Any other building where shutting off the gas would have serious consequences.

In these conditions, the connecting valve can only be shut off with the authorization of the person in charge of fire department.

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### TECHNICAL SPECIFICATIONS

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2.5	Dispat	ch Centre, whi	ion or if the main w ich will then contact a to interrupt the gas su	the man	nager in charge so	
	There	can be no excav	ation works near an ac	tive fire	unless:	
	- TI	ne fire departme	ent authorizes the inter	vention te	eam's presence at the	at location; and
		ne current situat people and pro	tion could rapidly caus perty.	e inciden	ts with a serious imp	pact on the integrity
2.6	Detect	any leaks:				
	Sequer	utial steps to fol	low:			
	2.6.1		ngs in the street near t r, telephone, storm and			
	2.6.2	At the measu	ring station and the ex	terior fou	indations of the build	dings located:
			r side of the impacted or in the back of the in			
	2.6.3		of an explosion or wi in 2.6.1 or 2.6.2, insid			l gas are measured
			r side of the impacted in the back of the impa			
	2.6.4	Repeat the le	ak detection steps whe	n necessa	uy.	
	2.6.5	If natural gas – Leaks and/o	concentrations are me or atmospheric odours	easured, r	efer to Technical sp	ecification 59.01.03
2.7	those b	muildings as per	pread to nearby build the procedure indicat eps in section 2.6.			
2.8	Once t	he emergency i	s over and prior to leav	ring the s	ite:	
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#### Sequential steps to follow:

2.8.1	If natural gas is involved, measure the level of the odorizer concentration present in
	the natural gas at the measuring stations of the clients involved (preferably) or those
	nearby, according to the requirements of Technical specification 57.01.03 - Gas
	sampling method on the network and note the results in the "Remarks" section of
	the event report.

- Note: Begin by checking with the manager to ensure this task is necessary (situations where Legal department or the claims adjuster must be notified).
- 2.8.2 Inspect Énergir facilities of those clients involved in the emergency situation (e.g., meter, regulator, valve, etc.);
- 2.8.3 For risers without an anode, inspect as per Technical specification 59.02.06 Verification of facilities following damages to a by-pass;
- 2.8.4 Inspect the facilities of clients affected by the emergency situation (e.g., devices, pipes, etc.) and leave red or yellow notices whenever necessary. See Technical specifications 82.01.05 Issuing a red notice and 82.01.06 Issuing a yellow notice.
- 2.8.5 Prepare the event report and to include the number and reading of the meters impacted by an interruption.
- 2.8.6 If applicable, install a pipe identifier on the riser to alert demolition companies of the presence of a building connection.
- 2.9 If no anomalies or damages are observed at the facilities of clients involved in the emergency situation, the main valve and devices can be turned on following a discussion the manager in charge. In such situations, refer to Technical specification 82.01.02 Turning on natural gas devices.

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# D.5 Technical specification No. 59.01.03 – Leak and atmospheric odours

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.7

This Champion technical specification refers to that of Énergir.

#### 1. OBJECTIVE

This procedure describes the steps to follow when responding to calls concerning external leaks, internal leaks or atmospheric odours.

#### 2. PROCEDURE FOR CALL CONCERING LEAKS

Except in cases where natural gas is clearly not involved (give the location or type of emergency situation), the responder must:

- 2.1 Upon arriving at the scene, report to the Emergency Dispatch Centre and speak with the person in charge from the fire department, police or other organization, depending on the situation.
- 2.2 Handle all reports of a strange odour as though natural gas were involved, and this until the evidence shows otherwise. Call 9-1-1 for all strange odours constituting a risk.
- 2.3 Contact Énergir Emergency Dispatch Centre in the following situations:
  - 2.3.1 A call concerning a leak turns out to be for a wrong address or "closed door";
  - 2.3.2 A combustible vapour or gas has entered a building;
  - 2.3.3 The fire department, police or other public services are needed;
  - 2.3.4 The conditions are such that the responder requires assistance;
  - 2.3.5 Any other circumstance considered significant by the responder.

#### 3. DETECTION

Various detection methods can be relied upon, depending on circumstances. They include smell, a combustible gas detector, a soap test, the meter sweep hand, a U-shaped pressure gauge or other devices.

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	E OF NATURAL GAS INSIDE A BUILDING					
Whene	ever natural gas in the air:					
OR						
4.1.1	Call 9-1-1 and start evacuating building occupants while remaining calm;					
4.1.2	Use every means possible to eliminate all ignition sources;					
4.1.3	Ventilate the affected rooms by opening doors and windows. Mechanic can also be considered using intrinsically safe equipment;	al ventilation				
4.1.4	If applicable, close the section valve, counter valve or the building connect	tion;				
4.1.5	Once the site is secured, apply the "Searching for leaks" procedure describ 5;	oed in section				
4.1.6	Keep the manager in charger informed.					
Whene	ever natural gas in the air:					
AND						
The fo	he following procedure must be initiated:					
4.2.1 Use every means possible to eliminate all ignition sources;						
4.2.2	Ventilate the rooms touched by opening doors and windows. Mechanic can also be considered. If so, use intrinsically safe equipment;	al ventilation				
4.2.2	Apply the « Searching for leaks" procedure described in section 5.					
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	- GR OR - h The fo 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.1.6 Whend - C AND - H The fo 4.2.1 4.2.2	<ul> <li>has a concentration in excess of 25% LEL;</li> <li>The following procedure must be initiated:</li> <li>4.1.1 <u>Call 9-1-1 and start evacuating building occupants while remaining calm;</u></li> <li>4.1.2 Use every means possible to eliminate all ignition sources;</li> <li>4.1.3 Ventilate the affected rooms by opening doors and windows. Mechanic can also be considered using intrinsically safe equipment;</li> <li>4.1.4 If applicable, close the section valve, counter valve or the building connect 4.1.5 Once the site is secured, apply the "Searching for leaks" procedure describ 5;</li> <li>4.1.6 Keep the manager in charger informed.</li> <li>Whenever natural gas in the air:         <ul> <li><u>can</u> be quickly lowered using ventilation;</li> <li>AND</li> <li>Has a concentration less than or equal to 25% LEL;</li> </ul> </li> <li>The following procedure must be initiated:</li> <li>4.2.1 Use every means possible to eliminate all ignition sources;</li> <li>4.2.2 Ventilate the rooms touched by opening doors and windows. Mechanic can also be considered. If so, use intrinsically safe equipment;</li> <li>4.2.2 Apply the « Searching for leaks" procedure described in section 5.</li> </ul>				

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#### 5. SEARCHING FOR LEAKS

#### 5.1 Leak inside a building (C60):

The leak must be located by using the means indicated in section 3 "Detection" The following places must be verified, in the necessary sequence:

- 5.1.1 Entry points of underground conduits (gas, water, sewers, oil, air, etc.);
- 5.1.2 Building's interior foundations;
- 5.1.3 Any fissures and/or openings or cracks in the floor;
- 5.1.4 Énergir's equipment (e.g. meter, regulator, etc.);
- 5.1.5 Client devices and pipes;
- 5.1.6 Follow the steps in section 5.2 "Leak outside a building".

Once the leak is located, it must be temporarily or permanently repaired if possible. When a temporary repair is performed, a "yellow" warning must be issued and given to the client. When a temporary repair cannot be performed on the inside installation, the section involved will need to be isolated and a "red" warning issued and given to the client.

5.2 Leak outside a building (C63):

The leak must be located by using the means indicated in section 3 "Detection". The following places must be verified in the required sequence:

- 5.2.1 The EXTERIOR foundations, at the riser, the regulator, the safety valve, etc.;
- 5.2.2 At all street openings for the section in question only;
- 5.2.3 Outdoor devices and facilities (or located nearby).

When the existence of an exterior leak is confirmed:

#### Aboveground (Énergir equipment):

- Permanently or temporarily repair the leak, or notify the manager in charge if this is not possible;
- If the leak originates in the regulator valve, refer to Technical specification 59.01.05 Pressure problem.

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#### Aboveground (Client equipement):

- Temporarily repair the leak if possible;
- When a temporary repair is performed, a "yellow" warning must be issued and give to the client. When a temporary cannot be performed on the inside or outside installation, the section involved will need to be isolated and a "red" warning issued and give to the client.

#### Underground:

 Report to the Emergency Dispatch Centre to mobilize the necessary personnel; Check for gas inside the buildings on either side of the road or damage, then check outside and inside for the presence of combustible gas until the extent of the leak is established. Search for an underground leak as per Technical specification 59.02.05 – Locating a leak.

#### 5.3 Leak outside a building with infiltration

5.3.1 Whenever infiltration is detected inside a building, refer to section 4 "Presence of natural gas inside a building" and stay at the site to control the situation check nearby buildings.

#### 6. CLOSED DOOR SITUATION

The responder must follow the instructions in section 5.2 "Leak outside a building" and attempt to take a sample of the indoor air through openings such as door frames, dryer outlets, open windows, etc.

- 6.1 Whenever natural gas concentrations are detected, the responder must proceed as follows:
  - 6.1.1 Shut off the meter valve or building connection;
  - 6.1.2 Report the situation to Energir Emergency Dispatch Centre;
  - 6.1.3 Use all possible means to eliminate any ignition source and other combustible (e.g., power supply, propane tank, etc.)
  - 6.1.4 Request help from the fire department (via the Emergency Dispatch Centre);
  - 6.1.5 Ask for assistance from a locksmith if necessary;

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6.1.6 While accompanied by a representative from the fire department or police, apply the appropriate measures inside the building.

#### 7. DAMAGE BY THIRD PARTIES

- 7.1 Whenever a leak or major damage to a pipe results in a dangerous situation:
  - Prevent people from approaching;
    - Request help from public services (fire department, police);
    - Monitor ignition sources; and
    - Ask that traffic be halted if there is any associated risk or potential danger.

All building occupants must be evacuated if the natural gas concentration cannot be quickly dispersed by ventilation or exceeds 25% LEL.

Building ventilation must be performed by taking into account the location of the leak and direction of the wind.

Everything must be done to prevent the gas being released from entering buildings. In some instances, the fire department must be asked to direct mist sprays so as to create an air stream near the buildings and effectively prevent the gas from approaching.

If the gas leak originated at a main pipe, ensure that the fire department does not spray near the section in question.

In these types of situations, refer to Technical specification 59.02.01 – Emergency intervention in response to a network leak.

#### 8 ADDITIONAL NOTES

To establish the priority of interventions, i twill be necessary to focus on certain factors likely to impact the migration of gas, including:

- → slope of the land;
- → pipe section that is flooded or buried;
- → wall-to-wall cement or concrete;
- → frost;
- → etc.

In these types of situations, refer to Technical specification 59.02.05 - Locating a leak.

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# D.6 Technical specification No. 59.02.01 – Emergency response to a natural gas pipeline leak

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.7

This Champion technical specification refers to that of Énergir.

#### TECHNICAL SPECIFICATIONS

#### 1. <u>OBJECTIVE</u>

The goal of this technical specification is to define the steps to follow during an emergency intervention related to a leak in the gas network as well as the individual protective equipment required to perform such intervention. The primary objective of the emergency intervention is to ensure the safety of the public and the stakeholders, while protecting any property that could be affected by the event.

#### 2. <u>SCOPE</u>

This specification applies to all emergency intervention carried out near an accidental natural gas leak caused by damages (including a damaged exterior riser, cold junction) to an underground or aboveground facility, outside of the buildings. It concerns polyethylene, steel or aluminum gas networks, of all pressure categories.

For certain underground leaks of unknown origin (e.g.: sudden damage to a conduit or a fitting cold junction, electric discharge, abrasion due to an underground water leak, etc.), it may be necessary to introduce exceptional measures to allow for quickly shutting off the has supply prior to identifying the source of leak. In such situations, refer to Paragraph 9 of Technical Specification 59.02.05 - Location an underground gas leak – to determine the conditions where this applies and the actions to implement.

NOTE: Although they apply to emergency situations, the prevention and safety measures described in this specification could also, in part or in full, apply to planned interventions, particularly when the origin of a leak is unknown or when the risk could increase during the course of an intervention.

#### 3. BASIC PRINCIPLES

3.1 The emergency intervention must be performed:

- To ensure the safety of the public and stakeholders
  - With a view to protecting public and company properties
- To limit disturbances to the public and to clients to the greatest possible extent
- To quickly restore the network to its normal operating conditions
- In close cooperation with the fire department
- In compliance with the Corporate Emergency Plan
- 3.2 Interventions must be done based on a decision-making process described in Appendix 1, 2 and 3. These appendixes have been established for three (3) types of breakage: underground BI, above ground BI and on CP. The decision-making processes are based on the following questions:

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tl	<ul> <li>Is there</li> <li>Is there</li> <li>For a PO</li> <li>In which</li> <li>What are</li> <li>What is</li> </ul> This specification can be various stakehold and experience to bether the statement of the statement	C, what is the pressure class h zone can I intervene? (int re the preconditions before the intervention method? mot cover all cases of poss ers must adapt themselves	to buildings and infrastructures s or is the pressure can be low terior or exterior of the hot zo	wered? one) s. Therefore, knowledge	
4. <u>DEFINIT</u>	TIONS				
With rega	rds to this specificat	ion, the following definitio	ns apply:		
4.1 <u>S</u>	services (fire dep representing an i	partment, police, other eme	f (ribbon, barricades) by em- rgency actors) within which ne is occurring. It usually m r.	a situation	
4.2 <u>S</u>		on stationed near the interve the stakeholders at all times	ention site of a natural gas le s.	ak and who	
4.3 <u>T</u>		h a longitudinal hole define out any special devices, suc	ed by vertical walls or a slop h as a ladder, difficult.	e that makes	
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Trench (d	ifficult evacuation)	Very	wide trench (open street, easy	y evacuation)
4.4 C -	intervene on the directly linked to	field to manage the action the organisation's mana ature of the incident may	rea put in place by an organisa is of its employees. The Com gement centre. The scale, the required the set-up of many c	mand Post is scope, the
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	takeholders must pa esponder: General in		chnical specification 59.01.01	– First
te	o eliminate potential		sary and reasonable steps have intervention site (e.g., heavy light posts, etc.).	
u n p si si	nderground infrastru ot done yet, for an e er Fire Safety Regul hutdown (route trigg ervice, if required, tl	icture, Énergir's represen lectrical shutdown to the ation. Énergir must obta er) by Hydro Québec and irough the CP to FPS or l	infiltration or migration to a b tative must request as soon as CP of the Fire Prevention Ser in the verbal confirmation of t d/or by the municipalities' elec EOC. in the company's electronic directory	possible, if vice (FPS), as he electrical ctrical
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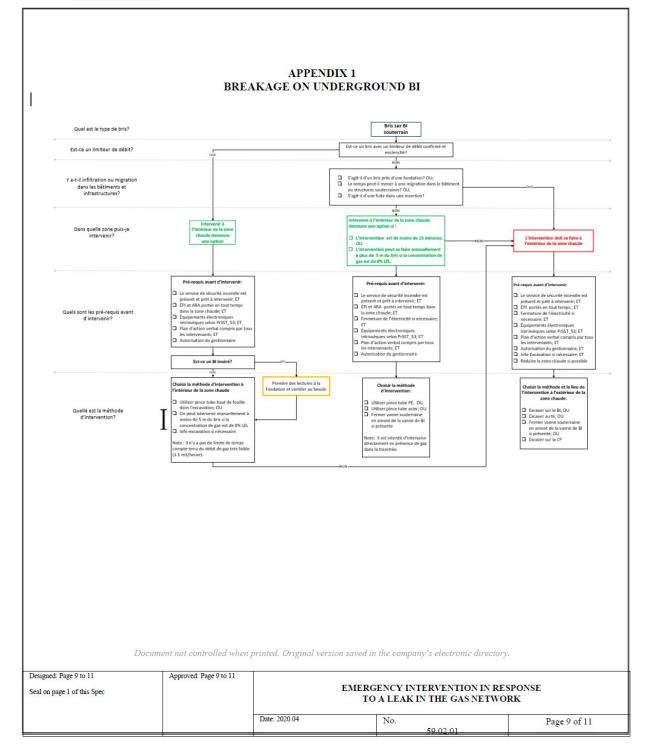
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NOTE:	and the second sec		hutdown, many other sourc nnection boxes, etc.)	es of ignition may remain O	UTSIDE the
				r	
NOTE:	in damages bucket mus Should the	s to a gas conduit, th st be lifted out of the	he machine's engine must l trench in order to facilitat trunning, the action plan n	nt (ex. Drilling machine, etc., be shut off an if possible, the te gas evacuation and plugg nust take into consideration	excavator ing works.
		Then an excavator is ork must be done ou		, it represents a risk and the	refore, the
	fo		eak in an insert leading to a	d if there is a risk of infiltrat a migration potentially dange	
	5.6 N	o intervention is allo	owed in the trench when th	ere is gas (for example, usin	g a shovel).
	cc at lo	nduit is forbidden. <u>more</u> than 5 m. of t cated on a BI with f	However, the intervention he breakage if the gas conc	nded type is excluded) direct can be done manually inside centration is 0% LEL. If the tion can be done manually in concentration is 0% LEL.	e the hot zone breakage is
		he closing of valves oncentration is at 0%		n the hot zone can be done w	when the gas
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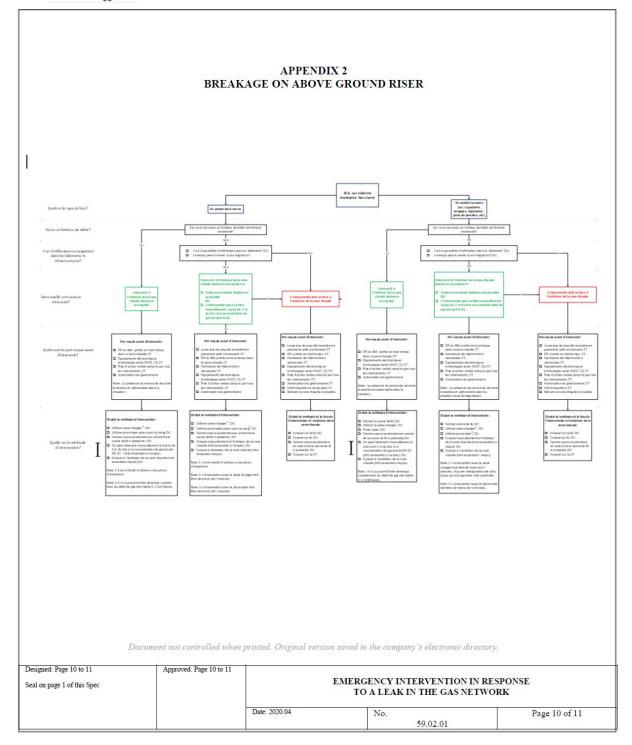
	5.9	In situations that cou	ld quickly lead to incident	s with potentially serious con	isequences on
		the integrity of perso	ns and property, stakehold	ers can decide to shut off the	gas supply
		outside the hot zone	e and without consulting th	e hydro engineer (for examp	le: closing of
		valves or station). H	lowever, the manager mus	t be informed as soon as poss	ible.
	5.10	When there is a gas l	leakage after an accidental	breakage, it is forbidden to i	nstall a
		"Plidco" repair sleev	e or a mechanical "Adam	Sleeve".	
	5.11	Because of the time :	required to set up and the r	isk of this operation, the inst	allation of
		block connectors or t	the use of existent block co	nnectors is not considered a	s an
		emergency intervent	ion technic as per the curre	ent specification. However, i	n some
		instances, it can repr	esent the only feasible solu	ation outside the hot one an	d it must be
		authorized by the EO	OC regional engineer.		
	5.12	All stakeholders who	o find themselves inside th	e operation perimeter of the l	hot zone
		(when many operation	on perimeters are set up) or	who find themselves inside	the only
		operation perimeter of	or if no operation perimete	r has been set up, must wear	the following
		personal protective e	equipment (PPE):		
		a) Safety helmet (v	vith fireproof and antistatio	lining, if required)	
		b) Safety boots (sh	oes are not permitted)		
		c) Thermal protect	ive clothing (TPC)		
		d) Flame-resistant :	antistatic hood		
		e) Flame-resistant	antistatic gloves		
		f) Ear protectors (s	simple or double) wheneve	r there is noise	
		g) Self contained b	reathing apparatus (SCBA	)	
	NOTE:			ndby at the CP must always	have the PPE
		with them but need n	ot be wearing it yet.		
	It can al	lso be possible to lesse	en the obligation to wear a	thermal protection suit in the	e cold zone or
	inside th	he operation perimeter	r when thermal conditions	constraints are present.	
	NOTE:	The Fire department	is responsible for overall	safety at the site and can, at	any time,
		demand that certain	personal protective equips	nent be worn.	
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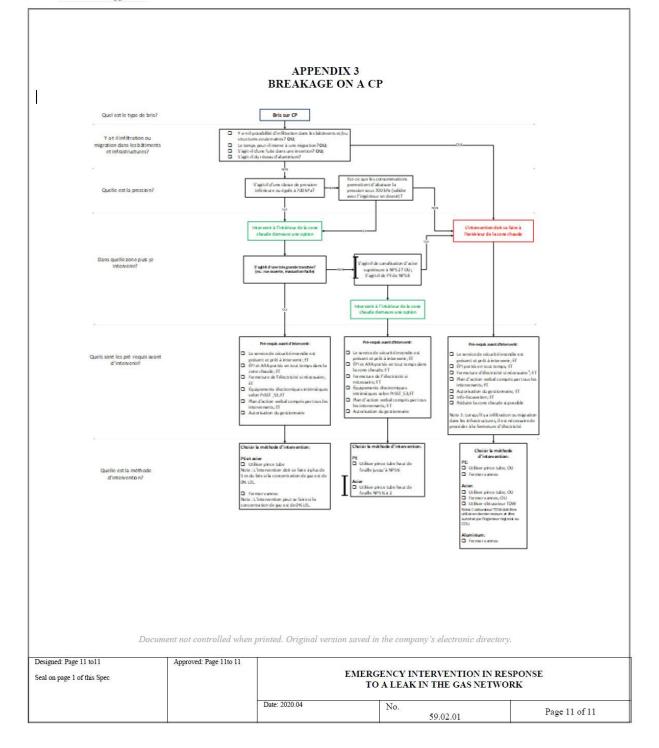
5.13 5.14 6. <u>INTERV</u> 6.1	Except in situation with a area allow it, all situation perimeter the only use intrinsically devices as per the Properties of the Fire of engaged flow limiter For intervention when with a total capacity of intervention site.	bere stakeholders are at the takeholders who find them many operation sites are set that is set up, or if no operat safe communication (e.g. of SST_53 – Intrinsic tools. uring plugging directly control of the partment is optional in though for breakage of an about the Fire department is not of at least 4.5 kg. and a flar cattered states and a	Fire department CP and the selves inside the operation p up), or find themselves in the ion perimeter has been set up cellular phone, pager) or elect mected on a gas conduit musus to be ready to intervene. How e case where there is a confin ove ground riser. t present, one or more ABC of me-resistant tarp must be avai	erimeter of e only p, they must tronic st be executed wever, the rmed and extinguishers
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	Submit a request regantervention site.	arding the location of	of foreign conduits that could be situ	nated near the
	NOTE: In the event requested by this par		rd party, the valid localization docu d.	ments
	f necessary, locate th Inderground gas lea		cal specifications 50.02.05 – Locatin	ng an
c i	of the situation and in nternal and external	structions regardin stakeholders, and to	tre to obtain further details regardin g network operations, to ask necessa prequest access to intervention mate ergency Plan for the steps to follow	ary help from erials that
i n	ncluded in the corpo	rate Emergency me reduction work are o	ribed at item 5.9, the communicatio asure plan must be followed before lone. The following factors must be f necessary:	isolation
t c c c c	<ul> <li>b) The type and number</li> <li>c) The type of network</li> <li>d) Time needed to p</li> <li>c) Weather condition</li> </ul>	mber of clients that york impacted (loop plug the leak; pns;		
6.7 5	Set up a verbal action	n plan before the int	ervention.	
ł	Appendix 1, 2 or 3 an Note: Notwithstan shutdown's	nd in cooperation w ding the selected ini steps must be shown	on site based on the breakage type d ith the Fire department. tervention mode, the site(s) and time to on the leakage description form an	e(s) of every
		ol Office (CO). quipment for gas sli	uutdown operations (clamping, exca	vation, valve
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		necessary, lower the the second se		l specification 22.04.01 – Pr	ocedure for
	52		n of static electricity on po	duits, follow the Technical solution duits, follow the Technical solution of the solution of t	
			on on steel gas conduits, fo ipe wrench on steel conduc	llow the Technical specifica cts.	tions
			vith a Valve Changer, follo nger as an emergency inter	w the Technical specification vention tool.	n 59.02.12 –
	N	ote 1: The use of an	n expansion plug is prohibi	ited.	
	N	ote 2: A Valve Cha	nger intervention must be a	done in less than 2 minutes.	
			n aluminum conduit. Shuto located in the Montérégie	lown of the supply valve is r region only.	equired. The
_	DEDICAL				
7.	PERMAN	<u>VENT REPAIR</u>			
			f the impacted conduit mus is temporarily fixed.	t be planned and executed a	s quickly as
	he	-	al verification for the prese	e trench must stay open for a ence of gas in the ground mu	
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### D.7 Technical specification No.°22.06.01 – Work execution guidelines

See OPR sect. 32(1.1), OPR Appendix A.2, OPR sect. 6.5(1)t

This Champion technical specification refers to that of Énergir.

#### 1. OBJECTIVE

This technical specification aims to define the activities that require issuing work execution guidelines because of their sensitive (e.g., location) or critical nature. It also allows for defining the roles and responsibilities of the actors called upon to execute these works in order to reduce associated risks.

#### 2. SCOPE

An instruction that the work can be executed is required in the following two (2) situations:

- For any <u>construction or improvement project along a CL-1000 and more gas conduit. Planned</u> construction or improvement projects include, among other things:
  - Deviation;
  - Segment replacement;
  - Installation/extension/ abandonment of a main line;
    - Installation/abandonment of a delivery or regulation station;
  - Valve repairs.

Does not apply:

To connection works using H-17800 tee fittings
 To unplanned emergency interventions (responsibility on on-call teams)

 For all other <u>planned construction or improvement projects</u> at lower pressures, if deemed appropriate by the project manager.

#### 3. GENERAL

In light of their scope and complexity, the construction projects targeted by this technical specification require that we plan their execution in various steps considering the following objectives:

- Ensure the safety of workers and the public;
- Ensure ongoing supply for clients or limit the down times;
- Ensure quality work;
- Limit loss of time;
- Foresee potential incidents and implementing mitigation measures and specific emergency intervention procedures when needed.

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#### 4. DEFINITIONS

#### Project Manager:

Employee of Énergir responsible for planning and carrying out the work. Depending of the type and scope of the works to carry out, this person is:

- A Project Manager Construction; or
- · A Project Manager Major Projects; or
- · An Engineering Manager Special Projects.

#### 5. PRELIMINARY ACTIVITIES

Prior to launching a project requiring guidelines for the execution of work, the following activities must be carried out:

5.1 Procedure for a temporary decrease in temperature

A procedure for temporarily lowering a specific pressure must be established prior to the coordination meeting once the construction plans are completed. It is requested by the project manager (or project technician) and developed by the Engineering Network Design and Management group, as per technical specification 22.04.01 - Procedure for a temporary decrease in pressure.

#### 5.2 Emergency Plan

A specific network intervention emergency plan must be prepared prior to the coordination meeting, once the construction plans are completed. It is requested by the project manager (or project technician) and developed by the Engineering Network Design and Management group, as per the technical specification 22.04.01 – Procedure for a temporary decrease in pressure.

5.3 Planning for a preventive EOC (Emergency Operations Centre) and/or preventive ECC (Emergency Coordination Centre)

The director of the administrative office and the project manager must determine a few days prior to the onset of the works whether or not to hold a preventive EOC/ECC. The deployment process of a EOC/ECC must be done in accordance with the procedure SGMU PG 02 – *Preventive EOC and ECC* available on the PMUCO group SharePoint on the

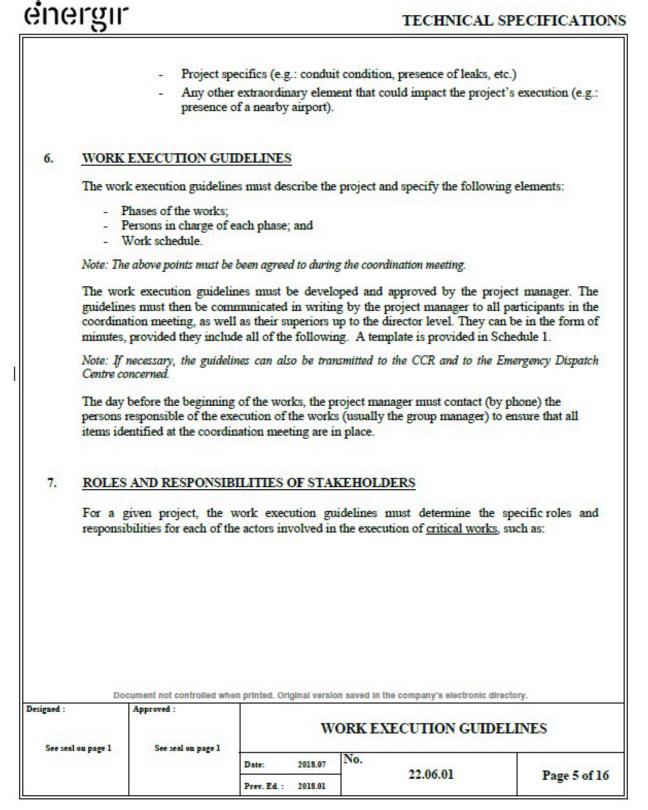
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	following path: Shar	ePoint PMUCO > Prévention > COU / CCU Pr	éventif > SGMU				
	PG 02 Centre urgen	ce preventif.					
5.4	Coordination meeting						
	phase of the project.	pportunity for confirming the roles of the persons The project manager convenes and conducts the me (3) weeks prior to the start of the project or near a etc.).	eting, which must				
		must schedule one (1) additional hour after the coo preventive EOC meeting. If the preventive EO be cancelled.					
		olders must attend the meeting if <u>invited by the pro</u> I, a thorough transfer of information is required pr					
	- Project technic	cian:					
	- General contr						
	- General contr	actor's WHS Advisor (optional);					
	<ul> <li>Director, Business office and/or Pipeline technical service;</li> </ul>						
	<ul> <li>Workplace health &amp; safety advisor;</li> </ul>						
	<ul> <li>Director or advisor – Prevention or risks/Emergency management;</li> </ul>						
	<ul> <li>Public and governmental affairs representative;</li> </ul>						
		er or senior technician - Connection;					
		er - Transmission;					
		er – Welding (if performed by Énergir welders);					
		er – Business office operations;					
	- Regional engi						
	-	igineer officer;					
	<ul> <li>Specialized engineer onicer,</li> <li>Specialized inspection;</li> </ul>						
	- Sales represen	ntative (Large businesses sales or Major accounts). upport team for Large businesses sales;	To do so, please				
		loyees involved in the project (e.g. : Contractors,	Arkéos, Couture,				
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 The project manager must gather the following information and send it to the stakeholders one (1) week before the coordination meeting. He must ensure that the information is available at the meeting:

	Informa	tion	Person in charge of th	e document
	Construction plan and work		Project mana	ger
	Procedure for a temp pressure and Em	-	Engineering manager - N	letwork design
	List of impact	ted clients	Engineering manager - N	letwork design
w	HS Prevention program proje		e Energir Project manager ( authorized by WHS	
	Investment reques	t, if applicable	Regional engi	neer
No	STR, the prevention of	agent will identify the in pject manager will com	ject manager – Construction and the j nportant items of the prevention progr plete the identified risks in the minu	am related to his risk
	• The following mu	st be addressed duri	ng this meeting:	
	- Execution	schedule and perso	ns in charge of the various activi	ties:
			nergency plan (regional enginee	
		-	cialized inspections;	
	- Work sch			
	- Workford	e challenges;		
	- Potential	-	lic, employees (risks regarding ent;	workplace health
	Note: For conduit in	works involving the stalled on a reel, a	uncovering and cutting into section retaining method must be determ the conduit in question.	
	- Potential	impacts on the netwo	ork;	
		ents and special pu in the event of an inc	rpose building likely to be impident;	pacted during the
			ties, the Ministère des Trans r the Environment Ministry;	ports du Québec
	- Mitigation	n measures seeking t	o limit the risk of accidents;	
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#### A- Mechanical excavation:

Stationary - Énergir (If excavation work is performed by a general contractor)excavation described in the guide for carrying of works near gas networks. Notifies the Emergency Dispatch Centre (EDCW when an accident occurs.Technician - Network Operations (If excavation work is performed by Énergir)On site. Meets the requirements related to mechanic excavation described in the guide for carrying of works near gas networks.Technician - Network Operations (If excavation work is performed by Énergir)On site. Meets the requirements related to mechanic excavation described in the guide for carrying of works near gas networks. Notifies the Emergency Dispatch Centre (EDCW when an accident occurs.Group manager - OperationsNot on site, but nonetheless ensures that the emergency plan is relevant (e.g., valves are accessible and functional).		Roles and responsibilities
Technician – Network Operations (If excavation work is performed by Énergir)       Meets the requirements related to mechanic excavation described in the guide for carrying of works near gas networks.         Notifies the Emergency Dispatch Centre (EDCW when an accident occurs.         Group manager - Operations         Not on site, but nonetheless ensures that the emergency plan is relevant (e.g., valves are accessible and functional).         Stays in touch with the various actors to ensure the	(If excavation work is performed by a general	Meets the requirements related to mechanica excavation described in the guide for carrying or works near gas networks. Notifies the Emergency Dispatch Centre (EDCW
Group manager - Operations       emergency plan is relevant (e.g., valves are accessible and functional).         Stays in touch with the various actors to ensure the various actors		Meets the requirements related to mechanica excavation described in the guide for carrying ou works near gas networks. Notifies the Emergency Dispatch Centre (EDCW
Project manager Stays in touch with the various actors to ensure the works are properly executed.	Group manager - Operations	Not on site, but nonetheless ensures that the emergency plan is relevant (e.g., valves are accessible and functional).
	Project manager	Stays in touch with the various actors to ensure th works are properly executed.
	Project manager	works are properly executed.

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10 million (1997)	Stakeholders		Roles and responsibilities		
	technician ng work is performed by a or)	a general Notifies	On site. Performs the general inspection of the job site. Notifies the Emergency Dispatch Centre when an incident occurs.		
	manager – Welding <sup>(1)</sup> ng work is performed by F	Energir	the general inspection of the job site. the Emergency Dispatch Centre when an occurs.		
(When w	ized inspection velding work is executed o of Cl-1000 or more)	Carries on Does an in 2400 and	hat the welding procedures are adhered to. ut non-destructive tests. inspection (after 48 hours) on networks of C1- more. verifications. See the checklist in Schedule 2		
Group	Group manager - Operations Project manager		<ul> <li>Not on site, but nonetheless ensures that the emergency plan is relevant (e.g., valves are accessible and functional).</li> <li>Initiates the emergency plan and is mobilized to the site in the event of an incident in such cases, becomes the manager at the incident site.</li> </ul>		
Project			Stays in touch with the various stakeholders to ensure the works are properly executed.		
		99			
re ex	sponsibilities to anoth perience and knowledg	er Énergir manager. Th e regarding welding of ste m printed. Original version sav	ved in the company's electronic directory.		
re ex	sponsibilities to anoth perience and knowledg ocument not controlled whe	er Énergir manager. Th e regarding welding of ste m printed. Original version sav	tis manager, however, must have the necessar and conduits in use. red in the company's electronic directory. KEXECUTION GUIDELINES		

#### **B-** Installation of welded connections:

## C- Pressure test (block connections picketing/marking tips, etc.):

Stakeholders	Roles and responsibilities
Project technician (If tests are performed by a general contractor)	On site. Oversees follow-up of the pressure test procedure. Notifies the Emergency Dispatch Centre when an incident occurs.
Technician – Network Operations (If tests are performed by Énergir)	On site. Oversees follow-up of the pressure test procedure. Notifies the Emergency Dispatch Centre when an incident occurs.
Group manager - Operations	Not on site, but nonetheless ensures that the emergency plan is relevant (e.g., valves are accessible and functional). Initiates the emergency plan and is mobilized to the site in the event of an incident. In such cases, becomes the manager at the incident site.
Project manager	Stays in touch with the various stakeholders to ensure the works are properly executed.

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## **D-** Drilling

Stakeholders	Roles and responsibilities
	On site
Project technician (If drilling work is performed by a general	Carries out a general inspection of the job site and follows up on the drilling procedure.
contractor)	Notifies the Emergency Dispatch Centre when an incident occurs.
	On site
Groupe manager – Network Operations	Carries out a general inspection of the job site and follows up on the drilling procedure.
(If drilling work is executed on a main supply conduit by Network Operations teams)	Notifies the Emergency Dispatch Centre when an incident occurs.
	Not on site, but nonetheless ensures that the emergency plan is relevant (e.g., valves are accessible and functional).
Group manager - Operations	Initiates the emergency plan and is mobilized to the site in the event of an incident. In such cases, become the manager at the incident site.
Project manager	Stays in touch with the various stakeholders to ensure that the works are properly executed.

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## E- Blocking, purging and welding of parts downstream of the block connector

	Stakeholders		Roles and responsibilit	ties			
		On si	te.				
	Project technician (If work is performed on a main	1	Ensures that a general inspection of the job site is done makes sure that the procedures are followed.				
	general contractor)	Notif	Notifies the Emergency Dispatch Centre when an incident occurs.				
	21	On si	te.				
	Group manager – Network	•	es that a general inspection of the j s sure that the procedures are follow				
	(if work is executed on a main su Network Operations teams)	Notif	Notifies the Emergency Dispatch Centre when an incident occurs.				
	Group manager - Operation	under	es the physical presence of the sta the emergency plan, and makes su int (e.g., valves are accessible and f	re this same plan is			
	0.0000000000000000000000000000000000000	On si	te.				
	Specialized inspection		Performs non-destructive tests and carries out verification activities.				
			es from the Group manager – Op ger – Transmission that the eme				
	delegate his/her respo	g the coordination m	Stays in touch with the various sta orks are properly executed. eeting, the Group manager-Netwo Energir manager. This manager, I arding blocking, purging and weld	keholders to ensure ork Operations can however, must have			
	Note: If agreed upon during delegate his/her respo the necessary experien in use.	g the coordination m msibilities to another and knowledge reg	Stays in touch with the various statorks are properly executed. eeting, the Group manager-Netwo Énergir manager. This manager, l arding blocking, purging and weld	keholders to ensure ork Operations can however, must have ing of steel conduit:			
igned :	Note: If agreed upon during delegate his/her respo the necessary experien in use.	g the coordination m msibilities to another and knowledge reg	Stays in touch with the various sta orks are properly executed. eeting, the Group manager-Netwo Énergir manager. This manager,	keholders to ensure ork Operations can however, must have ing of steel conduit:			
-	Note: If agreed upon during delegate his/her respo the necessary experien in use. Document not controlled wh	g the coordination m nsibilities to another ace and knowledge reg	Stays in touch with the various statorks are properly executed. eeting, the Group manager-Netwo Énergir manager. This manager, l arding blocking, purging and weld	keholders to ensure ork Operations can however, must have ing of steel conduits			
signed : See seal	Note: If agreed upon during delegate his/her respo the necessary experien in use.	g the coordination m nsibilities to another ace and knowledge reg	Stays in touch with the various statorks are properly executed. eeting, the Group manager-Network Energir manager. This manager, larding blocking, purging and weld	keholders to ensure ork Operations can however, must have ing of steel conduits			

## 8. FINAL ACTIVITIES

After having completed a project requiring work execution guidelines, an "as-built" plan must be carried out as quickly as possible, and then transmitted to the Geomatics department so that everything is digitalized and archived.

This will require being on site so as to gather the information relevant to the "as-built" plan.

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## TECHNICAL SPECIFICATIONS

		Schedule		
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Project Title:				
wo:				
Subject: Minutes	of the Coordinat	ion meeting		
Date:				
Location: Drafted by:	<u>8</u>			
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Present:				
Participa	nt	Company	Role / Title	
-			-	
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Absent:				
Participa	nt	Company	Role / Title	
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## TECHNICAL SPECIFICATIONS

Subject		Discussions	Person in charge
Project Presentation	1. Description of	Project manager	
		Preliminary Activities	
Procedure for pressure decrease	Project manager		
Emergency Plan		edure for important leaks or major damag ngineering and presented the meeting	es Project manager
List of clients	1. A list of the c interruption v at the meeting	d Project manager	
WHS Prevention program applicable to project	<ol> <li>The WHS Pre- been prepared presented at t</li> </ol>	S Project manager Énergir or contractor Validated by the WHS advisor	
Planning of a preventive EOC	available on risques, mesu Access Patch	rocedure PG 02 - EOC and Preventive EO SharePoint PMUCO (Prévention des ures d'urgence et continuité des opération 1 : SharePoint PMUCO > Prévention > CO ntif > SGMU PG 02 Centre urgence	AO Director and EOC s) Director (if project
		Stakes to discuss	
Items to discuss - Schedul Septemi - Explain - Explain - Work so - Work fo - Potentia		ce challenges impacts (public, employees, network, etc hat could be impacted	
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## TECHNICAL SPECIFICATIONS

Roles and responsibilities of stakeholders	<ul> <li>Requirements of municipalities and the MTQ</li> <li>Mitigation measures (prevention program)</li> <li>Project specifics (main conduit, airport, etc.)</li> </ul> The stakeholders' respective roles and responsibilities were reviewed during the meeting: <ul> <li>A. Role and responsibilities – Mechanical excavation</li> <li>B. Role and responsibilities – Installation of welded connections</li> <li>C. Role and responsibilities – Pressure test;</li> <li>D. Role and responsibilities – Drilling;</li> <li>E. Role and responsibilities – Blocking, purging and welding parts downstream of the block connector;</li> <li>Final activities:         <ul> <li>As-built (TQC): Georeferenced points and x, y, z will be submitted to Geomatics upon completion of the works.</li> </ul> </li> </ul>					
Summary of act <u>1. Schedule - S</u> ACTIONS REQU	takes	rm after the coor	linatio	PERSON IN CH		TIME FRAME
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6. Stakes – J	Plans and specifi	cations		
ACTIONS RE	QUIRED		PERSON IN CHARGE	TIME FRAME
7. Stakes – J	Procurement of g	goods and service	25	
ACTIONS RE	QUIRED		PERSON IN CHARGE	TIME FRAME
8. Stakes - I				
ACTIONS RE	QUIRED		PERSON IN CHARGE	TIME FRAME
9. Stakes - S	Schedule			
ACTIONS RE	QUIRED		PERSON IN CHARGE	TIME FRAME
10. Stakes -	Environment			
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## TECHNICAL SPECIFICATIONS

## Schedule 2

<u>Checklist – Specialized inspection</u> Welding work performed on steel conduits of CL-1000 or more

	PROJE	<u>CT:</u>	i 2	
	II	EMS TO VERIFY		CHECK ONCE VERIFIED
Check t	hat welders have the qual	ifications required to pe	rform the work	T LIGHT LED
	hat welders have the requ			
Check			with the requirements of	2
Check t			ircumferential weld on the ed	
Check t	he condition of the condu	it over the entire area w	here the connection will be	
	ne the cooling rate at nt with requirements of th		nd establish whether it is	
the con			onnection to be welded and omplies with the welding	
Check t			the connector (longitudinal ure parameters	
	are that the ovens requir ntained at the necessary t		en electrodes are adequate	
Check t procedu		correspond to those	identified in the welding	
Make su	ire available electrodes co	ome from unopened box	tes	
		have the adequate cap	acity and are in sufficient	
number.				
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## **E** Appendices

## E.1 Procedure to notify and report to authorities

See OPR sect. 33, OPR sect. 34, OPR sect. 52 and Clause 10.4.3.1 CSA Z662, Event Reporting Guidelines sect. 3, Event Reporting Guidelines sect. 12

Incident notification procedures						
Reportable events	Reporting timeframe	Information to transmit by virtue of:				
With the exception of major incidents, all other incidents can be reported via the <b>CER-TSB</b> <b>online reporting system</b> available at: <u>https://apps.cer- rec.gc.ca/ERS/Contact/Edit</u> If the system is unavailable, incidents must be reported to the TSB at the following emergency number: 819-997-7887	Incidents reported via the CER-TSB online reporting system must be reported immediately or <u>no later than</u> <b>24 hours</b> after being <u>discovered.</u> If the reported information is incomplete, the missing details must be submitted as soon as possible and at most, during the 30-day period following the initial report.	<ul> <li>Canada Energy Regulator Onshore Pipeline Regulations</li> <li>Company contact information.</li> <li>Date and time of the event or its discovery.</li> <li>Details of the incident's discovery (e.g. scheduled patrol, report from the landowner or a member of the general public).</li> <li>Type of incident reported (e.g. death, release of a substance, fire, explosion).</li> <li>Type of substance released and estimated initial volume (if applicable).</li> <li>Qualitative information on the type of incident (e.g. serious injury involving broken bones, exposure of a pipeline in a body of water which exceeds design criteria).</li> <li>Nearest population centre.</li> <li>Name of the facility or pipeline.</li> <li>Report of the facts, including a description of the events leading up to the situation or discovery and details of the measures taken to</li> </ul>				

	Incident not	tification procedures
Reportable events	Reporting timeframe	Information to transmit by virtue of:
		<ul> <li>immediately protect members of the public, company employees and the environment (e.g. evacuation, containment of the substance).</li> <li>Preliminary information on the faulty element, if applicable.</li> <li>Land or areas impacted (e.g. company land, right-of-way, private land, State land).</li> </ul>
Major incidents (see E.2 – Incidents to report to the authorities) must first be reported to the TSB at 819-997-7887 or 1-800-387-3557. They must subsequently be reported via the CER-TSB online reporting system.	Must be reported immediately or no later than <b>3 hours</b> after the incident is discovered.	<ul> <li>Canadian Energy Regulator Pipeline Damage Prevention Regulations</li> <li>Details of the violations or damages, including, in the case of damages, the cause and nature thereof, including: <ul> <li>Champion's and the offender's contact information (if known);</li> <li>Location of occurrence in decimal degrees to four decimal places;</li> <li>The name of the pipeline involved;</li> <li>How the event was discovered;</li> <li>Description of the damage caused or potentially caused by the occurrence;</li> <li>Description of the actions taken by the company;</li> <li>The reason for the violation.</li> </ul> </li> <li>Concerns the pipeline company may have about the safety of the pipeline as a result of the pipeline as a result of the construction or installation of the facility or the performance of the excavation;</li> <li>Any action the pipeline company intends to take or request.</li> </ul>
		Transportation Safety Board Regulations
		Name of the operator;
		Date and time of the pipeline accident;

	Incident notification procedures								
Reportable events	Reporting timeframe	Information to transmit by virtue of:							
		Unique identifier of the pipeline or pipeline section (i.e. name or number);							
		Identification of pipeline elements that malfunctioned or were defective;							
		• Site of the pipeline accident in relation to a specific point or location (e.g. operator's facilities or pipeline kilometre markers);							
		Name of the closest city or village to the accident site;							
		• Number of deaths or persons who suffered serious injuries as a result of the accident;							
		• List of products in the pipeline or which were released from it, as well as estimates of the volume released and volume recovered;							
		<ul> <li>Real or forecast duration of any interruption in the activities of the pipeline or pipeline section;</li> </ul>							
		• Report on the pipeline accident, the events leading up to the incident and the extent of the damages, particularly the impacts on the pipeline or pipeline section, any other property and the environment;							
		Description of the measures taken or planned to remedy the consequences of the accident;							
		• Description of the measures taken or planned to protect people, property and the environment, and more specifically any evacuation ensuing from the accident;							
		• The report author's name and title, along with a telephone number and address at which they can be reached;							
		• Any information on the pipeline accident required by the TSB.							

Writte	n report to submit to the CER at a later date under the Canadian Energy Regulator Onshore Pipeline Regulations
Timeframe	As soon as possible after the incident, a preliminary incident report and a detailed report must be submitted. According to the guidelines, the initial notice given by the companies generally meets the requirements regarding preliminary incident reports. The information required for the <b>detailed incident report</b> must be submitted within <b>12 weeks</b> of the incident being reported. For complex incidents, companies may ask for an extension of the detailing for submitting the detailed report.
Content	<ul> <li>All relevant updates of the information included in the notice or preliminary incident reports.</li> <li>Detailed information on the pipeline or faulty element of the facility, if applicable.</li> <li>Operating conditions of the pipeline or facility where the incident was discovered (e.g. operating pressure, type of product, thickness of the cover), if applicable.</li> <li>Maintenance log of the defective element (e.g. date of the last inspection or maintenance activity, type of inspection, namely visual or non-destructive testing), if applicable.</li> <li>Corrective measures taken by the company to prevent other similar situations.</li> <li>Analysis of the underlying cause, including at least one immediate cause (e.g. defective equipment or element) and at least one underlying cause (e.g. normal wear).</li> <li>Corroborating facts (e.g. metallurgy report), if applicable.</li> </ul>
Reporting of incident costs	<ul> <li>In response to an incident, a work order is opened, enabling the allocation of costs.</li> <li>An annual statement of costs is produced for all incidents. It includes:</li> <li>A major negative impact on the environment;</li> <li>A rupture</li> <li>A toxic plume</li> <li>A loss of containment of any fluid from a well</li> <li>Champion must report costs according to the following categories:</li> <li>Category 1 – Actual costs (to be reported separately) committed to:</li> <li>The emergency response, including the containment of the product released</li> </ul>

Written	Written report to submit to the CER at a later date under the Canadian Energy Regulator Onshore Pipeline Regulations						
	<ul> <li>The clean-up and remediation of the incident</li> </ul>						
	<ul> <li>The repair or replacement of regulated facilities</li> </ul>						
	Category 2 – Actual or estimated value of losses or damages not included in Category 1						

## **E.2** Incidents to report to the authorities

## See OPR sect. 33, OPR sect. 34, OPR sect. 52 and clause 10.4.3.1 CSA Z662

			Authorities to c	ontact		
const	CER: Event that occurs during the pipeline's construction, operations or decommissioning TSB: Event that occurs during the pipeline's operations		CER-TSB Portal – Via Internet	TSB – Via telephone	Comments	Responsible for contacting authorities
No.		Event that results in:	(24 h)	(3 h)		
1.	By virtue of the OPR and Transportation Safety Board Regulations	The death of a person or a serious injury (see section A.3)		~	The following must be reported: An event where the deceased or injured person was working at the time of the incident or if the work carried out was a cause of or contributing factor to the incident. All deceased or seriously injured persons, regardless if they are direct employees or not. If several serious injuries or deaths occur following a single incident in the same location or if one individual suffers several serious injuries during a single event, everything must be reported in a single incident report. Conversely, if several serious injuries occur at different locations, a separate incident report must be submitted for each event.	EM Coordinator
2.		Pipeline operations beyond the design limits established under the CSA Z662 or CSA Z276 standards, or beyond the operating limits imposed by the CER.	~		Examples of the types of events in question: Pipeline operations at a pressure that exceeds the design criteria regarding tolerance against excess pressure (standard Z662), i.e., the operating pressure exceeds the allowable or modified MOP	Asset Management

		Authorities to contact			
const	uring the pipeline's or decommissioning TSB: he pipeline's operations	CER-TSB Portal – Via Internet	ר אלי לא		Responsible for contacting authorities
No.	Event that results in:	(24 h)	(3 h)		
				(maximum operating pressure) by 10% or 35 kPa, whichever is greater;	
				Pipeline operations at a pressure that exceeds 100% of the ROP (restricted operating pressure);	
				Pipeline operations at a pressure that exceeds 110% of the company's self-imposed restricted pressure for safety or integrity reasons;	
				Pipeline operations at a pressure that does not comply with CER criteria;	
				Pipeline operations at a temperature that does not comply with design criteria or CER criteria;	
				Pipeline exposed to a major risk of vibration or an excessive restriction;	
				Slope movement with a possible negative impact on the pipeline;	
				Pipeline exposed in a body of water (e.g. river, wetlands);	
				Introduction of an inappropriate product in the pipeline (e.g. corrosive product in a pipe or facility designed to carry non-corrosive products).	
3.			~	Unintended or uncontrolled release of sweet natural gas or high vapour pressure hydrocarbons in excess <sup>7</sup> of 30,000 m <sup>3</sup>	EM Coordinator

<sup>&</sup>lt;sup>7</sup> In Champion's network, this volume would be reached for a leak with a diameter greater than 1" after 1.5 hours.

			Authorities to contact			
const	CER: Event that occurs during the pipeline's construction, operations or decommissioning TSB: Event that occurs during the pipeline's operations		CER-TSB Portal – Via Internet TSB – Via		Comments	Responsible for contacting authorities
No.		Event that results in:	(24 h)	(3 h)		
4.	re	n unintended or uncontrolled elease of gas or HVP ydrocarbons	~		<ul> <li>A unintended or uncontrolled event is an event that is not part of a planned pipeline operation or maintenance activity that occurs during the construction, operation, or abandonment of a pipeline and results in the following:</li> <li>A release of gas with a flow rate greater<sup>8</sup> than 0.1 kg/s from a malfunctioning or faulty part of a pipeline, facility or appurtenance, including a seals, packing, O-ring, plug or valve; (<i>i.e. the parts of the pipeline that are not the pipe itself</i>)</li> <li>A release, regardless of flow rate, from the body of the pipeline or from a welded connection</li> <li>Events that do not fall under this definition include but are not limited to:</li> <li>Intended and controlled flaring or release of natural gas or hydrocarbons into the atmosphere, including release through properly functioning pressure safety valves or pressure relief valves.</li> <li>Companies must provide an estimate of the release rate and volume released to date when reporting events through the Online Event Reporting System (OERS). Companies should use the following formula to estimate the release rate</li> </ul>	EM Coordinator

 $<sup>^{8}</sup>$  In Champion's network, this mass flow is achieved for a leak with a diameter greater than  $\frac{1}{2}$ " (13 mm).

		Authorities to contact			
construct	CER: Event that occurs during the pipeline's construction, operations or decommissioning TSB: Event that occurs during the pipeline's operations		TSB – Via telephone	Comments	Responsible for contacting authorities
No.	Event that results in:	(24 h)	(3 h)		
				Flow rate = $132.52 \times \frac{h^2}{1000} \times \sqrt{D \times P}$	
				Mass flow (kg/s) h = equivalent hole diameter (mm) D = density of gas (kg/m <sup>3</sup> ) P = pressure of gas (bar(a), absolute pressure) Companies should use the following formula to estimate the total mass released: Total mass (kg) = Flow rate (kg/s) x duration of release (seconds)	
5.	A release of unintentional or unconfined LVP hydrocarbon over more than 1.5 m <sup>3</sup> Extending beyond the limits of Champion's property or right- of-way	√		Does not apply to Champion Pipeline	N/A
6.	Extending beyond the limits of Champion's property or right- of-way		~		N/A
7.	Unintentional explosion or fire that poses a risk to the safety	V		This definition includes the following events (for example): Battery explosion;	EM Coordinator

			Authorities to contact			
const	CER: Event that occurs during the pipeline's construction, operations or decommissioning TSB: Event that occurs during the pipeline's operations		CER-TSB Portal – Via Internet	TSB – Via telephone	Comments	Responsible for contacting authorities
No.		Event that results in:	(24 h)	(3 h)		
		of the public, property or the environment.			Fire caused by an arc, a cable fault or a breakdown of any component of the uninterruptible power system (UPS) or the back-up generator; Wildland or forest fires that damage pipeline infrastructure or impact the construction or operation of a pipeline; Small welding- or maintenance-related fires.	
8.		An unintentional explosion or fire	$\checkmark$			EM Coordinator
9.	Under the OPR	A major negative impact on the environment;	~		Examples of the types of events in question: Release of a toxic substance in a sensitive environment (e.g. watercourse or wetlands) or a designated region, national park or provincial park; Fracking accident resulting in a direct spill in a watercourse during horizontal directional drilling activities; Release of a toxic substance near a receptor (e.g. groundwater or surface water used as drinking water, for irrigation or for livestock); Destruction of an essential habitat, as defined in the <i>Species at Risk Act</i> ;	EM Coordinator
					Should there be negative effects from a residual contamination associated with a historic event, a contamination notice will need to be sent to the CER	

			Authorities to contact			
const	ruction, operations	occurs during the pipeline's erations or decommissioning TSB: a during the pipeline's operations		TSB – Via telephone	Comments	Responsible for contacting authorities
No.	Event that results in:		(24 h)	(3 h)		
					Secretary. This is described in greater detail in the CER's Remediation Process Guide.	
10.		The pipeline's safe operations are compromised by its being subjected to, depending on the case:				
11.		Damages after having been hit by another object;	$\checkmark$			Asset management
12.	Under the	A fire or explosion		~		EM Coordinator
13.	Transportation Safety Board Regulations	Ignition not due to normal operating conditions.	$\checkmark$			EM Coordinator
14.	_	An unintentional or uncontrolled release of a product other than gas, HVP hydrocarbons or LVP hydrocarbons.	~			EM Coordinator
15.	1	Release of a product from the body of the main pipe.	$\checkmark$			EM Coordinator

			Authorities to contact			
const	CER: Event that occurs during the pipeline's construction, operations or decommissioning TSB: Event that occurs during the pipeline's operations		CER-TSB Portal – Via Internet	TSB – Via telephone	Comments	Responsible for contacting authorities
No.		Event that results in:	(24 h)	(3 h)		
16.		Pipeline hindering the safe operations of any transportation method.	~			EM Coordinator
17.		An unauthorized activity carried out by a third party inside the safety zone that compromises the pipeline's safe operations.	~			Asset management
18.		A geotechnical, hydraulic or environmental activity occurs, and compromises the pipeline's safe operations.	~			Asset management
19.		Interruption of the operations of a pipeline section due to a situation or condition that poses a risk to the safety of the public, property or the environment.	~			EM Coordinator
20.		A rupture (an immediate release that instantaneously affects the pipeline's operations, making it impossible to maintain pressure).		V		EM Coordinator

			Authorities to contact			
const	Event that occurs during the pipeline's ruction, operations or decommissioning TSB: that occurs during the pipeline's operations		CER-TSB Portal – Via Internet TSB – Via		Comments	Responsible for contacting authorities
No.		Event that results in:	(24 h)	(3 h)		
21.		A toxic plume		~		EM Coordinator
22.	Under the Canadian Energy	Any offence under the Canadian Energy Regulator Pipeline Damage Prevention Regulations	✓		Examples of the offences in question: Disturbance of the ground by excavation works with motorized equipment or explosives inside the safety zone of 30 m (100 ft) (measured from the centre of the pipeline); Encroachment due to the unauthorized construction or development of a facility in, atop or along a right- of-way. This category includes the construction of structures or facilities (e.g. swimming pools, skating rinks, sheds) on a right-of-way as well as the stockpiling of materials (e.g. sand or earth).	Asset management
23.	Canadian Energy Regulator Pipeline Damage Prevention Regulations	Any damage to the Champion pipes occurring or identified during the construction or development of a facility, the operations, maintenance or dismantling of a facility, or the execution of excavation works.	√			Asset management
24.		Any facility owner activities associated with excavation works and which Champion believes could pose a risk to pipe safety.	$\checkmark$		This includes, among other things, a vehicle crossing the right-of-way, or in other words, the unauthorized use of a vehicle or mobile equipment on or to cross a right-of-way. This category also includes the use of trucks or heavy equipment along	Asset management

		Authorities to o	contact		
const	rring the pipeline's or decommissioning TSB: he pipeline's operations	CER-TSB Portal – Via Internet	TSB – Via telephone	Comments	Responsible for contacting authorities
No.	Event that results in:	(24 h)	(3 h)		
				the right-of-way, with the exception of those vehicles that cross the right-of-way on the travelled portion of a highway or public road.	

## E.3 Inventory list – Emergency materials

The emergency equipment inventory is available through the SAP computer application. The following tables provide excerpts of this information.

See OPR sect. 6.5(1)u, OPR sect. 6.5(1)w, OPR sect. 32(1.1), OPR Appendix A.2

## E.3.1 Emergency materials management

The management of emergency materials is a shared responsibility. To that end, the following teams are involved:

- Engineering, which defines the equipment parts to store.
- The distribution centre, which stores, maintains and manages equipment parts that take up more storage space and are not used very often;
- The business office, which stores, maintains and manages the equipment used during field interventions.

In connection with the types of network interventions described in section D.1, the following paragraph lists the available emergency equipment on the Champion network. The equipment is stored in separate locations so as to comply with the following logistics:

- The frequently used equipment, especially for regular distribution network operations, is kept in the technician trucks. The equipment in the trucks is selected according to the planned daily requirements and to allow for first-level emergency responses.
  - At the Abitibi business office: for the equipment specifically designed for the Champion network.
- The equipment required for major emergency repairs to the Champion network is stored:
  - At the distribution centre: the emergency equipment used throughout the Énergir franchise. The 410 division is a group of equipment used to ensure an operational response to emergencies on the gas network. This equipment is only requested during emergencies, and always replaced as soon as it is used.
  - o In Longueuil: the equipment used for emergencies throughout the Énergir franchise.

## E.3.2 List of Champion's intervention equipment

### BO – Abitibi-Témis camingue

The following lists concern:

- The equipment used by the teams during emergency responses;
- The material needed for repairs;
- The material that all technicians have with them.

The details of the storage addresses have been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

No.	Equipment	Details	Storage	Inspection/preventive maintenance
1	Thermal protective clothing (TPC)	All of the technicians have their TPC with them.		Monthly maintenance – visual inspection Annual maintenance – cleaning and inspection by the supplier
2	Respiratory protective equipment (RPE)	All of the technicians have their RPE mask with them. 7 regulators and 21 tanks		Monthly maintenance – inspection by technicians Annual maintenance – inspection and refill by the supplier
3	Personal protective equipment (PPE)	All of the technicians have their PPE with them, including helmet, boots, glasses, fireproof gloves, visor, ear protectors, fireproof coveralls, hood, high-visibility Énergir vest)		N/A

No.	Equipment	Details	Storage	Inspection/preventive maintenance
4	Response truck	A trailer truck is available during the intervention. This truck is equipped with all of the manual tools required to respond and to maintain the gas network. It also includes an office space that has a computer on which the network plans and specifications can be accessed.		Heavy vehicle maintenance (PMP, preventative maintenance program) every three months (SAAQ) Annual maintenance of the compressor
5	Command post (CP) response truck	The small truck assigned to the Business Office Director is equipped with an office and all of the materials required for deploying a command post (electrical outlets, chair, lighting, computer, first- aid kit, etc.).		Maintenance at the dealer every three months Monthly maintenance of emergency equipment by the manager
6	Emergency operations and coordination (EOC) room	A room is set up to host an emergency operations and coordination centre, at 579 Témiscamingue Blvd., Rouyn-Noranda. It is equipped with all of the materials required in an EOC (television, computer, printer, telephone with conferencing capability, table, satellite telephone).		Monthly check of how well the equipment works A business recovery plan is prepared in the event of a disaster affecting the EOC room.
7	Gas detector and supersensitive gas detector	All technicians have a gas detector with them, and six supersensitive gas detectors are also available.		Monthly maintenance by a technician Annual maintenance and benchmarking by the supplier
8	Plugging tool, shut-off valve			N/A
9	Shut-off valve	Five manual shut-off valves are installed on the Champion network (V3401, V3402, V3403, V3404 and V4048) so segments can be isolated in case of emergency.		Annual maintenance of valves by transmission technicians

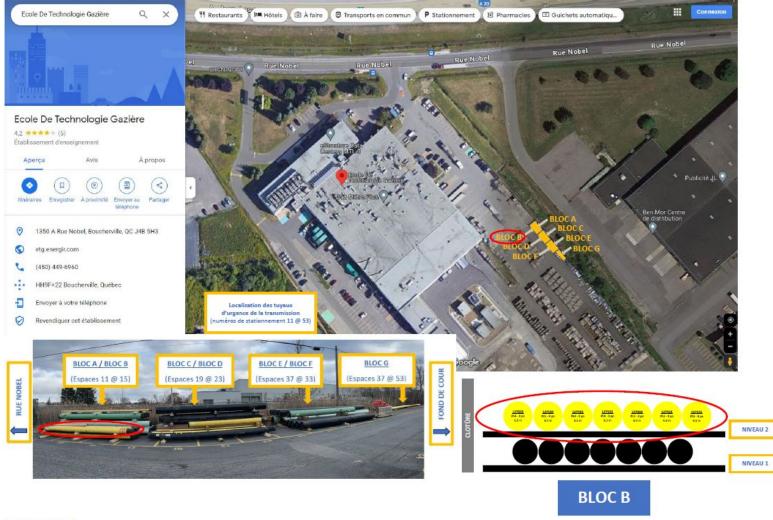
ltem	Designation	Division	Site	Location	Storage location	Comments
100377	SLEEVE, BOUL AC 8"X24" MOP 7,000 KPA PLIDCO	300	Abitibi BO		0001	
100761	SPIGOT NIPPLE 2"X3" MOP 9,930 KPA	300	Abitibi BO		0001	
101844	BLOCK CONN 8" BRI CL150 TDW	300	Abitibi BO		0001	
103448	SLEEVE, BOUL AC 8"X10" MOP 7,000 KPA PLIDCO	300	Abitibi BO		0001	
103501	BLOCK CONN 2" FIL CL150 TDW	300	Abitibi BO		0001	
103754	BLOCK COLLAR 8" MOP 7,000 KPA	300	Abitibi BO		0001	
104011	SLEEVE, BOUL AC 2"X9" MOP 7,000 PA PLIDCO	300	Abitibi BO		0001	
105751	BLOCK CONN 6" BRI CL150 TDW	300	Abitibi BO		0001	
106288	2"X18" SHEATH FOR AC MOP 1,200 KPA MUE	300	Abitibi BO		0001	
122961	SLEEVE, BOUL AC 2"X18" 7,000 KPA PLIDCO	300	Abitibi BO		0001	
122963	SLEEVE, BOUL AC 6"X18" 7,000 KPA PLIDCO	300	Abitibi BO		0001	
126322	EMERG PIPE DTR NPS8 AC BJ 6.40 mm GR290/X42 C1	300	Abitibi BO		0001	
128920	SLEEVE TYPE B NPS8 7,070 KPA ENC COMPL RAMF	300	Abitibi BO		0001	

### Other storage sites

The following list indicates all equipment available for repairs, at the Longueuil, Saint-Maurice and Montréal sites.




#### INVENTAIRE URGENCE TRANSMISSION TUYAUX D'URGENCE – ETG / MASTER LOCALISATION TUYAUX CHAMPION



Dernière mise à jour : 2023-11-28 Par : Annie Bruneau

## E.3.3 Emergency rooms

#### See OPR sect. 32(1.1), OPR Appendix A.2

### ECC Room

The list below indicates the equipment that should be present in the ECC rooms. This room (and the alternate room) are checked on a yearly basis.

No.	Equipment	Verification
1	Projector or screen	Turn on the projector.
		Make sure the necessary wires (to project) are available.
		Project the computer screen
2	Printer	Make sure there is a printer near the room to print necessary documents.
		Print one page
3	Digital clock	Check that the clock is functioning and that the hour indicated is accurate.
4	Television	Check that the television is functioning.
		Confirm that the main television channels are available.
5	Whiteboard and markers	Confirm that there is a board, markers (in good condition) and a brush (to erase).
6	Conference telephone system	Make sure there is a conference telephone system/Check room operation using the communication tools (e.g. Teams conference call)
		Make an outgoing call from the system
		Make an incoming call to the system from the telephone number provided on the on- duty personnel chart
7	Management cycle table	Confirm the existence of the management cycle

#### CCC Room

The list below indicates the equipment that should be present in the CCC rooms. This room (and the alternate room) are checked on a yearly basis.

No.	Equipment	Verification
1	Projector or screen	Turn on the projector. Make sure the necessary wires (to project) are available. Project the computer screen
2	Television	Check that the television is functioning. Confirm that the main television channels are available.

No.	Equipment	Verification
3	Conference telephone system	Make sure there is a conference telephone system/Check room operation using the communication tools (e.g. Teams conference call) Make an outgoing call from the system Make an incoming call to the system from the telephone number provided on the on- duty personnel chart

## E.4 Crisis communication plan

#### See OPR sect. 32(1.1), OPR Appendix A.2

The crisis communication plan seeks to establish the primary communication management principles and processes during an emergency.

## E.4.1 CCC implementation process

The communication plan is developed once the situation has been analyzed. To do so, a number of standard steps are provided for when the CCC is opened:

#### Deploying resources

- Following a call from the head of media on call and based on a preliminary analysis of the situation, the CCC Coordinator mobilizes the CCC.
- The CCC Coordinator requests the necessary resources from the CCC manager on duty.

- Whenever needed, the CCC Coordinator sends a spokesperson to the site, accompanied by the person in charge of support services.
- The CCC Coordinator makes all necessary arrangements with the other centres (EOC, SEC) if there is no open ECC.
- The CCC coordinator communicates with upper management if necessary.
- The crisis level is analyzed.

#### Opening the CCC

- The **CCC coordinator** opens the CCC by providing an overview of the situation; this can be done via a conference call.
  - Briefing of known elements
  - Analysis of the crisis level
  - o Identification of the persons/groups involved
  - o Round table
  - General action plan
- **CCC resources** identify the stakeholders involved, dividing them into "priority" stakeholders (those who need to know) and "others" (those who want to know).

A comprehensive overview of these stakeholders is then established.

#### Table 2 – Priority and other stakeholders

Position titles	Priority	Other	Comments
Énergir, L.P.			•
Management			
Employees			
Employee family members			
Customer service			
Regional office			
Union leaders			
Board of Directors			
Partners			
Subsidiaries			
Authorities			
Public safety centre			
Fire departments			
Police			

Position titles	Priority	Other	Comments
Government operations centre			
Ministère des Ressources naturelles			
Ministère de l'Environnement			
Ministère des Affaires municipales			
Ministère de la Santé et des services sociaux			
Ministère des transports			
Public health branch			
Municipal representatives			
Provincial representatives			
Federal representatives			
Régie de l'énergie			
Canada Energy Regulator			
CANUTEC			
Environment Canada			
CNESST			
Work Safety and Insurance Board (WSIB)			
Autorité des marchés financiers			
First Nations and Indigenous communities			
Other organizations			
Customers and the community			
Sensitive customers			
Customers			
Residents/communities			
Partners			
GMAP			
Suppliers			
Gas industry associations			
Industry associations			
Municipal associations			

Position titles	Priority	Other	Comments				
Boards of trade							
Professional associations							
External							
Community groups							
Environmental groups							
General public							
Financial analysts							
Traditional media and social media							

- The coordinator identifies the persons responsible for:
  - the logbook;
  - traditional media watch;
  - social media watch;
  - research and writing;
  - spokesperson support;
  - o press relations (if necessary and if there are very many requests from the media);
  - o relations with first responders and municipalities;
  - o relations with governments and various agencies;
  - o employees.

# More specifically, the team members must perform the following duties assigned by the CCC Coordinator.

- Identification of communication issues
- General and technical research
- Drafting of key messages, CSR lines, press releases and Q&As
- Media watch
- Keeping a logbook
- Relations with first responders and municipalities
- The CCC Coordinator manages relations with the ECC and EOC.
- The **person in charge of the logbook** gathers all of the information already known and adds, on an ongoing basis, all relevant information (round tables, new events, new details).
- The **person in charge of the media watch** ensures a real-time watch over electronic media, including the Web. This person reports back to the CCC Coordinator on an ongoing basis.

- The **person in charge of media support**, in conjunction with the spokesperson and research team, prepares an initial statement, key messages and arguments.
  - This person also ensures that information is disseminated to and validated by the designated persons in charge.
- The persons in charge of support for the spokesperson and social media:
  - Identify the spokesperson's needs;
  - Keep a record of interview requests which includes the names of journalists, their contact information and the media involved;
  - Manage the flow of media requests at the front line.
- The **research and writing** team draws up a general parallel overview of the situation by gathering all of the relevant information on the event.
- The CCC Coordinator approves the final versions of all documents and authorizes their release.
- The persons in charge of internal communications, government relations, investor relations and marketing, along with the community manager, release messages via traditional channels:

Stakeholders	Channels used			
Authorities involved	Telephone			
	Email (for follow-up)			
Employees	Intranet			
	Email			
Media	Website			
	Municipality websites			
	Social media			
	Press releases			
	Magazine space			
General public	Website			
	Municipality websites			
	Social media			
	Press releases			
	Magazine space			
Customers	Call out			
	Email			
	Website			

#### Table 3 – Channels used for emergency communications

#### E.4.2 Emergency roles

The following list provides information associated with the emergency structure.

Emergency roles	Position titles
ECC Managers on duty	Senior Director – Public, Government and Community Affairs
	Senior Advisor – Government Affairs
	Executive Director – Customer Service
CCC Coordinators on duty	Head – Public Affairs and Communications
	Senior Director – Public, Government and Community Affairs
	Senior Advisor – Government Affairs
Media spokesperson	Advisor – Media Relations and Public Affairs
	Head – Public Affairs and Communications
	Advisors – Public Affairs
	Advisor – Public Affairs and Community Relations
External spokesperson	Advisor – Media Relations and Public Affairs
Team: Internal communications, Media Watch, and Research and Writing (Public Affairs)	Advisors – Public Affairs
Replacements	Head – ESG Practices
	Senior Advisor – Government and Municipal Relations
	TACT Intelligence Conseil
Logbook and monitoring of operations	Coordinator – External Communications and Communities
	Coordinator – Sustainable Development and Community Engagement
Replacement	Assistant Director – Sustainable Development, and Public and Government Affairs
Answering media line calls	Clerk – Sustainable Development, and Public and Government Affairs
Replacement	Clerk – Marketing Communication Coordination
Representative, Government and Municipal Relations	Senior Advisor – Government Affairs
Replacements	Senior Advisor – Government and Municipal Relations Advisor – Municipal Affairs
Social media – watch and monitoring	Advisor – Social Media
Replacement	TACT Intelligence Conseil
Investor Relations representative	Director, Finance and Treasury, or any person on this team the director designates

Should a major situation require it (e.g. an event that lasts longer than originally anticipated), additional or replacement resources can be obtained from outside companies (TACT Intelligence-conseil – 1-844-667-8228).

## **E.5 Emergency tools**

#### E.5.1 Activity log

See OPR sect. 32(1.1), OPR Appendix A.2, OPR Appendix A.3,

The Champion activity log is the same as that established by Énergir, which is available at the link below. The individual activity log serves to provide all of the emergency stakeholders with a standardized template for:

- Taking notes during the emergency response;
- Supporting the consolidation of emergency responses when preparing the post-mortem.

This log mainly seeks to document the primary interactions (communications), actions or decisions taken throughout the emergency situation and ensure that all is kept in the proper chronological order.

#### Activity Log

The intranet address (hyperlink to internal documentation) allowing the activity log to be viewed has been removed since its disclosure would be likely to put its network and facilities at risk and compromise the security and safety by allowing people to perform malicious acts.

	Activity log											
Ever	nt name:					Prepared by:						
Eme	rgency cen	ire:				Signature:						
Posit	Position/role:											
				Con	nmunications			Date				
No.	Date	Time	From	То	Subject	Action and/or decisions taken	Completed (initials)	and time				

	Activity log										
Ever	nt name:					Prepared by:					
Eme	Emergency centre: Signature:										
Posi	tion/role:										
				Cor	nmunications			Date			
No.	Date	Time	From	То	Subject	Action and/or decisions taken (initia		and time			

## E.5.2 Analysis, Planning, Coordination – APC

The analysis planning coordination tool (APC chart)/shared activity log is used for the emergency centre round tables.

Shared activity log/APC									
Event name									
nergency Centre ECC			Role						
	Open	issue			C	lose issu	e		
APC general issues (high level)	Date	Time	Resource	Action and/or decisions taken	Completed	Date	Time		
	APC general issues	APC general issues	Event name hergency Centre ECC Open issue APC general issues	Event name     Prepared by       hergency Centre     ECC     Role       Open issue     Open issue	Event name     Prepared by       hergency Centre     ECC       Open issue     Role       APC general issues     Date       Time     Resource	Event name     Prepared by       hergency Centre ECC     Role       Open issue     Cl       APC general issues     Date       Time     Resource       Action and/or decisions     Completed	Event name     Prepared by       hergency Centre     ECC       Open issue     Close issue       APC general issues     Date       Time     Resource       Action and/or decisions     Completed		

## E.6 Liaison activities and continuing education

Énergir has put in place a number of liaison activities and continuing education programs. The following table provides a summary of:

- The action taken
- The methods used to measure the effectiveness of these liaison programs

In view of this, the survey results will help improve the liaison activity programs in place.

No.	Initiative	Department	Frequency	Survey method	Items explored	Stakeholder	Survey results
1	Program for risk disclosure to municipalities	Public affairs	An information capsule is available on the website. Disseminated by biannual newsletter	Report on the consultation rate.	Overall satisfaction with the meeting; Satisfaction with the information on gas network safety and prevention that was provided; Other topics they would have liked us to address; Contact information for the necessary follow-up should they still have any outstanding questions.	Mayor or acting mayor General manager Police department director and/or assistant director (if applicable) Sûreté du Québec director and/or assistant director (if applicable) Public works director and/or assistant director Economic development officer Urban planning department director and/or assistant director Land development director and/or assistant director Municipal inspectors Engineering director and/or assistant director Environment and sustainable development	The results will be compiled by the Municipal Affairs department and will be compared every three years and presented to the person responsible for the action. Participants' questions will be answered by municipal relations teams in a timely manner. The results will be entered into a stakeholder management software application.

No.	Initiative	Department	Frequency	Survey method	Items explored	Stakeholder	Survey results
						regional manager and/or representative	
2	AGCICQ workshop	Emergency measures	Every three years, or as required by operational needs	Electronic survey sent to all participants after the meeting. To be completed on a voluntary basis.	Overall satisfaction with the meeting; Satisfaction with the information on gas network safety and prevention that was provided; Other topics they would have liked us to address; Contact information for the necessary follow-up should they still have any outstanding questions.	Directors – Fire Fire chiefs	The results will be compiled and can be compared. Participants' questions will be answered by emergency management teams in a timely manner.
3	Resident awareness program	Public affairs	Every three years	Survey conducted in the days following contact Sample telephone survey after distributing the awareness leaflet	Recollection of receiving a communication from Champion Pipeline; Overall satisfaction with the communication tool; Understanding of safety measure concepts when in close proximity to a high-pressure transmission network; Best communication method to raise residents' awareness.	Residents	The results will be compiled by the marketing department and will be compared every year and submitted to the person responsible for the action. The results will be entered into a stakeholder management software application.
4	Assignor awareness program	Real estate expertise	Every year (annually)	Survey every three years sent in the days after distributing or	Recollection of receiving a communication from Champion Pipeline; Overall satisfaction with the communication tool;	Assigning owners	The results will be compiled by the marketing department and will be compared every

No.	Initiative	Department	Frequency	Survey method	Items explored	Stakeholder	Survey results
				sending the mailout Sample telephone survey after distributing or sending the mailout	Understanding of safety measure concepts when in close proximity to a high-pressure transmission network; Best communication method to raise residents' awareness.		year and submitted to the person responsible for the action. The results will be entered into a stakeholder management software application.
5	Awareness of Aboriginal communities	Public affairs	Every three years (triennial)	Discussions at the end of the meeting Request for an assessment of the information content delivered during the meeting. To be provided on a voluntary basis.	Overall satisfaction with the meeting; Satisfaction with the information on gas network safety and prevention that was provided; Other topics they would have liked us to address; Other outstanding questions.	Aboriginal communities	The results will be compiled by the Public Affairs department and will be compared every three years and submitted to the person responsible for the action. The results will be entered into a stakeholder management software application.

## E.7 Material Safety Data Sheets (MSDS)

Champion infrastructure transports natural gas.

The material safety data sheets for natural gas (gaseous state) and for mercaptan are appended.

See OPR sect. 32(1.1), OPR Appendix A.2

## E.7.1 Material Safety Data Sheet (MSDS) for natural gas (gaseous state)

#### 1. Product identification

Product name	Gaseous natural gas
Reference	None
Chemical formula	CH₄
Type of product	GT 14
Usage	Fuel or feedstock (in various processes)
	Mixture of petroleum hydrocarbons
Synonym(s)	GNG, gaseous natural gas
Supplier	Énergir, L.P.
	1717 Du Havre Street
	Montréal, QC
	Canada H2K 2X3
	1-514-598-3339
Emergency telephone no.	1-855-598-8111
Website	www.energir.com

#### 2. Identification of hazards

Product classification	Category	Code
Flammable gas	1	H220
Pressurized gas	Compressed gas	H280
Simple asphyxiant	1	

GHS warning signs	
-------------------	--

Warning	DANGER – ATTENTION
Hazards Safety advice	H220: Extremely flammable gas H280: Contains pressurized gas, may explode when exposed to heat
General	N/A
Prevention	P202: Do not handle unless you have read and understood all safety precautions.
	P210: Keep away from heat, hot surfaces, sparks, open flames and all other ignition sources. Do not smoke.
Intervention	P377: Gas leak fire – do not extinguish if the leak cannot be safely contained. P381: In the event of a leak, eliminate all ignition sources.
Storage	P403: Store in a well-ventilated area.
Elimination	N/A
Other dangers	Can disperse oxygen and quickly cause suffocation.

## 3. Composition/information on the components

Components	CAS #	% (p/p)
Methane	74-82-8	95.4
Ethane	74-84-0	1.8
Nitrogen	7727-37-9	1.9
Carbon dioxide	124-38-9	0.7

Additional information	Present as an impurity from other simple hydrocarbons

#### 4. First aid

First aid procedures	Share this safety data sheet with emergency personnel and the attending physician.
Contact with the eyes	N/A
Contact with the skin	N/A
Inhalation	Move the victim to fresh air.
	Do CPR if necessary.
	Provide oxygen (whenever possible).
	A medical exam is mandatory, as the case may be.
Ingestion	N/A

Major symptoms and effects	<b>SIMPLE ASPHYXIANT</b> : A physiologically inert gas that exerts its action by displacing the oxygen in the air and that may thus lower the percentage volume of oxygen below the 19.5% needed to maintain the saturation of blood in oxygen.
Mention of the need for	N/A
immediate medical attention	No specific treatment is indicated.
or special treatment	Provide the appropriate care, based on patient needs.

#### 5. Measures to take in the event of a fire

Appropriate extinguishing agents	Do not put out the fire unless the leak can be stopped. Use dry powder, carbon dioxide (CO2) for small fires, halon or the equivalent allowed. A water spray can be used to cool down the contents.
Inappropriate extinguishing agents	Do not use low-expansion foam or a strong water spray directly on the gas.
Specific hazards associated with the hazardous product	<ul> <li>Flammable if exposed to an ignition source.</li> <li>Natural gas is lighter than air and disperses into the atmosphere.</li> <li>Natural gas will not burn or explode if there is too little or too much air.</li> <li>Evacuate the area if the safety valves are activated.</li> <li>There is a risk of reignition or explosion whenever the flame is put out without interrupting the flow of natural gas, or when the disaster site has yet to cool down and the cause of the fire has not been eliminated.</li> </ul>
Hazardous combustion products	Carbon monoxide (CO), when the combustion of natural gas is incomplete.

#### 6. Measures to take in case of an accidental spill

Individual precautions, protective equipment and emergency measures	Use a supplied-air respirator in emergency situations. Stop the spill or leak. Eliminate all ignition and heat sources. Ensure maximum ventilation or use forced ventilation. Evacuate nonessential personnel and establish a security perimeter. Dial 911. If service is not available in your region, call 1-855-598-8111.
Environmental precautions	Let the gas escape into the atmosphere. In the event of significant quantities, consult the regional office of the environmental authority that has jurisdiction.

Isolation and cleaning methods and materials	Check the condition and characteristics of the container. Consider the meteorological conditions (wind speed and direction, temperature, humidity).
	Stay upwind and, if possible, evaluate the direction in which the product is moving.
	Use water spray to disperse vapours.
	Isolate the area until the gas has dispersed.
	Aerate and test the area before entering.

## 7. Storage and handling

Safe handling precautions	All handling must comply with the provisions of the <i>Act Respecting Occupational</i> <i>Health and Safety</i> and its regulations, such as the <i>Regulation Respecting</i> <i>Occupational Health and Safety</i> (sections VII and X), the <i>Regulation Respecting</i> <i>Occupational Health and Safety in Mines</i> and the Safety Code for the construction industry. Handle away from all ignition sources. Do not smoke. Do not use any metal tools. Make sure the device is grounded. Ventilate sufficiently, otherwise, wear the appropriate respiratory device. Pressurized gas cylinders must not be subjected to violent shocks, and it is forbidden to use damaged cylinders. Cylinders must be affixed upright, or contained in a cart while in use. Never use pressurized gas cylinders for other purposes than those for which they were intended. Safely handle, according to standardized methods and in compliance with the <i>Regulation Respecting Occupational Health and Safety in Mines</i> , NFPA-30 and NFC. There is a CSA code (Canadian Standards Association) on propane and
Safe storage conditions	<ul> <li>natural gas facilities (CSA B149.1-00).</li> <li>Use only in well-ventilated areas. See also OSHA regulations regarding the handling of this product, including standard 29 CFR 1910.110: Storage and handling of liquefied petroleum gases.</li> <li>Storage must comply with the provisions of the Act Respecting Occupational</li> </ul>
Sale storage conditions	Health and Safety and its regulations, such as the Regulation Respecting Occupational Health and Safety (sections VII and X), the Regulation Respecting Occupational Health and Safety in Mines and the Safety Code for the construction industry. Depending on the situation, the chapter on Buildings of the Safety Code and the NFC may also apply.
	Store away from all heat and ignition sources. Store in a cool location, away from oxidizing materials. Ensure containers are grounded, and store in a well-ventilated area. Pressurized air cylinders must comply with the <i>Act Respecting Pressure Vessels</i> (R.S.Q., c. A-20.01) and its regulations. Pressurized gas cylinders must be kept away from all heat sources likely to raise the cylinder's temperature to above 55°C, have protective caps to close valves when they are not in use, be stored upright with valves pointing upwards and be solidly secured in place. Pressurized gas cylinders linked together with a manifold must be supported, held together and form a unit (with a padlock or other device for this purpose). Safety devices and valves must be protected from shocks. Keep away from flames, sparks and excessive temperatures.
	Store only in approved means of containment.

Incompatibilities	The gas may burn or explode in an enclosed space when mixed with a strong oxidizing agent (peroxide, chlorine, chlorine dioxide, liquid oxygen).
	This product is incompatible with: chlorine, liquid oxygen and strong oxidizing agents.

## 8. Exposure control/individual protection

Control parameters – Exposure values allowed under the <i>Regulation respecting occupational health and safety</i> (QC)				
Chemical name	CAS #	Туре	Value	Comments
Methane	74-82-8			Simple asphyxiant
Ethane	74-84-0			Simple asphyxiant
Nitrogen	7727-37-9			Simple asphyxiant
Carbon dioxide	124-38-9	VEMP VECD	5,000 ppm	

Other information	None known
Engineering control	General ventilation. Use a flame-proof mechanical ventilator.
Personal protective equipment	
Eye and face protection	If there is any risk of contact with pressurized natural gas, wear protective glasses or a face shield.
	The choice of eye protection, goggles, face shields, etc., depends on the nature of the work to be done and the risk of exposure.
Skin and body protection	In normal conditions, gloves are not required.
Respiratory protection	In general, no protection is necessary if there is sufficient oxygen. Use a supplied- air respirator in emergency situations.

## 9. Physical and chemical properties

Appearance (physical condition, colour, etc.)	Colourless and odourless gas	Vapour pressure	N/A
Odour	Odourizer (mercaptan) for detecting leaks – rotten egg smell	Vapour density (air = 1)	0.578
Olfactory threshold	Air concentration of less than 10,000 ppm	Relative density (water = 1)	0.44 at -162°C
рН	N/A	Solubility in water	0.0023 g/100 ml
Melting point/Freezing point	-187°C to -182°C (estimate)	N-octanol/water partition coefficient	0.0812

Initial boiling point and boiling range	-161°C	Self-ignition temperature	538°C
Flash point	-188°C	Degradation temperature	N/A
Evaporation rate (ether = 1)	N/A	Viscosity	N/A
Flammability (solid, gas)	N/A	Flow point	N/A
Lower/upper flammable or explosive limits	Lower: 4.9% at 25°C Upper: 14.9% at 25°C		

## 10. Stability and reactivity

Reactivity	Keep away from sources of ignition and heat, high temperatures, open flames, sparks, welding, static electricity and other ignition sources. Do not smoke.
Chemical stability	Stable under normal storage, use and transportation conditions.
Risk of dangerous reactions	There is no dangerous polymerization.
Conditions to avoid	Gaseous methane, within the flammable or explosive limits, can easily ignite if subjected to a sufficiently high-energy electrostatic discharge.
Incompatible materials	May burn or explode in an enclosed space when mixed with a strong oxidizing agent (peroxide, chlorine, chlorine dioxide, liquid oxygen).
Hazardous decomposition products	When heated at a high temperature, emits toxic gases (carbon monoxide and carbon dioxide) until it is decomposed.

## 11. Toxicology data

Information on likely exposure points	Respiratory route and skin. Physiologically inert. Ingestion unlikely during normal industrial use.
	Health effects associated with the ingredients
Inhalation/skin/eye	Simple asphyxiant: Natural gas, by displacing air, acts as an asphyxiant. Replacing air with natural gas can result in headaches, diminished faculties, errors in judgement, increasing lethargy and reduced coordination leading to convulsions, coma and death. Becomes narcotic at high concentrations.

Acute toxicology data			
Chemical name	CAS	LD <sub>50</sub>	LC <sub>50</sub>
Methane	74-82-8	N/A	35,355 ppm Four hours (mouse)
Ethane	74-84-0	N/A	N/A
Nitrogen	7727-37-9	N/A	N/A

	Acute toxic	ology data	
Chemical name	CAS	LD <sub>50</sub>	LC <sub>50</sub>
Carbon dioxide	124-38-9	N/A	N/A

Corrosion/irritation of the skin	This product is not an irritant
Serious eye injury/irritation	This product does not cause serious eye injuries or irritation.
Respiratory or skin sensitization	No data concerning respiratory or skin sensitization were found in the documentary sources consulted.
Toxicity for certain specific organs	No data concerning an effect on organs were found in the documentary sources consulted.
Carcinogenicity	No data concerning a carcinogenic effect were found in the documentary sources consulted (OSHA, ACGIH).
Toxicity as regards reproduction	No data concerning effects on reproduction were found in the documentary sources consulted
Germ cell mutagenicity	No data concerning a mutagenic effect on mammalian cells, whether in vivo or in vitro, were found in the documentary sources consulted

## 12. Ecological data

Aquatic ecotoxicology		
Components	CAS	LC <sub>50</sub>
Methane	74-82-8	N/A
Ethane	74-84-0	N/A
Nitrogen	7727-37-9	N/A
Carbon dioxide	124-38-9	N/A

Terrestrial ecotoxicology	This material is not harmful to the environment.
Persistence and degradation	The product will not persist in the environment.
Bioaccumulation potential	Does not trigger bioaccumulation.
Mobility in soil	Not considered mobile.
Other harmful effects	No available data.

#### 13. Disposal data

Residue disposal	Let the gas escape into the atmosphere.	
	In the event of a leak from a cylinder, close the cylinder and return it to the supplier.	

#### 14. Transportation information

UN identification	UN 1971
Shipping label	NATURAL GAS (high concentration of methane) – PRESSURIZED
Hazard category	2.1
Packing group	N/A
Environmental hazards	This material is not harmful to aquatic life.
Additional description and information	N/A

## 15. Regulatory Information

Applicable regulation	The product classification and material safety data sheets (MSDSs) were prepared in compliance with the HPR.
	The product was classified according to CPR criteria, and the MSDS includes all of the requirements indicated under the HPR. <i>Act Respecting Occupational Health and Safety</i> (c. S-2.1)
	Regulation respecting occupational health and safety (c. S-2.1, r. 19.01)
	The product is controlled according to WHMIS-2015.
	All of the ingredients are included on the Canadian Domestic Substances List. (DSL)

#### 16. Other information

MSDS drafted by	Envirospec for Énergir www.envirospec.qc.ca
MSDS versions	First version 10-11-2015
MSDS status	Active
Other information	The information included on this sheet was drafted according to our best knowledge and the best experience currently available.
References	<b>ACGIH</b> . <i>Guide to Occupational Exposure Values 2012</i> , Compiled by the American Conference of Governmental
	Industrial Hygienists (ACGIH)
	CANUTEC
	CSST. Service du répertoire toxicologique.

	<b>GOVERNMENT OF QUÉBEC</b> . <i>Regulation respecting occupational health and safety</i> (c.S-2.1, r.19.01) Updated August 1, 2015
	<b>LAUWERYS</b> , Robert R. (2003). <i>Toxicologie industrielle et intoxications professionnelles</i> . 5th edition. Masson, 1252 pp.
	Transport Canada, The Transportation of Dangerous Goods Regulations (TDGR)
	<b>U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES</b> (2005). <i>NIOSH</i> <i>Pocket Guide to Chemical Hazards</i> . NIOSH Publications, 424 pp.
	U.S. NATIONAL FIRE PROTECTION ASSOCIATION. Standards
	NFPA 77, Standard for Static Electricity
	NFPA 68, Standard on Explosion Protection by Deflagration Venting
	NFPA 69, Standard on Explosion Prevention Systems
Acronyms	ACGIH: American Conference of Governmental Industrial Hygienists
	AICS: Australian Inventory of Chemical Substances
	CAS: Chemical Abstract Services
	CSST: Commission de la santé et sécurité du travail
	DSL: Domestic Substances List (Canada)
	ECL: Existing Chemicals List
	GHS: Globally Harmonized System of Classification and Labelling of Chemicals
	IARC: International Agency for Research on Cancer
	LC: Lethal concentration
	LD: Lethal dose
	N/A : Not applicable
	N/A: Not applicable
	N/A: Not available
	NDSL: Non-Domestic Substances List (Canada)
	NFPA: National Fire Protection Association
	NIOSH: National Institute for Occupational Safety and Health
	NTP: National Toxicology Program
	OEL: Occupational Exposure Limit
	OSHA: Occupational Safety and Health Administration
	QC: Province of Québec, Canada
	REPTOX: CSST toxicology directory
	SDS: Safety Data Sheet
	STEL: Short Term Exposure Limit
	STEV: Short Term Exposure Value

TDGR: Transportation of Dangerous Goods Regulations
TSCA: Toxic Substances Control Act
TWA: Time Weighted Average
TWAEV: Time-weighted Average Exposure Value
UN: United Nations
WHMIS: Workplace Hazardous Materials Information System

## E.7.2 Material Safety Data Sheet (MSDS) for mercaptan

#### 1. Company and product details

Company

Arkema Canada Inc.

1100 Burloak Drive, Suite 107

Burlington, Ontario, L7L 6B2

Thio and fine chemical products

Customer service telephone number:	1-800-567-5726
	(Monday to Friday, 8:30 a.m. to 4:30 p.m. EST)
Emergency information	
Transport:	CANUTEC: 613-996-6666
	(24/7)
Medical:	Rocky Mountain Poison Center:
	1-866-767-5089 (24/7)
Product information	
Product name:	SPOTLEAK® 1001
Synonyms:	Unavailable
Molecular formula:	Mixture
Chemical family:	Mercaptans
Use of the product:	Odoriferous agents

#### 2. Identification of hazards

#### Overview of emergencies

• Danger!

- Highly flammable liquid and vapour.
- Vapour may cause a flash-over fire.
- Harmful and even fatal if ingested
- Can enter the lungs and cause damage.
- Vapours decrease the amount of oxygen available for breathing
- Risk of an allergic skin reaction.
- Repugnant odour can cause nausea, headaches or dizziness.

Potential health effects	
Main exposure points	Inhalation and contact with the skin.
Signs and symptoms related to an acute exposure	Vapour: Repugnant odour can cause nausea, headaches or dizziness. Vapour is heavier than air and can cause suffocation because it decreases the amount of oxygen available for breathing.
	Liquid: Can provoke a skin irritation.
	Prolonged or repeated exposure may cause: Allergic skin reaction (redness, rash). Aspiration risks in case of ingestion – can enter the lungs and cause lesions. Aspiration symptoms can include accelerated breathing and cardiac rhythm, coughing or any other related respiratory distress.
Skin	At most, slightly toxic. Slight to average irritation (depending on its composition). Prolonged or repeated contact with the skin can cause allergic reactions in certain people.
Inhalation	Practically not toxic (depending on its composition).
Eyes	Slight irritation (depending on its composition).
Ingestion	Slightly toxic (depending on its composition).

#### 3. Composition/information on the components

Chemical name	CAS No.	p/p	Controlled product from WHMIS
2-Propanethiol, 2- methyl-	75-66-1	> = 60 - < = 100%	Y
Methane, thiobis-	75-18-3	> = 10 - < 30%	Y

Substances with a "Y" in the WHMIS column above are classified as hazardous chemicals under the *Controlled Products Regulations*.

#### 4. First aid

Inhalation	In the event of inhalation, move the exposed person to fresh air. In case of respiratory failure, administer CPR. If breathing is difficult, give oxygen. Call for medical help.	
Skin	In the event of contact, immediately rinse the skin, using soap and a lot of water. Remove contaminated shoes and clothing. Call for medical help if symptoms develop. Wash clothing before wearing it again. Thoroughly clean shoes before putting them on again.	
Eyes	In the event of contact, abundantly rinse the eyes with water for at leas 15 minutes. Obtain medical care immediately.	
Ingestion	In case of ingestion, DO NOT provoke vomiting. Call for medical help. Never try to make an unconscious person drink.	

#### 5. Firefighting measures

Flash point	<0°F (<-18°C) (TAG)	
Self-ignition temperature	464°F (240°C)	
Lower flammable limit (LFL)	Not determined	
Upper flammable limit (UFL)	Not determined	
Extinguisher (suitable)	Carbon dioxide (CO2), foam, chemical extinguishing powder	
Extinguisher (suitable)	High-capacity jet of water	
Protective equipment	The firefighters and other individuals that could be exposed to combustion products should wear a complete firefighting uniform (complete intervention clothing) as well as an NIOSH-approved independent respiratory device or another approved equivalent.	
Other firefighting instructions	Use water jets to cool down the closed containers located near the source of the fire.	

	Do not use a concentrated spray, as this could have the effect of spreading the fire.		
	Closed containers with this substance inside could explode if located		
	close to a fire. Following a fire, wait until the product has cooled down to the ambient temperature before beginning to clean up.		
	Ensure that no contaminated extinction water enters the sewer system or watercourses. Firefighting equipment should be fully decontaminated after each use.		
Hazardous combustion	Vapour is heavier than air and can thus move along the ground or be		
products	displaced by ventilation then ignited by any heat or ignition source such as a lamp or naked flame, even if it is far from the handing area.		
	Vapour can create an explosive mixture when exposed to air.		
	Once burned, the product can emit hazardous combustion products: carbon oxides, sulphur oxides, hydrogen sulfide.		
	Data on the explosives		
Sensitivity to mechanical	No		
impact			
Sensitivity to static discharge	Yes		

## 6. Measures to take in case of an accidental spill

In the event of a leak or	Prevent all other leaks or spills, without putting yourself at risk.
spill	All unnecessary personnel must be evacuated from the area.
	Eliminate all ignition sources.
	Only aerate the site if odours must be controlled.
	Cover all spilt product with a cellular plastic foam to mitigate odours (use of an AFFF-type foam with a polymer membrane is also acceptable).
	If you do not have access to foam, absorb the spill with an absorbent material such as diatomaceous earth, sawdust, etc., and use hydrogen peroxide (3–10%) to deodorize the residue on the ground.
	Wash with water (which you should then recover).
	If the spill containment zone is significant, add bleach (5%) (sodium hypochlorite) diluted 50 to 1.
	Chemical products for pool maintenance (which include hypochlorites) are effective for deodorizing.
	If applied to the product, the crystals should be sufficiently diluted (in water) to allow for absorbing the considerable heat generated by the reaction.
	Enzyme- and bacteria-based deodorizing agents can also be used.

Sweep or pick up debris using tools that will not generate a spark, then place in properly labelled containers.
The split material should never come into contact with the earth, water courses, drains or dry well.
Speak with a legal expert for further details on local and federal reporting obligations, help in determining waste composition and elimination of dangerous waste and information on the requirements associated with any environmental permits.

## 7. Storage and handling

	Handling
General information	Avoid breathing in any vapours or mist.
regarding handling	Avoid contact with the eyes.
	Avoid prolonged or repeated contact with the skin.
	Keep far from heat, sparks and flames.
	Do not smoke.
	Keep the container closed.
	Only use in adequately ventilated areas.
	Wash carefully after handling.
	Check that all equipment is adequately grounded and installed according to electrical safety standards.
	This container is hazardous when empty.
	Comply with warnings on label, even when the container is empty.
	Do not enter confined spaces unless there is adequate ventilation.
	RESIDUAL VAPOURS COULD EXPLODE IF THEY IGNITE.
	DO NOT CUT, PIERCE, GRIND OR WELD ON OR NEAR THIS CONTAINER.
	The inappropriate discarding or reutilization of this container could be dangerous or illegal.
	Empty storage containers still include vapours and product residue.
	Storage
General information	Keep in a cool, dry area.
regarding storage	Store away from direct sunlight.
conditions	Keep container closed when not in use.
	Store in a secure area, in closed containers, to prevent any accidental damage or spill.
	Store in a sufficiently aired out area, far from all heat and ignition sources such as flames, sparks or static electricity.

	Check that all storage and handling equipment is adequately grounded and installed according to electrical safety standards. Static electricity can accumulate during product transfer. All metal storage containers that can be grounded, including but not limited to: canisters, bottles, cans, returnable intermediate bulk containers and flexible intermediate bulk containers of category C, must be metallized and grounded during the filling and emptying operations.
Storage incompatibilities – General application	Store separately from: Strong oxidizing agents Acids (concentrated solutions) Alkali metals Bases Reducing agents Hypochlorites Nitric acid Hydrogen peroxide

## 8. Exposure control measures/individual protection

Instructions concerning atmospheric exposure	
Methane, thiobis- (75-18-3)	US. ACGIH Threshold limit values
	Time-weighted average: 10 ppm
Engineering measures	Study engineering techniques to reduce exposure levels below the allowed limits or to otherwise limit exposure.
	If possible, use local forced ventilation near atmospheric pollution sources such as open equipment.
	Monitor carbon monoxide and oxygen levels in all tanks and closed spaces.
	Check the ACGIH ventilation manual or NFPA standard 91 for exhaust system design details.
Respiratory protection	Avoid breathing in any vapours or mist.
	If there is any likelihood that the substance is present in the air or that atmospheric exposure limits have been exceeded (as the case may be, see below), use a NIOSH-approved device with a full mask that includes a cartridge and filter (check with the respiratory device manufacturer to determine the type of equipment needed for a specific application).
	Respect the usage limits applicable to the device and prescribed by the manufacturer or NIOSH.
	During an emergency, or any other circumstance with a major risk of exposure or where exposure limits can be significantly exceeded, use a positive pressure self-contained breathing apparatus or an isolating compressed air-supplied device supplied by an independent oxygen source.
Skin protection	Wear appropriate chemical-resistant protective clothing and gloves to prevent all contact with the skin.
	Check with the glove manufacturer to ensure that its material is suitable for a given application.
	Wear glasses that offer protection against chemical agents, a face shield and chemical-resistant clothing, such as a rubber apron, if there is a risk of splattering of chemical products.
	Rinse immediately if the skin is touched.
	Remove all contaminated clothes and wash them before wearing them again.
	Clean all protective equipment before using it again.
	Plan the installation of decontamination showers in those areas where there is a risk of contact with the skin. Wash carefully after handling.
Eye protection	If there is a risk of contact with the eyes, wear a face shield and glasses that offer protection against chemical agents. Also make sure that a device for rinsing the eyes is available.

## 9. Physical and chemical properties

Colour	Colourless to yellow
Physical form	Liquid
Odour	Strong, nauseating
Odour threshold	0.1 ppb

ARKEMA	Material Safety Data Sheet
	SPOTLEAK® 1001
рН	Not determined
Density	0.816 g/cm <sup>3</sup> 59.9°F (15.5°C)
Vapour pressure	460 mm Hg 100.0°F (37.8°C)
Vapour concentration	Not determined
Boiling point/interval	50°C to 68.9°C
Evaporation rate	Data unavailable
Solubility in water	Negligible
Solubility in other solvents	Soluble in:
[qualitative and quantitative]	Diethyl ether
	Alcohols
% of volatile components	100%
Thermal degradation	842°F (450°C)

## 10. Stability and reactivity

Stable	This product is chemically stable under normal storage, handling and processing condition.
	Dangerous reactions
Materials to avoid	Violent reaction with: Strong oxidizing agents Acids Bases Reducing agents Hydrogen peroxide Hypochlorite nitric acid Alkali metals
Conditions of hazards to avoid	Keep away from heat and all ignition sources. Do not overheat, to avoid thermal degradation.
Hazardous decomposition products	Thermal decomposition into flammable and toxic product: Carbon oxides and sulphur oxides Hydrogen sulphide

#### 11. Toxicology information

Data regarding this substance or its constituents are summarized below.

Data for 2-propanethiol, 2-methyl- (75-66-1)	
Acute toxicity	
Oral	Slightly toxic (Rat) LD50 = 4.729 mg/kg
Dermal	No observed death (Rabbit) LD0 > 2,000 mg/kg
Inhalation	Practically non-toxic (Rat) 4 h LC50 = 82–98 mg/l (vapour)
Irritation of the skin	No irritation (Rabbit) Irritation index: 0/8 (4 h) (occluded exposure)
Irritation of the eyes	Slight irritation (Rabbit)
Awareness-raising	No available data
Sensitization of the skin	Skin sensitizer Buehler method (Guinea pig) Allergic skin reactions were observed Sensitizer. LLNA. (Mouse) Generates an allergic reaction.
Toxicity with repeated exposure	
Subchronic inhalation administration to a rat/affected organ(s): kidney/Signs: Inflammation, degeneration, increase in the weight of organs/(negligible in humans)	

Carcinogenicity         No available data         Genotoxicity         In vitro assessment       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity         Exposure during a pregnancy: inhalation (rat and mouse)/No congenital defect observed. Trial for letecting impacts on reproduction/development: oral (rat)/No toxic with regard to reproduction.         Data for methane, thiobis- (75-18-3)         Acute toxicity         Oral       Slightly toxic (rat and mouse) LD50 = 535–3,700 mg/kg         Dermat       Practically non-toxic (rabbit) LD50 > 5,000 mg/kg         Dermat       Practically non-toxic (rabbit) LD50 > 5,000 mg/kg         Inhalation       Practically non-toxic (rabbit) LD50 > 102.3 mg/l (40,250 ppm) (vapours)         Irritation of the skin       Practically non-toxic (rabbit)       Auareness-raising       No available data         Sensitization of the skin       No available data         Subchronic oral administration to rat/No general detrimental effect observed.         Carcinogenicity <th colspan="2">Repeated oral administration to a rat/affected organ(s): kidney/Signs: hyaline droplet</th>	Repeated oral administration to a rat/affected organ(s): kidney/Signs: hyaline droplet		
So available data         Genotoxicity         In vitro assessment       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity         Exposure during a pregnancy: inhalation (rat and mouse)/No congenital defect observed. Trial for detecting impacts on reproduction/development: oral (rat)/Not toxic with regard to reproduction.         Data for methane, thiobis- (75-18-3)         Acute toxicity         Oral       Slightly toxic (rat and mouse) LD50 = 535-3,700 mg/kg         Dermat       Practically non-toxic (rabbit) LD50 > 5,000 mg/kg         Inhalation       Practically non-toxic (rat) 4 h LC50 = 102.3 mg/l (40,250 ppm) (vapours)         Irritation of the skin       Practically no irritation (rabbit) Irritation index: 0.4/8. (24 h)         Irritation of the skin       No available data         Sensitization of the skin       No available data	nephropathy/(negligible in humans)		
Genotoxicity           In vitro assessment         No genetic change observed during laboratory trials with bacteria and animal cells.           In vitro assessment         No genetic change observed during laboratory trials with bacteria and animal cells.           In vitro assessment         No genetic change observed during laboratory trials with mice.           Developmental toxicity         Developmental toxicity           Exposure during a pregnancy: inhalation (rat and mouse)/No congenital defect observed. Trial for detecting impacts on reproduction/development: oral (rat)/No congenital defect observed.           Effects on reproduction         Effects on reproduction           Trial for detecting impacts on reproduction/development: oral (rat)/Not toxic with regard to reproduction.         Data for methane, thiobis- (75-18-3)           Acute toxicity         Oral         Slightly toxic (rat and mouse) LD50 = 535-3,700 mg/kg           Dermal         Practically non-toxic (rabbit) LD50 > 5,000 mg/kg           Inhalation         Practically non-toxic (rabbit) LD50 > 5,000 mg/kg           Irritation of the skin         Practically no irritation (rabbit) Irritation index: 0.4/8. (24 h)           Irritation of the skin         No available data           Sensitization of the skin         No available data           Sensitization of the skin         No available data           Subchronic oral administration to rat/No general detrimental effect observed.		Carcinogenicity	
In vitro assessment         No genetic change observed during laboratory trials with bacteria and animal cells.           In vitro assessment         No genetic change observed during laboratory trials with mice.           Developmental toxicity           Exposure during a pregnancy: inhalation (rat and mouse)/No congenital defect observed. Trial for detecting impacts on reproduction/development: oral (rat)/No congenital defect observed.           Effects on reproduction           Trial for detecting impacts on reproduction/development: oral (rat)/No toxic with regard to reproduction.           Data for methane, thiobis- (75-18-3)           Acute toxicity           Oral         Slightly toxic (rat and mouse) LD50 = 535–3,700 mg/kg           Dermat         Practically non-toxic (rabbit) LD50 > 5,000 mg/kg           Irritation of the skin         Practically non-toxic (rabbit) Irritation index: 0.4/8. (24 h)           Irritation of the skin         Practically no irritation (rabbit)           Awareness-raising         No available data           Sensitization of the skin         No available data           Carcinogenicity         Carcinogenicity           No available data         Carcinogenicity           No available data         Genotoxicity           In vitro assessment         No genetic change observed during laboratory trials with bacteria and animal cells.           In vitro assessment         No genetic chan	No available data		
animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity         Exposure during a pregnancy: inhalation (rat and mouse)/No congenital defect observed. Trial for detecting impacts on reproduction/development: oral (rat)/No congenital defect observed.         Effects on reproduction         Trial for detecting impacts on reproduction/development: oral (rat)/Not toxic with regard to reproduction.         Data for methane, thiobis- (75-18-3)         Acute toxicity         Oral         Slightly toxic (rat and mouse) LD50 = 535–3,700 mg/kg         Dermal       Practically non-toxic (rabbit) LD50 > 5,000 mg/kg         Inhalation       Practically non-toxic (rabbit) LD50 = 102.3 mg/l (40,250 ppm) (vapours)         Irritation of the skin       Practically non-toxic (rabbit) Irritation index: 0.4/8. (24 h)         Irritation of the skin       Practically no irritation (rabbit)         Awareness-raising       No available data         Sensitization of the skin       No available data         Carcinogenicity         No available data       Carcinogenicity         No available data       Carcinogenicity         No available data         Carcinogenicity         No available data		Genotoxicity	
Developmental toxicity           Exposure during a pregnancy: inhalation (rat and mouse)/No congenital defect observed. Trial for detecting impacts on reproduction/development: oral (rat)/No toxic with regard to reproduction.           Effects on reproduction           Trial for detecting impacts on reproduction/development: oral (rat)/Not toxic with regard to reproduction.           Data for methane, thiobis- (75-18-3)           Acute toxicity           Oral         Slightly toxic (rat and mouse) LD50 = 535–3,700 mg/kg           Dermal         Practically non-toxic (rabbit) LD50 > 5,000 mg/kg           Inhalation         Practically non-toxic (rat) 4 h LC50 = 102.3 mg/l (40,250 ppm) (vapours)           Irritation of the skin         Practically no irritation (rabbit) Irritation index: 0.4/8. (24 h)           Irritation of the skin         Practically no irritation (rabbit)           Awareness-raising         No available data           Carcinogenicity           No available data         Carcinogenicity           No available data           Genotoxicity           No available data         Carcinogenicity           No available data           Genotoxicity           Invitro assessment         No general detrimental effect observed.           Carcinogenicity <td>In vitro assessment</td> <td></td>	In vitro assessment		
Exposure during a pregnancy: inhalation (rat and mouse)/No congenital defect observed. Trial for detecting impacts on reproduction/development: oral (rat)/No congenital defect observed.         Trial for detecting impacts on reproduction/development: oral (rat)/Not toxic with regard to reproduction.         Data for methane, thiobis- (75-18-3)         Acute toxicity         Oral       Slightly toxic (rat and mouse) LD50 = 535–3,700 mg/kg         Dermal       Practically non-toxic (rabbit) LD50 > 5,000 mg/kg         Inhalation       Practically non-toxic (rat) 4 h LC50 = 102.3 mg/l (40,250 ppm) (vapours)         Irritation of the skin       Practically non-toxic (rat) 4 h LC50 = 102.3 mg/l (40,250 ppm) (vapours)         Irritation of the skin       Practically non-toxic (rabbit) Irritation index: 0.4/8. (24 h)         Irritation of the skin       No available data         Sensitization of the skin       No available data         Sensitization of the skin       No available data         Subchronic oral administration to rat/No general detrimental effect observed.         Carcinogenicity         No available data         Genotoxicity         No available data         Invitro assessment         No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials	In vitro assessment	No genetic change observed during laboratory trials with mice.	
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Trial for detecting impacts on reproduction/development: oral (rat)/Not toxic with regard to reproduction.         Data for methane, thiobis- (75-18-3)         Acute toxicity         Oral       Slightly toxic (rat and mouse) LD50 = 535–3,700 mg/kg         Dermal       Practically non-toxic (rabbit) LD50 > 5,000 mg/kg         Inhalation       Practically non-toxic (rat) 4 h LC50 = 102.3 mg/l (40,250 ppm) (vapours)         Irritation of the skin       Practically no irritation (rabbit) Irritation index: 0.4/8. (24 h)         Irritation of the eyes       Average irritation (rabbit)         Awareness-raising       No available data         Sensitization of the skin       No available data         Carcinogenicity         No available data       Carcinogenicity         Subchronic oral administration to rat/No general detrimental effect observed.       Carcinogenicity         No available data       Genotoxicity         In vitro assessment       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity       Developmental toxicity			
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Oral       Slightly toxic (rat and mouse) LD50 = 535–3,700 mg/kg         Dermal       Practically non-toxic (rabbit) LD50 > 5,000 mg/kg         Inhalation       Practically non-toxic (rat) 4 h LC50 = 102.3 mg/l (40,250 ppm) (vapours)         Irritation of the skin       Practically non-toxic (rat) 4 h LC50 = 102.3 mg/l (40,250 ppm) (vapours)         Irritation of the skin       Practically no irritation (rabbit) Irritation index: 0.4/8. (24 h)         Irritation of the eyes       Average irritation (rabbit)         Awareness-raising       No available data         Sensitization of the skin       No available data         Subchronic oral administration to rat/No general detrimental effect observed.         Carcinogenicity         No available data         Genotoxicity         No available data         In vitro assessment         No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity	Data for methane, thiobis- (75-18-3)		
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Inhalation       Practically non-toxic (rat) 4 h LC50 = 102.3 mg/l (40,250 ppm) (vapours)         Irritation of the skin       Practically no irritation (rabbit) Irritation index: 0.4/8. (24 h)         Irritation of the eyes       Average irritation (rabbit)         Awareness-raising       No available data         Sensitization of the skin       No available data         Toxicity with repeated exposure       Subchronic oral administration to rat/No general detrimental effect observed.         Carcinogenicity         No available data       Genotoxicity         No available data       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity       Developmental toxicity	Oral	Slightly toxic (rat and mouse) LD50 = 535–3,700 mg/kg	
Irritation of the skin       Practically no irritation (rabbit) Irritation index: 0.4/8. (24 h)         Irritation of the eyes       Average irritation (rabbit)         Awareness-raising       No available data         Sensitization of the skin       No available data         Toxicity with repeated exposure         Subchronic oral administration to rat/No general detrimental effect observed.         Carcinogenicity         No available data         Genotoxicity         No available data         Developmental toxicity	Dermal	Practically non-toxic (rabbit) LD50 > 5,000 mg/kg	
Irritation of the eyes       Average irritation (rabbit)         Awareness-raising       No available data         Sensitization of the skin       No available data         Toxicity with repeated exposure         Subchronic oral administration to rat/No general detrimental effect observed.         Carcinogenicity         No available data         In vitro assessment       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity	Inhalation	Practically non-toxic (rat) 4 h LC50 = 102.3 mg/l (40,250 ppm) (vapours)	
Awareness-raising       No available data         Sensitization of the skin       No available data         Toxicity with repeated exposure         Subchronic oral administration to rat/No general detrimental effect observed.         Carcinogenicity         No available data         Genotoxicity         In vitro assessment       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity	Irritation of the skin	Practically no irritation (rabbit) Irritation index: 0.4/8. (24 h)	
Sensitization of the skin       No available data         Toxicity with repeated exposure         Subchronic oral administration to rat/No general detrimental effect observed.         Carcinogenicity         No available data         Genotoxicity         In vitro assessment       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity	Irritation of the eyes	Average irritation (rabbit)	
Censitization of the skin         Toxicity with repeated exposure         Subchronic oral administration to rat/No general detrimental effect observed.         Carcinogenicity         No available data       Genotoxicity         In vitro assessment       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity	Awareness-raising	No available data	
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Carcinogenicity         Carcinogenicity         No available data       Genotoxicity         In vitro assessment       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity		Toxicity with repeated exposure	
No available data       Genotoxicity         In vitro assessment       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity	Subchronic oral administration	o rat/No general detrimental effect observed.	
Genotoxicity         In vitro assessment       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity	Carcinogenicity		
In vitro assessment       No genetic change observed during laboratory trials with bacteria and animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity	No available data	No available data	
animal cells.         In vitro assessment       No genetic change observed during laboratory trials with mice.         Developmental toxicity		Genotoxicity	
Developmental toxicity	In vitro assessment		
	In vitro assessment	No genetic change observed during laboratory trials with mice.	
Exposure during a pregnancy. Oral (rat)/No congenital defect observed		Developmental toxicity	
	Exposure during a pregnancy. Oral (rat)/No congenital defect observed.		
Effects on reproduction			

No available data	
	Other information
Aspiration risk	
Experience with humans	
Contact with the skin	No skin allergies observed (repeated or prolonged exposure).

## 12. Ecological information

Chemical routes and chemical substances

Data regarding this substance or its constituents are summarized below.

Data for 2-propanethiol, 2-methyl- (75-66-1)	
Biodegradation	Not easily biodegradable. (63 d) biodegradation 6%
Data for methane, thiobis- (75-18-3)	
Biodegradation	Easily biodegradable. (28 d) biodegradation 67%–77%
Octanol/water partition coefficient	log (octanol/water partition coefficient) = 0.84 (calculated)

## Ecotoxicology

Data regarding this substance or its constituents are summarized below.

Data for 2-propanethiol, 2-methyl- (75-66-1)		
Aquatic environment toxicity data	Slightly toxic Oncorhynchus mykiss (rainbow trout) 96 h LC50 = 34 mg/l	
Aquatic invertebrates	Average toxicity Daphnia magna (water flea) 48 h EC50 = 6.7 mg/l	
Algae	Slightly toxic Pseudokirchneriella subcapitata (green algae) 72h EC50 = 24 mg/l	
Data for methane, thiobis- (75-18-3)		
Aquatic environment toxicity data	Practically non-toxic Oncorhynchus mykiss (rainbow trout) 96 h LC50 = 213 mg/l	
-		

## 13. Waste disposal issues

Waste disposal	It is recommended that waste be incinerated.
	Dispose of all waste as per federal, provincial and local regulations
	Speak with a legal expert for further details on local and federal reporting obligations, help in determining waste composition and elimination of dangerous waste and information on the requirements associated with any environmental permits.
	Note: Any modifications or additions of chemicals to this product could result in the information on waste management and disposal being incomplete, inaccurate or inadequate. Furthermore, local and provincial regulations governing waste disposal can differ from or be more restrictive than federal laws and regulations.

#### 14. Transportation information

UN number	3336
Shipping label	Mercaptan mixture, liquid, flammable, n.o.s.
Technical name	(tert-Butylmercaptan)
Classification	3
Packing group	11
Marine pollutant	Yes

Transportation of Dangerous Goods Act (TDG)

#### International Maritime Dangerous Goods Code (IMDG)

UN number	3336
Shipping label	MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, N.O.S.
Technical name	(t-ButyImercaptan)
Classification	3
Packing group	11
Marine pollutant	Yes
Flash pollutant	<0°F (<-18°C) TAG

#### 15. Regulatory information

Chemical inver	ntory status	
EINECS list, EU	EINECS	Compliant
TSCA inventory, United States	TSCA	The product components are all included in the TSCA inventory.
Canadian Domestic Substances List (DSL)	DSL	All of the product components are on the Canadian Domestic Substances List (DSL).
China Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)	IECSC (CN)	Compliant
Japan ENCS – Existing and New Chemical Substances Inventory	ENCS (JP)	Compliant
Japan ISHL – Industry Safety and Health Law	ISHL (JP)	Compliant

Chemical inventory status		
Korea Korea Existing Chemicals Inventory (KECI)	KECI (KR)	Compliant
Philippine Inventory of Chemicals and Chemical Substances (PICCS)	PICCS (PH)	Compliant
Australian Inventory of Chemical Substances (AICS)	AICS	Compliant
New Zealand Inventory of Chemical Substances	NZIOC	Compliant

	Canada – Federal regulations
Workplace Hazardous Materials Information System (WHMIS)	B2: Flammable liquid D2B: Toxic matter causing other toxic effects
Ingredient Disclosure List (IDL)	WHMIS Ingredients Disclosure List: No component appears on the WHMIS Ingredients Disclosure List.
Carcinogen included i	n WHMIS controlled products (classified by IRAC, ACGIH):
IRAC	No product component with concentrations equal to or greater than 0.1% was identified as a likely, probable or recognized human carcinogen by the IARC (International Agency for Research on Cancer).
ACGIH	No product component with levels equal to or greater than 0.1% was identified as a potential or actual carcinogen by the ACGIH (American Conference of Governmental Industrial Hygienists).
National Pollutant Release Inventory (NPRI)	
Chemical name	Methane, thiobis-
CAS No.	75-18-3

#### 16. Other information

	Various	
Other information	For safe handling, consult codes 30, 70, 77 and 497 of the National Fire Protection Association (NFPA).	
Last revision(s)		
Reference number	00000065717	
Revision date	03/30/2015	
Print date	03/30/2015	
Prepared by	Technical Department	
Tel. number of person responsible for the preparation	1-800-567-5726	
Preparation date	03/30/2015	
SPOTLEAK® is a registered tra	ademark of d'Arkema Inc.	

THIS PRODUCT HAS BEEN CLASSIFIED ACCORDING TO THE RISK CRITERIA IN THE REGULATIONS GOVERNING CONTROLLED PRODUCTS, AND THE MSDS INCLUDES ALL OF THE REQUIRED INFORMATION.

THE APPENDED INFORMATION, OBTAINED FROM RESOURCES DEEMED RELIABLE, ARE, TO THE BEST OF OUR KNOWLEDGE, ACCURATE. HOWEVER, BECAUSE DATA, SAFETY STANDARDS AND GOVERNMENT REGULATIONS CAN CHANGE AND GIVEN THAT THE CONDITIONS OF USE AND HANDLING, AS WELL AS ANY INSTANCES OF MISUSE, REMAIN BEYOND OUR CONTROL, ARKEMA CANADA INC. OFFERS NO GUARANTEE, EITHER IMPLICIT OR EXPLICIT, AND DECLINES ALL RESPONSIBILITY WITH REGARD TO THE COMPREHENSIVENESS OR ACCURACY OF THE ATTACHED INFORMATION. THE USER IS THUS RESPONSIBLE FOR ENSURING THAT THEY HAVE RECENT INFORMATION THAT IS RELEVANT TO THEIR NEEDS. THE APPENDED INFORMATION CONCERNS ONLY THE DESCRIBED PRODUCT AND COULD PROVE INVALID SHOULD THE PRODUCT IN QUESTION BE USED WITH ANY OTHER PROCESS OR SUBSTANCE

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