

Canada Gas Operations

CORE Emergency Response Plan (ERP - CAN)

APPROVALS

Approvals were captured electronically and attached to the published document.

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**REVISION HISTORY**

The Revision History table captures a high-level summary of the five most recent versions (Rev. No.) of this document and the signoffs obtained for each revision. All holders of a controlled copy will be notified of any revisions made to the document; it is the responsibility of the holder to ensure their copy is updated when revisions are issued.

Revised plans will be distributed to noted plan holders who are responsible for destroying the outdated plans.

Revision History						
Next Revision Due Date:						
Rev. No.	Date (YYYY-MM-DD)	Document Status	Brief Description of Change History	Document Contact	Reviewer(s)	Approver(s)
05	November 3, 2025		2025 Annual review. Updated doc owner and approver. Removal of section 1.5.3 Response Time table. Inserted new IMT role checklist and added IMAT support option in 3.2.3 Relabelled section 4.6.11 to winter condition and added Avalanche sub section Replaced outdated links.			
04	March 28, 2025	Published	2024 Annual review. Removal of CEOC references. Updated 4.4.5 EPZ section; visuals, removed Protective			



			action zone verbiage. Tweaked Drill type exercise definitions. Added link to Critical Injury first hour action checklist. Added section 4.7.5 linking cyber incident documentation Added indigenous engagement link to section 4.8 communications			
03	2023-Aug-01	Published	Simplified response structure without need for REOC; Alignment to new 2023 organizational structure; Added context to initial response; Additional plan implementation sections; Additional ICS roles descriptions; Additional description of EPZ; Updated training strategy information.			
02	2022-Dec-01	Published	Annual document review and update.			
01	2021-Dec-01	Published	Document updates 2021.			

00	2020-Nov-03	Published	This is a new document.			

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Plan Holders						
Copy No.	Plan Holder	Core	Annex RZ1 NGTL	Annex RZ2 NGTL	Annex RZ3 & 4 ML	
01	Vice President, Canada Gas Operations	✓	✓	✓	✓	
02	Director, Northern BC Operations	✓	✓			
03	Director of NGTL Operations	✓	✓	✓		
04	Director of Mainline / TQM Operations	✓			✓	
05	Emergency Management Specialist, Northern BC	✓	✓			
06	Emergency Management Specialist, NGTL	✓	✓	✓		
07	Emergency Management Specialist, Mainline / TQM	✓			✓	
08	Control Centre Manager, Gas Control Center	✓	✓	✓	✓	

Additional copies of this ERP may be located at Operational Facilities with Tier 3 response reference documents; those copies shall be updated in concert with the Tier 3 response reference documents.



This Plan is distributed to key internal and external stakeholders and available to all required Canada Gas personnel through a secure internet portal hosted by the Company; the portal is internally referred to as the Controlled Documents Library (CDL).

1 INTRODUCTION

A critical aspect of operating TC Energy's pipeline systems is to have a comprehensive Emergency Management Program. A key component of the Emergency Management Program includes having Emergency Response Plans for all operational assets. This Plan is the Emergency Response Plan (ERP) applicable to all TC Energy (hereafter, "Company") owned and/operated natural gas pipelines in Canada (excluding Coastal GasLink).

This Plan is distributed to key internal and external stakeholders and available to all Company personnel through a secure internet portal hosted by the Company; the portal is internally referred to as the Controlled Documents Library.

The Canadian Gas Operations Emergency Response Plan (hereafter, the CGO ERP) is combined with a rigorous training and exercise program; and maintenance program making emergency response for the Canadian Gas Operations a priority fully endorsed at all levels within the Company.

1.1 Purpose

The purpose of this CGO ERP is to assist Company personnel in responding safely to emergencies originating from the pipeline and associated facilities. The Plan provides techniques and guidelines for achieving an efficient, coordinated, and effective response to emergencies which may occur along the pipeline.

Additionally, the purpose of this Emergency Response Plan (ERP) is to describe the actions to be taken by response personnel in responding quickly and safely to emergencies originating from the pipeline and associated facilities, thereby minimizing damage to people and the environment. This ERP prepares Canada Gas Operations personnel to respond to incidents. The ERP also provides important information regarding available support personnel and equipment, and necessary protective and corrective measures. The goal in all instances is to minimize risk to response personnel, the public, the environment, and company property. The early identification of an emergency and assignment of responsibility to proper personnel will ensure all phases of response, including notification, containment, and cleanup proceed simultaneously and efficiently.

1.2 Overview of the Response Plans

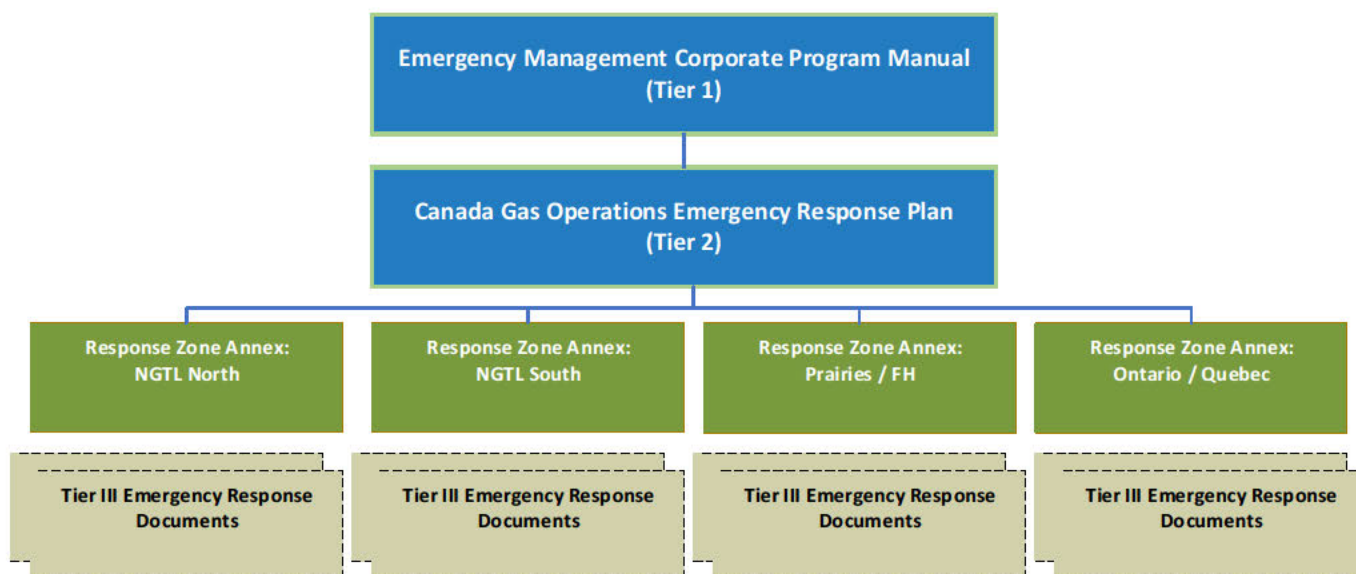
The Emergency Management Corporate Program Manual is the overarching document that describes the emergency preparedness process at the Company. The Emergency Management Corporate Program Manual and all its contents applies to CGO. This Tier 2 CGO ERP more

specifically defines how emergency response is conducted within CGO.

This CGO ERP is organized into eight (8) sections as follows:

- Introduction
- Facility Description
- Hazard identification and Implementation
- Organizational Control of Emergency
- Plan Implementation
- Response resources
- Release detection
- Maintaining Preparedness

The CGO ERP is augmented with four (4) Response Zone Annexes, and supported by hundreds of Tier 3 response reference documents.



1.2.1 Tier 1 Corporate Program Manual

TC Energy's Tier 1 Plan is the Emergency Management Corporate Program Manual. There is only one Tier 1 Plan in the Company, as an over-arching program manual. The Emergency Management Corporate Program Manual describes TC Energy's Emergency Management Program and the processes which apply to all lines of business within the Company. It rarely contains specific tactics, resource inventories, or procedures for use during response; moreover, the Program Manual serves to guide Facilities, Lines of Business, and Support Departments in developing and executing emergency preparedness activities within their area of responsibility.

1.2.2 Tier 2 Emergency Response Plan / Core ERP

This Plan is designated as the Tier 2 Core ERP for the Company's CGO assets. This ERP augments the



overarching Emergency Management Corporate Program Manual by providing preparedness and response guidance tailored specifically to CGO; therefore, all Emergency Management Program requirements per the Emergency Management Corporate Program Manual also apply to CGO.

This Plan provides the information and guidance necessary for an operating area within CGO to prepare and respond to an emergency situation. The procedures developed in this Plan include the organization and effective utilization of available manpower, material, equipment, and outside resources to assure prompt and effective response to an emergency situation.

1.2.3 Response Zone Annex Documents

Response Zone Annex Documents are used to provide easy drill down search and links to the numerous municipal or district level Tier 3 Emergency Response Plans based on Canada Gas standard organization and area of accountability. There is one document per region which is divided into separate sections for each management area. Please refer to Appendix C for a list of Response Zone Annex Documents.

1.2.4 Tier 3 Response Reference Documents

Tier 3 Documents are maintained in concert with this ERP to provide a mechanism for preservation of the most detailed and fluid response information, such as pipeline maps, drawings, and descriptions; and specific contact information for emergency notifications.

The Emergency Preparedness Team (EPT) is responsible to assemble and maintain Tier 3 documents in accordance with the *Tier 3 Emergency Response References (CAN-US-MEX)* (Item ID [1017375940](#)). All Tier 3 documents must reside within the Emergency Management folder within OpenText, accessible at [OpenText Content Server \(tcpl.ca\)](#).

1.3 Scope

This Plan is applicable to all Company owned and/operated natural gas pipelines in Canada (excluding Coastal GasLink). This Plan is an all-hazards Plan for any emergencies impacting natural gas pipelines.

Descriptions of the pipelines are detailed in Section 2 (Facility Description) of this Plan with additional information provided in the Response Zone Annexes.

1.4 Legal Authority

This Plan has been developed in accordance with the regulation published in the CER's Statutory Orders and Onshore Pipeline Regulations (OPR) (SOR)/99-294, S. 32-35 – Emergency Management Program and Annex A (2) of the OPR Guidance Notes as well as applicable Canadian Standards Association (CSA) standards; however, compliance to these regulations is accomplished or demonstrated through the Emergency Management Corporate Program Manual (Tier1) and its sub component : Tier 2; this here document specific to Canada Gas and Tier 3; local district plans.

1.5 Description of Operations

General Information		
Operator Name	TC Energy	

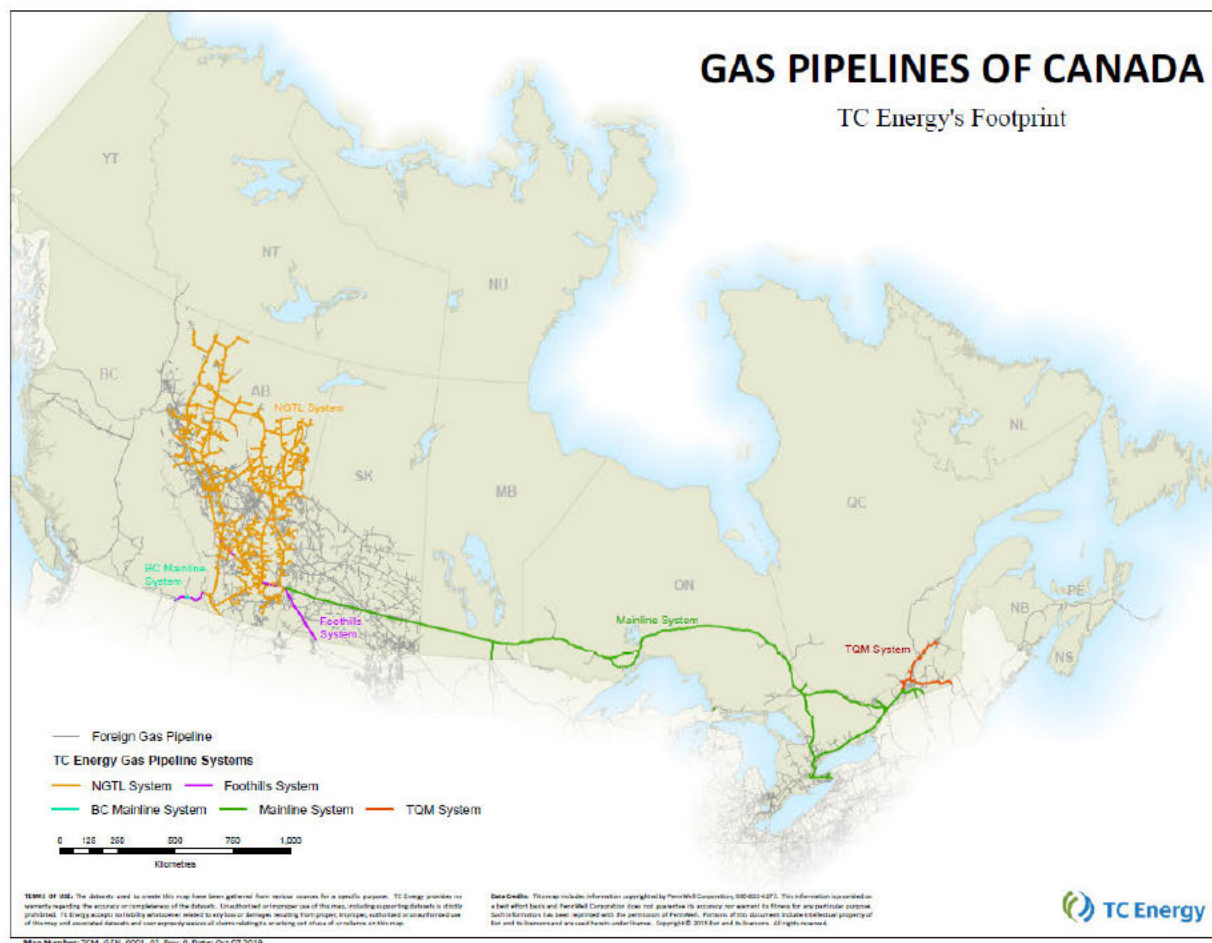
**General Information**

Address	
Mainline Number (24 hour)	888-982-7222
Plan Contact	

The wholly owned pipelines include these systems:

- Nova Gas Transmission Line (NGTL), which is 24,544 km (15,251 miles) and receives, transports, and delivers natural gas within Alberta and British Columbia. NGTL connects with the Canadian Mainline and Foothills system, as well as third party pipelines.
- Canadian Mainline, which is 14,114 km (8,770 miles), transports natural gas from the Alberta/Saskatchewan border and the Ontario U.S. border to serve Eastern Canada and interconnects to the U.S.
- Foothills System, which is 1,241 km (771 miles), transports natural gas from central Alberta to the British Columbia/U.S. border for export to the U.S. Midwest, Pacific Northwest, California, and Nevada.
- The Company has 50% ownership of the Trans Québec and Maritimes Pipeline (TQM) and maintains operational control of this pipeline. TQM connects with the Canadian Mainline near the Ontario/Québec border, and transports natural gas to the Montréal and Québec City corridor, as well as connects with the Portland pipeline system that serves the northeast U.S.

Gas Pipelines of Canada



1.5.1 Emergency Systems and Equipment

Company facilities and vehicles are equipped with emergency systems and equipment to protect employees, the public, the environment, and the pipeline assets. Specific requirements for emergency systems and equipment are defined in the following policies and procedures:

- *Vehicle Inspection* (Item ID [1019902344](#)): specifies the requirements for First Aid Kit, Survival Kit, First Responder Kit, Safety Flares/Reflective Markers, and Fire Extinguisher in Company vehicles among other non-emergency equipment requirements.
- *Emergency Management System Incident Command Post Kit Requirements Checklist* (Item ID [003674777](#)): specifies the requirements for equipment maintained in each Incident Command Post (ICP) Kit.
- TC maintains strategically placed Emergency preparedness trailers. Location and inventory of the trailers are available through respective regional emergency preparedness teams..

1.5.2 Site Security

Company facilities are protected from security breaches. Specific requirements for security protections are defined in the *Physical Security and Security Systems Standard (CAN-US-MEX)*

(Item ID [1020373672](#)).

2 HAZARD IDENTIFICATION AND RISK ASSESSMENT

Each CGO Line of Business is responsible to identify hazards (both from internal and external sources) which may result in an emergency affecting the Company’s operations. The identified hazards will be reviewed through a risk assessment to determine the potential likelihood, consequence, and potential impact of the hazard. Risk assessments shall be used to develop emergency response plans, to mitigate impacts of the hazard, or amended to reflect the hazard.

2.1 Risk Assessment Information

Risk Management is a key element in ensuring the ongoing safety, integrity, and reliability of Company assets. Understanding risks through the execution of established risk management processes and incorporating these risks into emergency response plans will support ongoing safe, reliable, and efficient operations in emergencies.

The Company’s *Risk Management RM Standard (CAN-US-MEX)* (Item ID [008749510](#)) provides the foundations (policy, objectives, mandate, and commitment) and organizational arrangements for designing, implementing, monitoring, reviewing and continually improving risk management. The Emergency Management Program abides by the Risk Management Standard to ensure risks are identified and addressed in emergency response plans.

On-site Hazard Evaluation

The Company uses Emergency Planning Zones (EPZ) to identify areas most likely impacted by a pipeline incident. Where potential for highest impact exist, the community and population should be documented on the applicable Response Zones Annex as potential receptors.

Worst case scenarios and overall vulnerability analyses should be conducted using the data in the table above. Each Line of Business has the autonomy to determine their high impact and sensitive areas, and the Lines of Business are responsible to develop site specific response plans to address each of these locations. Please refer to the following link for additional information [TC EM EPZ Documentation](#).

2.2 Hazard Identification Matrix

In the table below, asset-based and natural hazards identified in the Emergency Management Corporate Program Manual (Section 2) are evaluated for likelihood to produce significant consequence or impact to CGO assets. Where the potential exists for a hazard to significantly impact CGO, there shall be a procedure to respond to each hazard in Section 4 of this Plan.

Hazard	Potential for Significant Impact CGO Assets	Procedure Included in Section 4
Asset-Based Hazards		
Liquids Pipeline Emergencies		
Gas Pipeline Emergencies	✓	✓



Power and Gas Storage Facility Emergencies		
Natural Hazards		
Floods	✓	✓
Earthquakes	✓	
Landslides/Rockslides	✓	✓
Hurricanes		
Forest Fires	✓	✓
Severe Thunderstorms	✓	✓
Tornadoes	✓	✓
Winter Storms/Ice Storms/Blizzards	✓	✓
Prolonged Extreme Heat		
Severe Drought		
Technological or Man-Made Hazards		
Security Incidents	✓	✓
Medical Emergencies	✓	✓

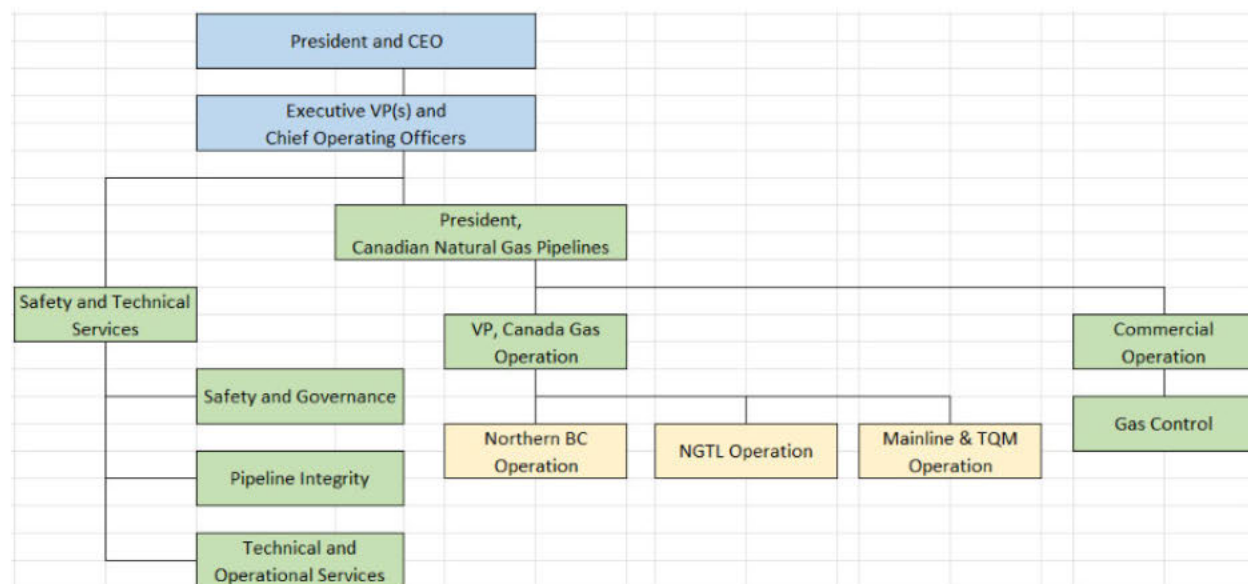
3 ORGANIZATIONAL CONTROL OF EMERGENCY

When an emergency occurs, the chain of command and communication lines deviate from that during routine work. This section describes how the Company's emergency response personnel transition from the standard organization to implementation of the Incident Command System (ICS), which the Company has adopted as its system of organizational control during emergencies.

All personnel who are assigned to be an on-call representative to the site are trained as Company First Responders for emergencies. Small scale emergencies may be managed through this regular scheduling and chain of command; however, the next sections of this ERP describe how the organization may change to effectively respond to a larger scale emergency.



3.1 Standard Organization



3.2 Emergency Organization

In an emergency, the structure of leadership and decision making is altered from the standard organizational structure. This section describes the elements of the Company emergency response organization.

3.2.1 Initial Response / Site Managed Emergencies

Site procedures provide for one individual to assume command and control from the beginning of emergency operations. Normally, this would be the Company First Responder to the scene. The Company First Responder will take whatever actions are possible to mitigate the consequences of the emergency and will communicate the details of the emergency to the Canada Gas Control Center (CGCC) and appropriate leaders. Notifications will be initiated to bring in the Manager On-Call or other appropriate levels of leadership to assume command of the event.

The initial response team will be composed of personnel from local field operations. The Company First Responder will coordinate the emergency response with support of the on-call manager until an Incident Commander (IC) is assigned.

At no time shall any employee endanger his/her own safety while responding to an emergency situation.

In hazardous situations, the initial response team, under the direction of the IC, will take immediate defensive actions to stop the release and initiate procedures within practicalities of the situation and within the limits of the team member's emergency response training. If necessary, outside contractors may be mobilized to help with the response.

For small incidents, or for the initial stages of an event, the IC and their staff will assume multiple duties within the implemented management structure. For small scale emergencies, having staff



playing multiple roles may be appropriate and efficient.

3.2.2 Incident Command System (ICS)

ICS is a standardized on-scene emergency management tool that has considerable flexibility, has been found to be cost-effective and efficient, and can be applied to both emergency and if desired, non-emergency events.

ICS is based on the knowledge that every incident or event has certain major management activities that must be performed. Even if the event is very small and only one or two people are involved, these activities will always apply to some degree. The five major management activities in ICS are:

- Command
- Operations
- Planning
- Logistics
- Finance/Administration

The ICS organization as presented here has been developed from these five management activities. The ICS organization is “set” in that the job titles and responsibilities may not be changed, thus ensuring that any individual properly trained can come into an emergency situation and know exactly what he/she has to do. However, ICS provides the flexibility to allow each event to have its own unique organizational structure based on the size and type of event. **It is the responsibility of the Incident Commander to determine the appropriate ICS organization based on the event.**

**Incident Command (IC)**

- Responsible for overall management of the incident in alignment with goals and objectives.
- Carried out by a single Incident Commander or a group (Unified Command)
- Incident Commander who relieves the Company First Responder is usually a manager

Incident
Commander

For more information on the Incident Command System, refer to the Emergency Management Corporate Program Manual

Liaison Officer (LNO)

- Staffed when there are agencies or groups requiring representation that have not joined Unified Command.
- Acts as the contact for assisting and/or cooperating Agency Representatives.
- Coordinates information sharing with impacted agencies and groups including landowners, Indigenous Rights Holders, homeowner associations, and municipalities.

Liaison
Officer**Public Information Officer (PIO)**

- Develops and releases information about the incident to the media, incident personnel, and other organizations.

Public
Information
Officer**Safety Officer (SOFR)**

- Develops and recommends measures for assuring personnel safety and to assess and/or anticipate hazardous and unsafe situations.
- Assistant Safety Officers (ASOFR) may have specific responsibilities, such as air operations, hazardous materials, etc.

Safety
Officer**Operations
Section****Operations Section**

- Manages tactical operations directly applicable to the primary mission.
- Executes tactics in the IAP
- Leader is called the Operations Section Chief (OSC) with responsibility to:
 - Direct preparation of operational plans
 - Request or releases resources
 - Monitor operational progress
 - Make expedient changes to the IAP
- OSC may assign a Deputy OSC to supervise on-scene operations while the OSC participates in the incident planning process.
- Common Operations Section staff:
 - Staging Area Manager
 - Branch Directors
 - Division Supervisor (organized geographically)
 - Group Supervisor (organized by function)
 - Strike Teams (similar resources)
 - Task Forces (unique resources)

**Planning
Section****Planning Section**

- Responsible for the collection, evaluation, dissemination, maintenance, and use of incident information
- Leader is called the Planning Section Chief (PSC) and is responsible for supervising members of the Planning Section and facilitates the development of the IAP
- Common Planning Section staff:
 - Documentation Unit Leader
 - Demolition Unit Leader
 - Resource Unit Leader
 - Situation Unit Leader
 - Environmental Unit Leader
 - Field Observer
 - Technical Specialists

**Logistics
Section****Logistics Section**

- Responsible for providing facilities, services, and material in support of the incident.
- Leader is called the Logistics Section Chief (LSC) and is responsible for supervising members of the Logistics Section
- Common Logistics Section staff:
 - Communications Unit Leader
 - Food Unit Leader
 - Facilities Unit Leader
 - Supply Unit Leader

**Finance &
Administration
Section****Finance/Admin Section**

- Responsible for all financial, administrative and cost analysis aspects of the incident.
- Leader is called the Finance Section Chief (FSC) and is responsible for supervising members of the Finance/Admin Section
- Common Finance/Admin Section Staff:
 - Cost Unit Leader
 - Time Unit Leader

3.2.3 Incident Management Team

Incident Management Team (IMT) is the term used for the collective of personnel staffing an Incident Command System (ICS) structure at an Incident Command Post or, depending on response requirements, from a virtual setting. Led by an Incident Commander, the team is responsible for the direct control of all facets of the response to the emergency. This is achieved using ‘management by objective’ and the other attributes and features of ICS. Where Unified Command has been enacted, there is only one, composite IMT for the incident. Incident Management Teams focus on the following response strategies:

1. Ensure the safety of all responders and the public.
2. Continuously reassess the situation and status of the incident.
3. Define the issues and prioritize the problems.
4. Clarify response and secondary goals.
5. Establish objectives, strategies and tactics.
6. Identify and request resources required.
7. Develop an Incident Action Plan.

Any element of a response to an emergency not managed by the IMT is deliberately left un-done or is delegated to and managed autonomously by a TC Energy supporting function such as an Incident Support Team (IST)

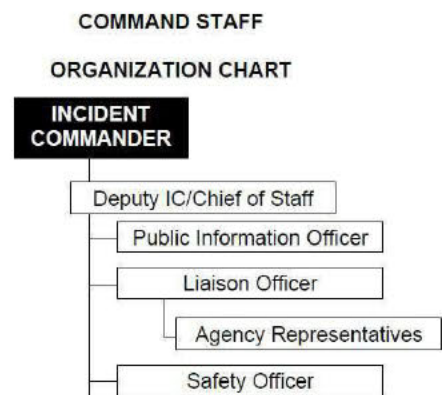
IMT roles should reference the CG Emergency Response checklists which are available electronically through TC Energy’s Emergency Management Website.

3.2.3.1 Command Staff

Incident Commander

The IC’s responsibility is the overall management of the incident. Throughout many incidents, the command activity is carried out by a single IC. The IC is selected based on qualifications and experience. The IC may have Deputy IC’s, who may be from the same agency or from an assisting agency. The Deputy IC must have the same qualifications as the IC, as they must be ready to take over that position at any time. When span of control becomes an issue for the IC, a Deputy IC/Chief of Staff may be assigned to manage the Command Staff.

The Incident Commander is responsible for overall management and command & control of all aspects of the response related to the protection of life, the environment, and property. The IC has final decision- making authority over response priorities, incident objectives, strategies and countermeasures and major expenditures. The IC is the Incident Management Team’s (IMT) primary





link between the Incident Support Team (IST), senior government officials and key outside stakeholders.

Deputy Incident Commander

The Deputy Incident Commander (DIC) reports to the Incident Commander and is responsible for the overall coordination and facilitation to ensure accurate assessment, planning and effective implementation of physical response operations. The DIC ensures the Section Chiefs are working in accordance with prioritized objectives established by the Incident Commander.

Scribe

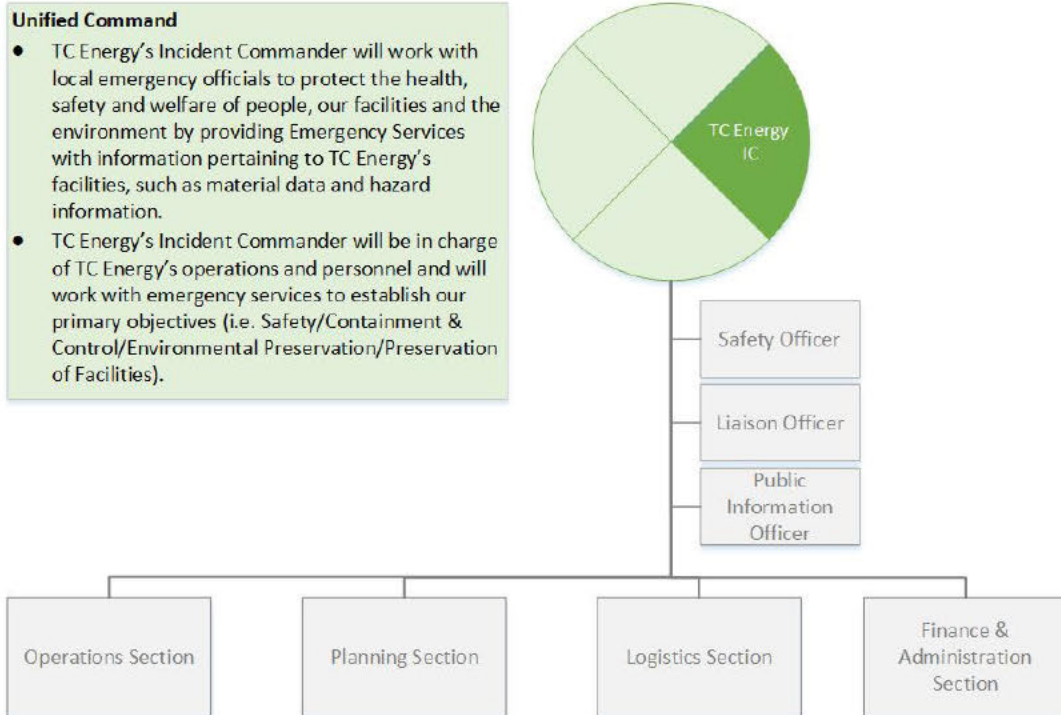
The Scribe may report to the Incident Commander, Deputy Incident Commander and more than one Scribe position may be assigned. The role of the Scribe is to record actions taken, actions pending, and to provide updates and reminders to the members of the response team. This key role is to provide administrative support to the Incident Command Organization.

Unified Command

Unified Command (UC) is an expansion of the ICS organization. To be a member of the UC, response personnel must have authority and jurisdiction. UC members may also include agencies, organizations or private industries bringing large amounts of tactical and support resources to the response. The need for UC is brought about when an incident impacts the jurisdictional or functional responsibility of more than one agency. As a component of ICS, the UC is a structure that brings together the “Incident Commanders” of all major organizations that have jurisdictional responsibility for the incident to coordinate an effective response while carrying out their own agency’s jurisdictional responsibilities. UC links the responding organizations to the incident and provides a forum for these agencies to make consensus decisions. Under UC, the various jurisdictions and/or agencies and non-government responders may blend together throughout the organization to create an integrated response team.

The need for UC arises when incidents:

- Cross geographic boundaries (e.g., two provinces, international boundaries);
- Involve various governmental levels (e.g., provincial, local,);
- Impact functional responsibilities (e.g., Search and Rescue, fire, spill, EMS); or
- Some combination of the above.



Actual UC makeup for a specific incident will be determined on a case-by-case basis taking into account:

- The specific details and characteristics of the incident.
- Determinations outlined in existing response plans.
- Decisions reached during the initial meeting of the UC.

The makeup of the UC may change as an incident progresses to account for changes in the situation.

UC is a team effort, but to be effective the number of personnel should be kept as small as possible. A well-defined process requires the UC to set clear objectives to guide the on-scene response resources.

UC is responsible for overall management of the incident. UC directs incident activities, including development and implementation of overall objectives and strategies, and approves ordering and releasing of resources. UC is not a “decision by committee”. The principals are there to command the response to an incident. Time is of the essence. UC should develop synergy based on the significant capabilities that are brought by the various representatives. There should be personal acknowledgement of each representative’s unique capabilities, a shared understanding of the situation, and agreement on the common objectives. With the different perspectives on UC comes the risk of disagreements, most of which can be resolved through the understanding of the underlying issues. Contentious issues may arise, but the UC framework provides a forum and a process to resolve problems and find solutions.

For Quebec province, the approach of a unified command is overseen by the Frame of Reference –



Pipeline Response (FRPR), also known as the [Cadre de référence](#) – Intervention pipelines (CRIP) in French.

Public Information Officer (PIO)

The PIO is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations. Only one primary PIO will be assigned for each incident, including incidents operating under UC and multi-jurisdiction incidents. The PIO may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions.

Liaison Officer (LOFR)

Incidents that are multijurisdictional, or have several agencies involved, may require the establishment of the LOFR position on the Command Staff. Only one primary LOFR will be assigned for each incident, including incidents operating under UC and multi-jurisdiction incidents. The LOFR may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions. The LOFR is assigned to the incident to be the contact for assisting and/or cooperating Agency Representatives.

Safety Officer (SOFR)

The SOFR function is to develop and recommend measures for assuring personnel safety and to assess and/or anticipate hazardous and unsafe situations. Only one primary SOFR will be assigned for each incident. The SOFR may have assistants, as necessary, and the assistants may also represent assisting agencies or jurisdictions. Safety assistants may have specific responsibilities, such as air operations, hazardous materials, etc.

3.2.3.2 Operations Section

Operations Section Chief (OSC)

The OSC, a member of the General Staff, is responsible for the management of all tactical operations directly applicable to the primary mission. The OSC will normally be selected from the organization/agency with the most jurisdictional responsibility for the incident. The OSC activates and supervises organization elements in accordance with the Incident Action Plan (IAP) and directs its execution. The OSC also directs the preparation of operational plans; requests or releases resources, monitors operational progress and makes expedient changes to the IAP, as necessary; and reports such to the IC. The OSC may have Deputy OSC's, who may be from the same agency or from an assisting agency. The Deputy OSC must have the same qualifications as the OSC, as they must be ready to take over that position at any time. In complex incidents, the OSC may assign a Deputy OSC to supervise on-scene operations while the OSC participates in the incident planning process.

Branch Director (OPBD)

OPBDs, when activated, are under the direction of the OSC and are responsible for the implementation of the portion of the IAP appropriate to the Branches.

**Division/Group Supervisor (DIVS)**

The DIVS reports to the OSC (or OPBD when activated). The DIVS is responsible for the implementation of the assigned portion of the IAP, assignment of resources within the Division/Group, and reporting on the progress of control operations and status of resources within the Division/Group.

Strike Team/Task Force Leader (STCR/TFLD)

The STCR/TFLD reports to an OPBD or DIVS and is responsible for performing tactical assignments assigned. The Leader reports work progress, resources status, and other important information and maintains work records on assigned personnel.

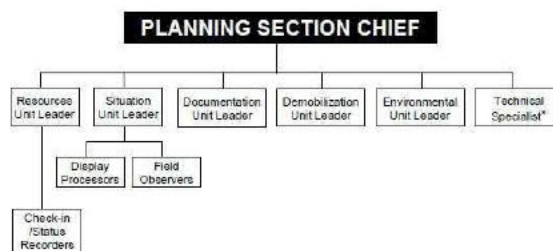
Staging Area Manager (STAM)

The STAM is under the direction of the OSC and is responsible for managing all activities within a Staging Area.

3.2.3.3 Planning Section**Planning Section Chief (PSC)**

The PSC, a member of the General Staff, is responsible for the collection, evaluation, dissemination, and use of incident information and maintaining status of assigned resources. Information is needed to:

- Understand the current situation.
- Predict the probable course of incident events.
- Prepare strategies, plans and alternative strategies and plans for the incident.
- Submit required incident status reports.

**PLANNING SECTION
ORGANIZATION CHART**

The PSC may have Deputy PSCs, who may be from the same agency or from an assisting agency. The Deputy PSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

Resource Unit Leader (RESL)

The RESL is responsible for maintaining the status of all assigned tactical resources and personnel at an incident. This is achieved by overseeing the check-in of all tactical resources and personnel, maintaining a status-keeping system indicating current location and status of all these resources.

Situation Unit Leader (SITL)

The Situation Unit Leader is responsible for collecting, processing, and organizing incident information relating to the growth, mitigation or intelligence activities taking place on the incident. The SITL may prepare future projections of incident growth, maps, and intelligence information.



Field Observer (FOBS)

The FOBS is responsible for collecting situation information from personal observations at the incident and provides this information to the SITL.

Documentation Unit Leader (DOCL)

The DOCL is responsible for the maintenance of accurate, up-to-date incident files. Examples of incident documentation include: Incident Action Plan(s), incident reports, communication logs, injury claims, situation status reports, etc. Thorough documentation is critical to post-incident analysis. Some of the documents may originate in other sections. The DOCL shall ensure each section is maintaining and providing appropriate documents.

The DOCL will provide duplication and copying services for all other sections. The Documentation Unit will store incident files for legal, analytical, and historical purposes.

Demobilization Unit Leader (DMOB)

The DMOB is responsible for developing the Incident Demobilization Plan. On large incidents, demobilization can be quite complex, requiring a separate planning activity. Note that not all agencies require specific demobilization instructions.

Technical Specialist (THSP)

Certain incidents or events may require the use of THSPs who have specialized knowledge and expertise. THSP's may function within the Planning Section or be assigned wherever their services are required. Technical Specialists report to the Planning Section Chief and are responsible for providing specialized technical support to emergency response personnel. These specialists may be company personnel or contractors hired specifically for emergency response operations. Technical Specialists may also report to the Operations Section Chief, Finance Section Chief or the Logistics Section Chief depending on the situation. Specialists may include accountants, engineering & environmental consultants, industrial hygienists, lawyers, meteorologists, purchasing agents, information technology support, GIS specialists etc. These roles are to be filled on an "as required" basis on site.

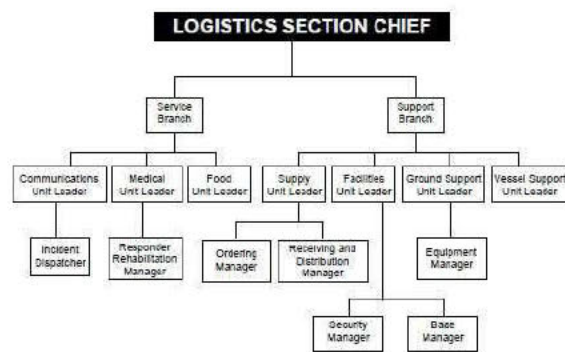
3.2.3.4 Logistics Section

Logistics Section Chief (LSC)

The LSC, a member of the General Staff, is responsible for providing facilities, services, and material in support of the incident. The LSC participates in the development and implementation of the IAP and activates and supervises the Branches and Units within the Logistics Section. The LSC may have Deputy LSCs, who may be from the same agency or from an assisting agency. The Deputy LSC must have the same qualifications as the person

LOGISTICS SECTION

ORGANIZATION CHART





for whom they work, as they must be ready to take over that position at any time.

Service Branch Director (SVBD)

The SVBD, when activated, is under the supervision of the LSC and is responsible for the management of all service activities at the incident. The Branch Director supervises the operations of the Communications, Medical and Food Units.

Communications Unit Leader (COML)

The COML is responsible for developing plans for the effective use of incident communications equipment and facilities; installing and testing of communications equipment; supervision of the Incident Communications Center; distribution of communications equipment to incident personnel; and the maintenance and repair of communications equipment.

Food Unit Leader (FDUL)

The FDUL is responsible for supplying the food needs for the entire incident, including all remote locations, e.g., Staging Areas, as well as providing food for personnel unable to leave tactical field assignments.

Support Branch Director (SUBD)

The SUBD, when activated, is under the direction of the LSC, and is responsible for the development and implementation of logistics plans in support of the Incident Action Plan. The SUBD supervises the operations of the Supply, Facilities, Ground Support and Vessel Support Units.

Supply Unit Leader (SPUL)

The SPUL is primarily responsible for receiving, storing, and distributing all supplies for the incident; maintaining an inventory of supplies; and storing, disbursing, and servicing non-expendable supplies and equipment.

Facilities Unit Leader (FACL)

The FACL is primarily responsible for the setup, maintenance, and demobilization of incident facilities, e.g., Base, ICP and Staging Areas, as well as security services required to support incident operations. The FACL provides sleeping and sanitation facilities for incident personnel and manages Base operations. Each facility is assigned a manager who reports to the FACL and is responsible for managing the operation of the facility. The FACL reports to the SUBD.

Security Manager (SECM)

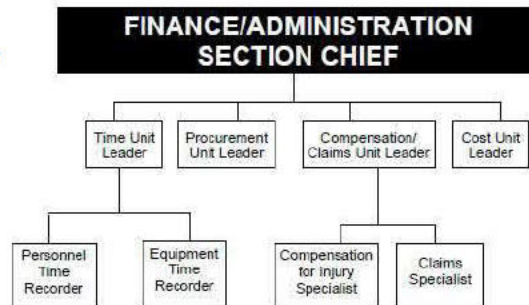
The SECM is responsible for providing safeguards needed to protect personnel and property from loss or damage.



3.2.3.5 Finance and Administration Section Finance/Administration Section Chief (FSC)

The FSC, a member of the General Staff, is responsible for all financial, administrative, and cost analysis aspects of the incident and for supervising members of the Finance/Admin Section. The FSC may have Deputy FSC's, who may be from the same agency or from an assisting agency. The Deputy FSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

FINANCE/ADMINISTRATION SECTION ORGANIZATION CHART



Time Unit Leader (TIME)

The TIME is responsible for equipment and personnel time recording and for managing the commissary operations.

Procurement Unit Leader (PROC)

The PROC is responsible for administering all financial matters pertaining to vendor contracts, leases and fiscal agreements.

Compensation/Claims Unit Leader (COMP)

The COMP is responsible for the overall management and direction of all administrative matters pertaining to compensation for injury and claims related activities (other than injury) for an incident.

3.2.4 Incident Support Team

Business Unit Leadership shall be engaged during all significant incidents and emergencies that occur in the Company. This may occur concurrently with IMT activation but may also occur for significant incidents that do not meet the definition of emergency. In all emergencies the Incident Commander has the authority to make all decisions related to the event. Senior Management can help provide direction and help establish priorities as necessary, but the Incident Commander (or Unified Command) is leading the response efforts.

TC Energy personnel who may provide direction and establish priorities as described above are known as the Incident Support Team (IST). The establishment of the IST is at the discretion of the Vice President of Canada Gas Operations. The IST is predominantly activated for significant events (non-emergencies), emergencies and active through repair and restoration phase.

The responsibilities of the IST will include the following:

- Providing guidance/support for the Incident Commander and other members of the IMT as required, including when the IMT can be deactivated.
- Helping the Incident Commander transition command when necessary.
- Help establish increased spending authority for the Incident Commander and Incident Management team.
- Providing input in deciding when the emergency event is over.
- Communicating status updates to Executive Management not participating on the IST.

For pipeline related incidents, the IST may help provide direction and help establish priorities as necessary, but the on-site Incident Commander (using ICS) is leading response activities.



3.2.5 Augmentation of the Site Managed Response/Large Scale Emergencies

If the event is of a significant size, the initial response organization will be expanded. The degree to which the organization expands will depend on the size and severity of the incident. The decision to augment the initial response team with an Incident Management Team (IMT), in full or in part is the responsibility of the Incident Commander (IC).

All attempts will be made to fill needed positions within the incident management team with qualified personnel who will support either from an onsite or virtual perspective. If additional resources are required, the IC, in coordination with the Incident Support Team (IST) will solicit special expertise such as media, communications, legal and finance specialists who will assist in the response or resources will be sent to the incident site from other areas of the Company as needed. Additional response help may be drafted from other trained TC Energy staff and outside contractors who are under contract with TC Energy.

Representatives from the provincial agencies may report to the incident site for major emergencies. Upon their arrival, TC Energy's Liaison Officer or support staff will meet with these representatives; the Lead Agency may be a representative from the Provincial Environmental Agency. In most instances, the Lead Agency will be available for direction and consultation on the response. However, if conditions warrant, a Unified Command (UC) will be established between the TC Energy IC and the Lead Agency. Once established, the UC will jointly decide on response actions.

Provincial and/or municipal emergency services agencies will respond to the incident for emergencies such as fire/explosion events, security related issues, etc. Upon their arrival at the ICP, the IC will meet with the lead representatives from the various response agencies. In certain instances, (e.g. a fire, or explosion or security event), the chief of the fire department or police department may assume command of the incident from the TC Energy IC. If this occurs, the



Company First Responder or Company IC will assist the Emergency Services IC while serving to oversee TC Energy's interests. When the emergency is declared over, the Emergency Services IC will turn command and control back to the Company IC. In other event scenarios, a UC will be established between the TC Energy IC and the lead representative from the responding agencies.

3.3 Incident Facilities

Numerous physical locations can be used to support incident management; some of these facilities are used directly by the IMT to coordinate activities, provide support to the Operations Section, and assist with the organization and tracking of resources. Other facilities may also be established, commonly at a greater distance from the incident site, and these facilities can be used to support the Incident Management Team.

3.3.1 Incident Command Post

The Incident Command Post (ICP) is the field or virtual location at which the primary tactical-level, incident command functions are performed. The ICP may be virtual, collocated with the incident base or other incident facilities and may be identified by a green flag.

The ICP will be determined by the actual location of the event, taking into consideration which Field Offices and Facilities are available to support a temporary ICP while a full deployment is coordinated with the IMT and a more suitable option is evaluated and selected if required (trailers, hotel rooms, others).

The ICP should be equipped with tables, a situation status display (physical or virtual) and copies of maps and contact lists.

3.3.2 Staging Area

Staging Areas are any location(s) established where resources can be placed while awaiting a tactical assignment. The Operations Section manages Staging Areas.

3.3.3 Reception Centre

Reception Centre personnel establish a specialized facility called the Reception Centre outside the Emergency Planning Zone (EPZ) at a suitable, safe location near the incident. Reception Centre personnel address the concerns and immediate needs of the evacuated public. Arrangements for alternative accommodation, reimbursement of daily expenses and temporary care of evacuated property are managed through the Reception Centre. Evacuees will not be housed at the Reception Centre.

4 PLAN IMPLEMENTATION

The Company is committed to conducting business in a safe and responsible manner. When an emergency does occur, the Company will take prompt action to protect public safety, limit the impact as result of the events pertaining to the emergency, make repairs, restore service, assist affected parties as appropriate, and communicate with those involved.

This Section describes the specific procedures used to safely and responsibly respond to an emergency.



4.1 Response Process

This Section of the ERP applies to all emergency events – all hazards, and all Canadian Gas Operations assets. When preparing for emergency response, the following emergency situations include a hazard-specific response actions defined in this section:

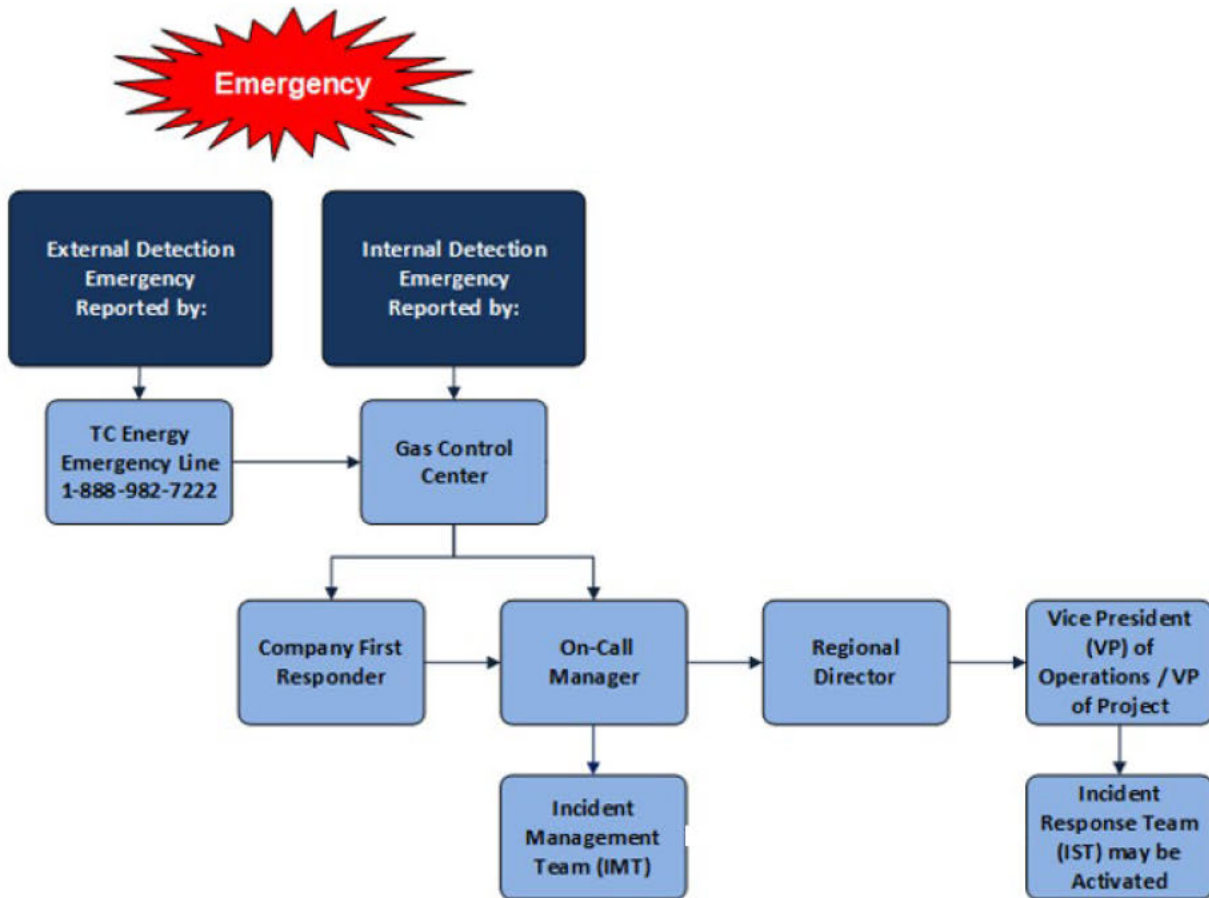
- Gas detected inside or near any building, especially buildings used or intended for human occupancy.
- A fire located near or directly involving a Company pipeline facility.
- An explosion occurring near or directly involving a Company pipeline facility.
- Natural disasters or other outside forces such as excavation which created a potential or actual emergency.
- Security Incidents, including bomb threats and suspicious packages.

**IN ALL CASES, EMPLOYEES SHOULD FIRST TAKE ACTION TO PROTECT HUMAN LIFE,
THEN THE ENVIRONMENT AND PROPERTY**

This section provides the procedures to be implemented upon identification of an emergency.



4.1.1 Activation Flowchart





4.1.2 Company First Responder

The Company representative first to arrive at the incident site is the Company First Responder. Two key responsibilities of the First Responder are as follows:

1. Take prompt action to protect human life, then the environment and property.
 2. Ensure communication is established with local emergency services. Local emergency response officials shall be contacted anytime an incident poses a threat to public safety.
 3. Maintain contact with the On-Call Manager or Incident Commander
- Response to any type of emergency must be timely and adequate. To best coordinate First Responder actions with response actions taken across the Company, the First Responder shall take actions in accordance with the [CG Company First Responder Checklist](#) found in [Appendix B: Forms](#).

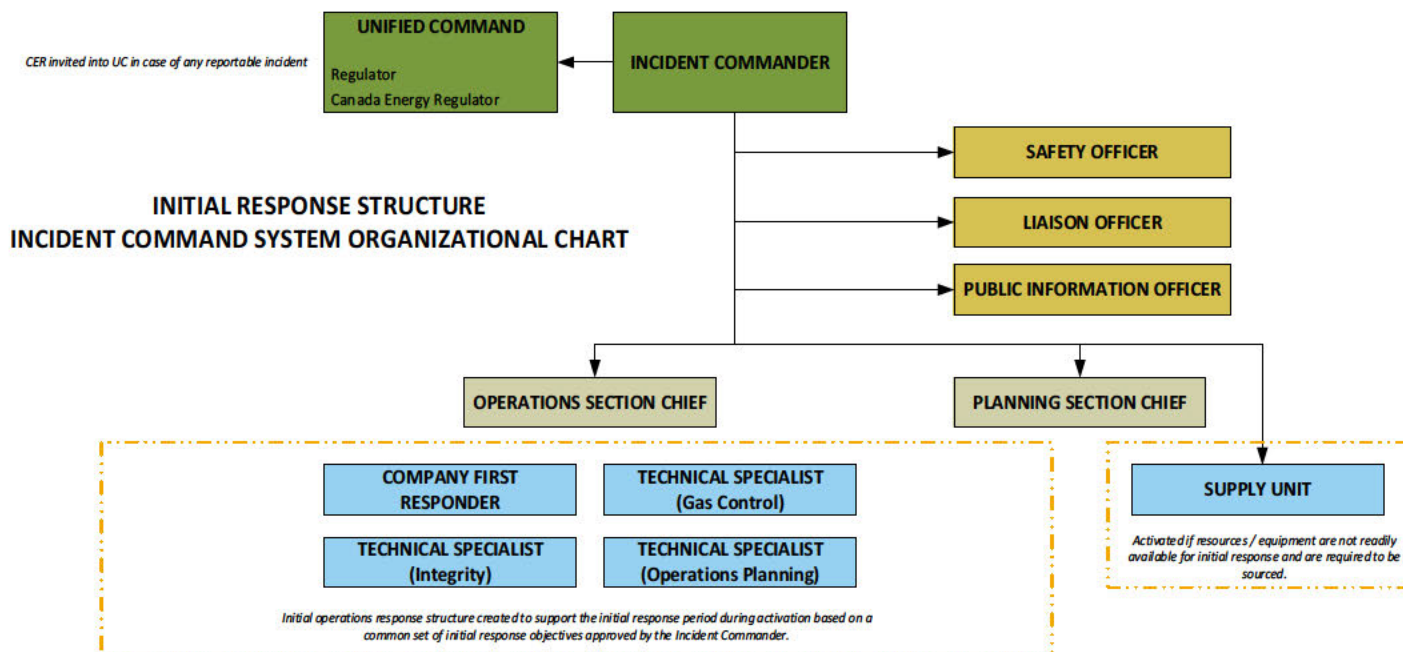
4.1.3 On-Call Manager

The On-Call Manager is responsible to ensure the safety of Company First Responders and personnel. To best coordinate On-Call Manager actions with response actions taken across the Company, the On-Call Manager shall take actions in accordance with the [CGO Regional On-Call Manager Checklist](#) found in [Appendix B: Forms](#) or as summarized in the table below.

4.1.4 Incident Management Team (IMT)

As mentioned above, an IMT is a person or group of people who respond to emergencies to set objectives, manage resources and logistics, and otherwise support personnel executing the specific tactics to stabilize and resolve the emergency.

4.1.4.1 Initial Response Structure Based on Immediate Notifications and Activations



Where needed, additional resources can be deployed to support the Company First Responders. Lines of Business will source Incident Management Team (IMT) personnel to be mobilized to support the incident. Should the incident response require, the IST will be stood up and additional Company resources deployed either onsite or by virtual methods.

IMT roles should reference the CG IMT role checklists which are available through the Emergency Management Website and found in [Appendix B: Forms](#).

4.1.4.2 Documentation of Initial Response

A log must be maintained which documents the history of the events and communications that occur during the response. When recording information during Initial Response, it is important to remember that the log may become instrumental in legal proceedings, therefore:

- Record only facts, do not speculate.
- Do not criticize the efforts and/or methods of other people/operations.
- Do not speculate on the cause of the incident.
- Do not skip lines between entries or make erasures. If an error is made, draw a line through it, add the correct entry above or below it, and initial the change.



- e) Record the recommendations, instructions, and actions taken by government/regulatory officials.
- f) Document conversations (telephone or in person) with government/regulatory officials.
- g) Request that government/regulatory officials document and sign their recommendations or orders (especially if company personnel do not agree with the suggestions, instructions, or actions).

An [ICS 201 Form](#) and [ICS 214a Form](#) are the preferred form to be used for documentation for initial Incident Response. Forms are in [Appendix B: Forms](#) of this Plan.

Proper documentation during emergency response is vital. In early phases of an emergency, high stress levels and fatigue decrease responder's ability to accurately recall actions and information. As the incident grows, documentation becomes an important means of sharing information with internal and external stakeholders and rightsholders. Finally, when an emergency is closed, documentation becomes the permanent record of the incident and subsequent response.

Due to the importance of proper documentation and note taking during an emergency, the Company has prepared [Note Taking form & Completion Guidelines](#) to assist all Company personnel with understanding the importance, concern, and legalities of proper record production.

4.2 Notifications

4.2.1 24-Hour Emergency Line

TC Energy has contracted a 24-hour seven-day a week trilingual answering service. The following is a description of the services provided:

- Answers "TC Energy's Emergency Line" incoming calls.
- Provide 24-hr trilingual (English, French & Spanish) call service.
- Prompt response to all calls.
- Record all calls.
- Contact the Control Centre and inform them of the emergency call.

Contact information for this 24-Hour Emergency Line is included in Annex Section 2.2.

4.3 Matrix for Classifying Emergencies

Emergency Classification Matrix			
Consequence of Emergency Rank		Likelihood of Escalation Rank	
Consequence Example	Rank	Rank	Likelihood Description
- No worker injuries. - No/low media interest. - Impacting only Company property.	1	1	- Emergency is contained or controlled and is unlikely to escalate. - There is no chance of additional hazards.
- First aid treatment required for employee. - Local/regional media interest. - Incident has potential to impact	2	2	- Control of the emergency may have deteriorated, but imminent control of the hazard is probable. - It is unlikely that the emergency will



off Company property/ROW.			further escalate.
- Employee requires hospitalization. - Regional/national media interest. - Has impacted off Company property - public health/safety could be jeopardized.	3	3	- Imminent and/or intermittent control of the emergency is possible. - The Company has the capability of using internal and/or external resources to manage and bring the hazard under control in the near term.
- Fatality. - National/international media interest. - Has impacted off Company property - public health/safety could be jeopardized and environmentally sensitive areas are impacted.	4	4	- Emergency is uncontrolled. - There is little chance that the Company can bring the hazard under control in the near term.
CHOOSE THIS COLUMN'S RANK HERE >>		+	<< CHOOSE THIS COLUMN'S RANK HERE
TOTAL EMERGENCY SCORE	= ____		

EMERGENCY SCORE >	Alert (Score = 2-3)	Level 1 Emergency (Score = 4-5)	Level 2 Emergency (Score = 6)	Level 3 Emergency (Score = 7-8)
Response Team Posture	Managed by Field Operations.	Local IMT deployed. IST notified.	IMAT leveraged as needed. IST active. CMT notified.	IMAT leveraged as needed. IST & CMT active.
Resource Requirements	Immediate and locally available.	Begin to establish resources that may be required.	Limited supplemental resources required.	Significant incremental resources required.

4.4 Responder Safety and Public Protection Measures

Public protection measures outlined in section 4.4 may be utilized depending on response requirements and hazards posed by an incident. TC Energy will collaborate and align with local authorities on public protection measures.

4.4.1 Responder Safety

An essential element to effectively and safely responding to any incident is the establishment of responder safety (company personnel) / site control zones. Not to be confused with Public Safety Zones. Responder Safety Zones are established by the Incident Commander or Safety Officer to:

- Ensure responder safety by limiting access to authorized personnel based on the risk(s) posed within the zone.
- Reduce the accidental spread of hazardous substances by workers and responders.
- Reduce exposure to hazards through restricted access and appropriate mitigative measures including but not limited to personal protective



equipment (PPE).

Responder safety zones specify:

- The type of operations that can occur in each zone;
- The degree of hazard(s) at different locations within the incident site/impacted area; and
- The areas at the incident site that should be avoided by unauthorized or unprotected employees.

The responder safety zones are defined specifically for each incident based on the nature and severity, as approved by the Incident Commander.

4.4.2 Health and Safety

It is the corporate policy of the Company to provide a safe workplace for all workers. All employees and contractors are responsible for maintaining the safety and health of all workers on the pipeline and the response operations.

Prior to engaging in any response activity:

- All employees/contractors must receive orientation from the HSE Company Safety Orientation and the Site-Specific Safety Orientation. External Contractors can access the course at <https://tcenergy.icomproductions.ca>.
- All other personnel will have completed appropriate training for their position.
- No employee/contractor shall engage in activities without the appropriate protective equipment and training.

4.4.3 Personal Protective Equipment

As required by the standard, PPE must be selected which will protect employees from the specific hazards which they are likely to encounter during their work on-site.

Selection of the appropriate PPE is a complex process which should take into consideration a variety of factors. Key factors involved in this process are identification of the hazards, or suspected hazards; their routes of potential hazard to employees (inhalation, skin absorption, ingestion, and eye or skin contact); and the performance of the PPE materials (and seams) in providing a barrier to these hazards.

The amount of protection provided by PPE is material-hazard specific. That is, protective equipment materials will protect well against some hazardous substances and poorly, or not at all, against others. In many instances, protective materials cannot be found which will provide continuous protection from the particular hazardous substance. In these cases, the breakthrough time of the protective material should exceed the work durations.

Other factors in this selection process to be considered are matching the PPE to the employee's work requirements and task-specific conditions. The durability of PPE materials, such as tear strength and seam strength, should be considered in relation to the employee's tasks. The effects of PPE in relation to heat stress and task duration are a factor in selecting and using PPE. In some cases, layers of PPE may be necessary to provide sufficient protection, or to protect expensive PPE inner garments,



suits or equipment.

The more that is known about the hazards at the site, the easier the job of PPE selection becomes. As more information about the hazards and conditions at the site becomes available, the site supervisor can make decisions to up-grade or down-grade the level of PPE protection to match the tasks at hand.

The following are guidelines that can be used to begin the selection of the appropriate PPE. As noted above, the site information may suggest the use of combinations of PPE selected from the different protection levels (i.e., A, B, C, or D) as being more suitable to the hazards of the work. It should be cautioned that the listing below does not fully address the performance of the specific PPE material in relation to the specific hazards at the job site, and that PPE selection, evaluation and re-selection is an ongoing process until sufficient information about the hazards and PPE performance is obtained.

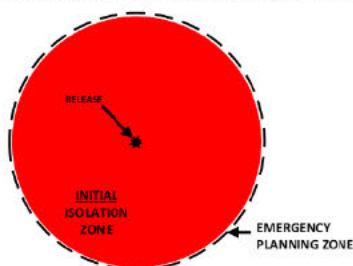
4.4.4 Emergency Planning Zone Determination

Emergency Planning Zone (EPZ)

The Emergency Planning Zone (EPZ) is a geographical area surrounding a well, pipeline, or facility containing hazardous product that requires specific emergency response planning. Responses for public protection in this area can include shelter-in-place, evacuation, and release ignition. All personnel must ensure they are familiar with the size of the EPZ.

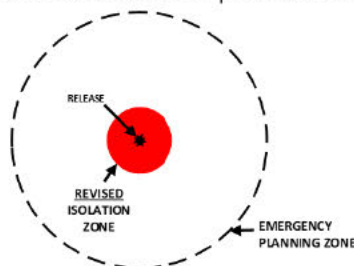
Initial Notification of an Emergency

– Limited to no information on current situation.



Reduce Isolation Zone

– Sufficient information and protective measures in place.



Initial Isolation Zone (IIZ) / Closest to Incident

The Initial Isolation Zone (IIZ) defines an area surrounding the incident in which people may be exposed to dangerous (upwind) and life-threatening (downwind) concentrations of material.

Sheltering-in-place may provide limited protection therefore all evacuation efforts must be initially focused in this zone.

If air monitoring is required to determine the size of the IIZ, response personnel should approach the perimeter of the response zone cautiously and from upwind, so as not to exceed personal exposure limits.

**Emergency Response Guidebook (ERG)**

This guidebook will assist responders in making initial decisions upon arriving at the scene of a dangerous goods incident. It should not be considered as a substitute for emergency response training. The ERG does not address all possible circumstances that may be associated with a dangerous goods incident. It is primarily designed for use at a dangerous goods incident occurring on a highway or railroad.

To view the ERG - 2024: [Canada Emergency Response Guidebook 2024](#)

4.4.5 Isolation of the Emergency Planning Zone

TC Energy may establish and manage manned roadblocks in order to prohibit unauthorized entry into the response zones. It may also become necessary to obtain a fire hazard order, Notice to Airmen (NOTAM), or to declare a state of local emergency to restrict access to a designated area.

Roads	Roadblock personnel can set-up roadblocks on lease roads. The local authority must authorize the roadblocks on public roads within the municipality. The Provincial Transportation Authority must authorize road closures on Provincial highways. Municipal personnel may assist with maintaining roadblocks during an emergency response.
Trails	Access to trails may be restricted with roadblock personnel and/or municipal or provincial personnel.
Railroads	CN, CP or private railroad companies will need to be notified of the situation and will stop or relocate rail traffic.
Rivers	Rivers may need to be monitored to ensure that recreational users do not travel into the EPZ. This may be accomplished by working with municipal, provincial, or private companies.
Air	Notification to NAV Canada may be required to issue a NOTAM to advise pilots of airspace restrictions above the EPZ.

4.4.6 Air Quality Monitoring

Air quality monitoring is used to track and record the presence, concentrations, and lower explosive limit levels (LEL) of materials (such as sweet gas) following a release. Air quality monitoring occurs downwind, with priority being directed to the nearest un-evacuated residence or area where people may be present.

Air monitoring is used for:

- Determine if evacuation or sheltering is required based on criteria
- Determine response zones and roadblock locations
- Determine if the emergency can be downgraded based on readings
- Determine if response actions need to be taken beyond the EPZ

The type of air monitoring units and the number of monitors required are based on site specific



information, including:

- Access and egress points
- Population density and proximity to urban density developments
- Local conditions
- Incident severity

Air quality monitoring occurs downwind, with priority being directed to the nearest un-evacuated residence or areas where people may be present.

4.4.7 Evacuation

Within the EPZ, notification and evacuation is based on the risks associated with the release. Evacuation is the primary public protection measure when the public may be exposed to a hazardous situation and can be safely removed from the area. Evacuation begins in the IIZ and expands outward into the PAZ (downwind of the release).

If safe to do so, evacuation should take place before a hazardous situation has the potential to affect people in proximity. Careful consideration will be given to designate the safest evacuation route(s) for personnel and members of the public to evacuate the area.

If, due to deteriorating conditions, evacuation is necessary, it will begin with of all residents closest and downwind from the release. This will occur through telephone calls, possible rover visits and pre-determined roadblock locations.

NOTE: Canada Gas can recommend evacuation but cannot force evacuation of the public. Mandatory evacuations can only be issued by the authority having jurisdiction.

Rovers

In the event of an emergency, Rovers may be activated to ensure public safety is preserved. Rovers are responsible for travelling and monitoring the EPZ during an emergency. Rovers ensure all transients, recreational users, residents, and other area users are properly notified and/or evacuated if the situation warrants. Rovers should be equipped with vehicles capable of carrying passengers allowing them to assist in the evacuation of the EPZ. Rovers will also be equipped with the appropriate PPE.



4.4.8 Shelter-In-Place

Shelter-in-place is the practice of going or remaining safely indoors during an outdoor release of a hazardous substance.

Shelter-in-place has been demonstrated to be an effective response during the first few hours of a substance release where public would be at the highest risk outdoors. Sheltering creates an indoor buffer to protect an individual from high concentrations that may exist outside.

Members of the public within the EPZ but outside of the PAZ may be contacted and advised to initially shelter in place pending further instructions from a CGO representative.

TC Energy may consider issuing a Shelter-in-place notice in conjunction with local authorities.

Sheltering indoors is a viable public protection measure when:

- There is insufficient time or warning to safely evacuate the public that may be at risk.
- Residents are waiting for evacuation assistance.
- The release will be of limited size and/or duration.
- The location of the release has not been identified.
- The public would be at higher risk if evacuated.

4.5 Response Process

Emergency Response is defined as an aggregate of decisions and measures taken to achieve the following:

- Contain or mitigate the effects of an emergency to prevent any further loss of life and/or property.
- Restore order in the immediate aftermath of an emergency.
- Re-establish normalcy through reconstruction and rehabilitation shortly thereafter.

In the unlikely event of a leak to an asset, Canada Gas Operations will respond immediately by closing valves (as safe to do so) and dispatching emergency response personnel. The principal focus of the initial response is to isolate the impacted segment(s) of the effected pipeline and then close shut-off valves in the vicinity of the leak to limit its impact. Actual response times will vary depending on the location of the leak. However, CG Operations is prepared to transport and mobilize any required personnel and equipment via ground, air and water. Personnel and equipment are strategically placed along the pipeline for a quick and safe response.

4.5.1 Search and Rescue

CGO personnel are not trained to conduct search and rescue operations. CGO personnel will work to identify personnel on site during an emergency and will use this information to support Local First Responders to conduct Search and Rescue Operations.

4.5.2 Serious Injuries and Fatalities

A *Critical Injury and Fatality Response Procedure (CAN-US-MEX)* (Item ID [006198710](#)) has been developed to help staff and leaders deal with issues related to a Critical Injury or Fatality of an employee or the fatality of a contractor who is actively engaged in work activities at a CGO site.

Additionally, some key initial actions are identified in the: [Critical Injury-Fatality ERP first-hour Checklist](#).

4.5.3 Notification of Next of Kin

Due to privacy issues, TC Energy takes extreme precautions not to access the next of kin files unless we have a defined emergency event involving the health and safety of our employees.

When an employee, contractor or member of the public is seriously injured, missing, or pronounced dead, the next of kin must be notified as promptly as possible.

Responsibility for Notification

Employee	Notification of an employee's next of kin is the responsibility of the RCMP, local police, or sheriff.
Contractors	Notification about contractors should be made by the RCMP, local police, or sheriff together with the employer. The Incident Commander will ensure that the contractor's management is notified. Some independent contractors may not have a head office.
Public	If a member of the public is injured or killed as a result of TC Energy operations, notifications will be coordinated through the RCMP, local police, or sheriff.

Before Notifying the Next of Kin

- Never release names before the next of kin are notified.
- Whenever possible, a senior company representative will participate with the RCMP, local Police, or sheriff.
- Be prepared to support the next of kin. Consider assistance such as transportation, childcare, alternative accommodation, reimbursements for daily expenses and the temporary care of the family home if required.
- Make the notification in person, not by telephone or through an intermediary.
- Provide the relatives with as much information as possible. Present only the facts; do not speculate.
- Do not discuss personal views of liability or fault.
- Be prepared to listen to what people are saying. Allow the next of kin to vent their emotions.
- Attempt to support and reunite families as quickly as possible.
- Offer assistance; document key issues and concerns.
- Document the details of anyone who appears to be having trouble coping with the incident so that he / she can be given prompt support.
- Do not leave the next of kin alone.
- Offer to contact a neighbor, friend, relative, minister, doctor, or counsellor.
- Leave your name and telephone number with family members

In addition, the *Critical Injury and Fatality Response Procedure (CAN-US-MEX)* (Item ID [006198710](#)) noted above, provides a detailed description of roles and responsibilities to respond to Serious



Injuries and Fatalities. Initial actions are also detailed in the: [Critical Injury-Fatality ERP first hour Checklist](#).

4.6 Incident Specific Response Actions

4.6.1 Medical Emergencies

A medical emergency is a condition that requires care beyond first aid (i.e., chest pain, unconsciousness, trouble breathing, severe bleeding, burns, seizures, etc.). Employees who encounter a serious medical emergency should seek help immediately.

Immediately call 911 or other first responders. If trained and willing, render first aid and make the affected person as comfortable as possible until emergency medical help arrives.

Medical Emergency
Mitigation Strategies
- Do not move the injured or ill person unless the person is in danger of further injury or illness. - Make the injured or ill person comfortable and have someone stay with them. - Call 911. Provide the dispatcher with your name, specific location, call-back number, and the nature of the emergency. - If an Automatic External Defibrillator (AED) is in the building, use the AED in the event of sudden cardiac arrest.
Response Actions
- Do not move the injured or ill person unless the person is in danger of further injury or illness. - Make the injured or ill person comfortable and have someone stay with them. - Call 911. Provide the dispatcher with your name, specific location, call-back number, and the nature of the emergency. - Contact the Area Manager. - If an Automatic External Defibrillator (AED) is in the building, use the AED in the event of sudden cardiac arrest.

4.6.2 Facility Evacuation

Facility Evacuation
Response Actions
- Initiate the appropriate warning system or alarm. - Evacuation of Company personnel is often an effective and appropriate response action. When an evacuation occurs, the following actions must also be taken: - Account for all personnel on site. This is accomplished through head counts, sign-in sheets, communication with supervisors and other means. - If the integrity of the facility is compromised, use the Emergency Shut-Down (ESD) or otherwise isolate the facility. - Notify the Gas Control Center of the evacuation. - Notify the Area Manager of the evacuation. - If a facility evacuation is required, no employees shall remain on the site – even to perform plant operations or to rescue others. All personnel must evacuate and await the arrive of emergency services before returning to the facility. - Additional, site specific Facility Evacuation Procedures are located in site specific plans. - Ensure the “Company First Responder Responsibilities & Action Checklist” has been completed



4.6.3 Facility/Pipeline Rupture, Fire or Explosion

Facility/Pipeline Rupture, Fire, or Explosion
Response Actions • Immediately evacuate people in the general vicinity to a safe area. • Avoid or eliminate possible ignition sources, such as cell phones and open flames/sparks. (Additional ignition sources may include laptops/tablets, cigarettes, electric switches, light switches, doorbells, garage door openers, thermostats, electrical motors, firearms, vehicles, telephones, emergency radios, construction equipment, and static electricity.) • Direct vehicular traffic away from area. • Call 911 to ensure notification of emergency services (Fire, Law Enforcement, EMS). • Initiate the appropriate warning system or alarm if safe to do so. • Account for all personnel who were on site at the time of the event. • Administer First Aid as applicable. • Isolate if safe to do so in collaboration with Gas Control Centre • If a Company natural gas transportation facility is involved, no attempts shall be made to extinguish the fires beyond the incipient stage, except via isolation & shut-down or controlled burnout. • ESD the facility/pipeline • Consider the use of barricades and flagging to secure the area. • Establish roadblocks, if necessary, until Emergency Services arrive on site. • Ensure backup assistance is being mobilized to support initial response actions. • Only qualified Company personnel should operate pipeline valves or equipment. • Emergency Services may attempt to extinguish fires on nearby buildings, property or lands to prevent secondary damage. • Determine if any additional personnel, tools, and equipment are necessary to make repairs. Secure these additional needs from the most convenient sources.

4.6.4 Pipeline Leak

Pipeline Leak
Response Actions • Initiate the appropriate warning system or alarm. • Evacuate all personnel from hazard area, consider the following: ○ Move to a safe area immediately. ○ Move upwind if the release is downwind of your location. ○ Move crosswind if the release is upwind of your location. ○ Move to higher ground if possible. ○ Initiate Public Safety Measures where local emergency services are not available. • Shut off all ignition sources if safe to do so. • Assess the situation. • PSD or ESD Plant as needed. • Provide Control Room with a description of the situation. • Obtain appropriate SDS for the released product to ensure hazard awareness. • Determine the necessary Personal Protective Equipment (PPE) needed to safely carry out response actions.



- Determine need for backup or outside resources.
- Contact Emergency Services 911 (local Fire, Police, EMS) directly for life safety issues, uncontrolled emergencies, or when response assistance is required.
- Isolate and contain the release/leak, if possible.
- Ensure backup assistance is being mobilized to support initial response actions.
- Ensure the "Company First Responder Responsibilities & Action Checklist" has been completed.

4.6.5 Gas Detected Inside or Near a Building

Gas Detected Inside or Near a Building	
<i>Response Actions</i>	
• Avoid or eliminate possible ignition sources, such as cell phones and open flames/sparks. (Additional ignition sources may include laptops/tablets, cigarettes, electric switches, light switches, doorbells, garage door openers, thermostats, electrical motors, firearms, vehicles, telephones, emergency radios, construction equipment, and static electricity.) • Do not operate any light switches, doorbells, garage door openers or thermostats as you leave. • Do not hang up the phone after finishing conversation if the call is being made from a building containing gas, since it could cause a spark and ignition. • Immediately evacuate people in the general vicinity to a safe area. • Notify the area manager/supervisor and the appropriate gas control center and proceed as directed • Initiate TC Energy emergency response based on severity and report the incident in the EHSM system	



4.6.6 Sour Gas Detected at or Near Facility

Sour Gas Detected at or Near Facility
Response Actions • Immediately evacuate people in the general vicinity to a safe area. • Direct vehicular traffic away from area. • Only qualified Company personnel should operate pipeline valves or equipment. • Emergency Services • Avoid or eliminate possible ignition sources, such as cell phones and open flames/sparks. (Additional ignition sources may include laptops/tablets, cigarettes, electric switches, light switches, doorbells, garage door openers, thermostats, electrical motors, firearms, vehicles, telephones, emergency radios, construction equipment, and static electricity.) • Determine if any additional personnel, tools, and equipment are necessary to make repairs. Secure these additional needs from the most convenient sources.

4.6.7 Encroaching Grassland or Bush Fires

Encroaching Grassland or Bush Fires
Response Actions • Contact Provincial Forestry agency. • Stay at a safe distance. Protect people first and property second. Secure the area and restrict access to trained personnel only. • Contact Canada Gas Control Centre (CGCC) with the following information: ○ A description of the situation. ○ The location of the fire and your exact location. ○ An assessment of whether Company personnel can handle the fire. ○ A request for what assistance is needed. ○ Possible activation of the Emergency Management System. • CGCC/ IMT will: ○ Notify necessary emergency response agencies, including fire departments as necessary. ○ Dispatch Company personnel and equipment. ○ Log times of significant events. ○ Coordinate offsite activities and monitor communications. • Site Personnel - Evacuate any adjacent facilities or buildings that may be endangered. Wait for assistance to arrive if assistance is necessary. • If the fire is due to escaping flammable material, eliminate the flammable fuel source if possible. • Proceed to extinguish the fire, if that is desirable. Use whatever firefighting equipment is available, remembering the proper firefighting techniques. • If the fire is to be contained by a fire department, and the fire involves Company facilities, establish Unified Command and inform the fire official in charge of what to do and what not to do regarding the Company facilities. • Allow the fire to burn out by itself, if that is desirable, because of escaping flammable material. Advise Fire Department to contain secondary fires. • Ensure responding agencies are made aware of the location of any buried pipelines. Encroachment over the pipelines should be closely monitored to ensure that proper procedures and appropriate equipment are selected to reduce any likelihood of buried pipeline damage.

Fires near the pipeline right-of-way and fires involving facilities, Company personnel should control



the situation and coordinate activities with outside firefighting personnel, as needed. Any large fires that involve the services of external firefighting agencies, the Incident Command System will be established.

Forest Fires or Wildfires

Forest Fire or Wildfires
Mitigation Strategies
- Preventative measures may include, but are not limited to: - Isolate the pipeline facility or minimize the risk from fire by trenching, watering, removing combustibles in the area and/or other appropriate measures, - Shut off gas to facilities as deemed appropriate. Company personnel should communicate with Gas Control the coordinate response to shutting off pipeline supplies unless the situation is an immediate threat to public safety. Company personnel should communicate with Gas Control as the situation warrants.
Preparedness in Fire Prone Areas
- Communicate with fire authorities to share key contact information and communication expectations. - Ensure fire authorities are familiar with the location of pipelines within their jurisdiction and know the risks of digging and driving heavy equipment across the ROW. - Share existing company excavation procedures, safety guidelines, crossing requirements, and depth of cover/weight restrictions. - Request that fire lines be constructed on the edges of the ROW (not over the pipeline). - The Company prefers Company personnel to be on site to monitor activity on the ROW. - Fire agencies may use ROW as a firebreak/fire line; ensure fire agencies know they are required to make an emergency one-call before disturbing ground on the ROW. Stake the pipeline to identify the location of the pipe(s) in the right-of-way. - Pre-draft the appropriate information to complete a formal pipeline crossing agreement. Send required information to the Land Department.
Response Measures
- If a fire is within 10 km of a Company facility, leadership shall: - Consider evacuating personnel from the site. Determine a safe place to relocate. - Because forest fires create their own wind and are unpredictable, employees will be evacuated out of the fire area for their safety. - Report the situation to the On-Call Manager and the Control Center. - Leadership should consider if an IMT is required - IMT should consider if an Incident Command Post is needed and if so, where the Incident Command Post will be established (may be a mobile Command Post). Consider the following: - Located within a secured area - Access and egress routes from stations in question - Need to isolate facility (isolate remotely if possible) - Notifications both internally and externally.



- Management of resources in or near fire area.
- Site personnel and/or the IMT shall maintain periodic contact with the local fire authority and the appropriate Federal, Provincial or local agency (if possible) as applicable for status and direction of the fire.
- Monitor road closures that may hamper the movement of Company personnel into or out of the site.
- If a fire is within 10 km of a Company facility or Project, or if there is a potential for operational changes or impact due to a fire, Canadian Regulatory Compliance shall:
- Evaluate reporting requirements for affected jurisdiction and make any required regulatory notifications.

Considerations to Prepare a Facility Prior to Evacuating

- Leadership should decide whether site isolation is required.
- Gas Control should determine what the system requirements are without the threatened/damaged facilities in service.

General Considerations

- Maintaining gas flow through a pipeline will dissipate heat; Gas Control and Field Operations must collaboratively weigh the risks of isolating a station in proximity to a fire.
- Eliminate stagnant flow - Review P&ID for above ground vs below ground components. Above ground components should continue flowing or be blown down. Check for dead heading on above ground equipment.
- Shutdown and blowdown station if possible. Open recycle valve to maintain gas flow through station.
 - Heat may affect the site electronics and SCADA equipment causing Gas Control to lose communication or control over the facility.
 - Decision should include consideration for any maintenance issues (valves out of service, maintenance activities) that could affect normal isolation procedures or hazards
 - Review methane emissions (LDAR) data for existing issues. Severity of issues could inform strategy for blowdown vs continued operation.
 - Consider minimum unit maintenance requirements (e.g. liquid top ups) for longer term evacuations.
- Minimize pressure in area to provide buffer in case a compressor unit goes down and OPP device is triggered.
- Draw down local line pack.
- Consider making temporary OPP design/system changes. Especially where slam shut valves used for OPP could block flow through the pipeline or fail closed valves are installed.
- Customers shutting in could result in stagnant flow, or unit shut down could result in unplanned flaring by a producer. Customers and producers will be made aware of this possibility, so they can determine their course of action if this were to occur.
- Remove flammable products from storage areas and/or provide information on remaining



products to fire services.

- Empty meter station drain and dump tanks (including below ground), and drain mercaptan as low as possible.
- Cover building windows and close doors. Assess location of any fire-eyes.
- With brushing controlled, impact should be radiant heat only (no fire on facility footprint).
- Meter stations and valve sites are typically considered at higher risk the Compressor Stations of exposure to heat from a forest fire, as there is less of a buffer area.
 - There should be no reason to drop fire suppressant on facility footprint.
- Ensure appropriate ROW crossing oversight for bulldozers clearing brush and moving along ROW

Pre-Evacuation Activities to Support Post-fire Integrity Assessment

- Walk down site and take video and pictures, focusing on fence and painted surfaces near fence. Review the “Important Indicators” in Fire Investigation: Data Collection for Damage Assessments (CDN) (Item ID: 1014991472) for a list of key components to document
- Install temperature stickers at different distances from fence.
- Deploy and implement High Temperature Data Logger (HTDL)

Component Specific Considerations

- APU/PPU - Remains on if station is continuing to operate
- Boilers and Pumps - Glycol piping insulation is not flammable. Low flow from utility gas, low risk component.
- Coolers - Will either have gas flowing through dissipating heat or will be shutdown. No impact.
- Fire Suppression - Remains active. Assess location of any fire-eyes and block windows.
- Instrumented Air - Filter will catch ash. Ignition unlikely due to position.
- Fuel Gas and Utility Lines - Remains open if unit will continue operating. If decision is made to shutdown and blowdown compressor unit, consider blowing down fuel gas and utility lines. Consider by-passing the fuel meter depending on proximity to facility boundary.
- OPP Pressure Relief - Tubing, power gas, wires and seals would all be impacted if exposed to heat. Consider operating without OPP if gas flow/ line pack are low. Applies to control valves & regulators as well.
- ESD Valves that Fail Open - Consider additional fire protection measures to protect components
- Valves – For valves that fail closed and could block flow, consider disabling HPSP to keep gas flowing below ground instead of venting. Isolate power gas feeding hydraulic actuators on isolation valves and leave them in the normal operational position as confirmed by Operations Planning. Depressurize the control circuit. Consider risks of disabling line break. If line break is disabled, inform on-call manager, EM team, Operations Planning and Gas Control in case there is an emergency event on the section of line without line break. Valves are fire designed under API up to 750C - 1000C for up to 30min with minimum leakage.
- CP Systems - Consider LOTO if equipment is outside of station. This will also eliminate arcs/sparks for any other preparatory actions.
- Electrical, Instrumentations & Controls - De-energize if compressor will not be operating. If



utility powering electric motor driven (EMD) unit is no longer supplying energy, de-energize high voltage line. Maintain communication with local utilities to provide insight into whether APU is running at facility.

Considerations if a Facility is Isolated and Vented

- All gas venting must be done safely and review the process with consideration for weather conditions at the time of the fire.
- If judgement indicates a need and ability to vent the station (considering wind direction and proximity of fire), the station may be vented and isolated by ESD; field operations personnel should discuss the decision with the IMT and/or Area Manager before venting a station in proximity to a fire.
- Forestry Officials and Authorities must be advised if gas will be vented to restrict all aerial traffic from flying over or near the compressor station. An ESD of the facility could happen at any time so it is imperative there be no aerial traffic above or within 750 meters of a compressor station.
 - The local authority having jurisdiction (example Forestry, Dept. of Natural Resources, Fire Boss etc.) must give permission for venting of gas in a forest fire area.
 - Local Emergency Services must be notified if venting of station occurs near a roadway.
- When venting is complete, ensure you call the appropriate authorities you have completed your venting.

Considerations if an Evacuation of site is required

- Inform the Monitoring Center/Gas Control and the IMT of personnel evacuation routes and final destination. Notify the Monitoring Center/Gas Control and the IMT to confirm arrival at your destination.
- If working with local authorities on creating fire breaks:
Notify Monitoring Center/Gas Control and Area Management.

After a Forest Fire

- Assess the situation to ensure personal and others' safety.
- Initiate the appropriate warning system or alarm.
- Move to a safe area immediately. Evacuate personnel from the hazard area; consider the availability of safe evacuation routes.
- **NOTIFY GAS CONTROL & ON-CALL MANAGER** to provide them with details of the emergency.
 - A description of the situation.
 - The location of the fire and your exact location.
- Determine need for backup or outside resources. Contact Emergency Services as needed - **call 911!**
- Leadership should consider if an Incident Command Post (ICP) is needed and if so if it is safe to utilize the primary ICP location (consider utilization of mobile Command Post and where this should be located).
- Decision for facility isolation should consider any maintenance issues (valves out of service, maintenance activities) that could affect normal isolation procedures or hazards



- If a facility is on fire, shut off gas to the area unless the area can be made safe without shutting off the gas, and there is a reason to do so.
- Neutralize/ Remove ignition and fuel sources from site if possible.
- Determine what the system requirements are without the threatened / damaged facility (ies) in service
- Whenever possible or as required depending on the scenario, at least two (2) staff members will be involved in any isolation procedures that are conducted
- Determine the necessary Personal Protective Equipment (PPE) needed to safely carry out response actions.
- Above ground facilities exposed to open flames may be damaged. Contact the appropriate Engineering services personnel for assistance in assessing damage prior to returning the facility to service.
- Be sure to document all patrols, inspection or repairs in the Company's work management system. Return the facility to service.
- Ensure the "Company First Responder Responsibilities & Action Checklist" has been completed.

4.6.8 Fire Control

If fires have grown beyond the incipient stage, Canada Gas Operations will work with local and contract firefighting professionals for fire control and suppression.

4.6.9 Flood

Flood
Mitigation Strategies
• Local operations may need to monitor local weather conditions to determine flood preparation requirements. • Preventative measures may include, but are not limited to: ○ Raise vents on critical equipment, such as regulators, to an elevation higher than that expected of the floodwater. ○ Extinguish line heaters if operating conditions permit. ○ Time permitting; evaluate liquid removal from atmospheric storage tanks. ○ Evacuate or secure hazardous materials. ○ Determine if normally aboveground facilities (valves, M&R and relief valve setting, etc.) could become submerged and be struck by watercraft operating in flooded areas. Mark such facilities with buoys as appropriate. ○ Disable line breaks or other automatic safety devices if necessary. ○ Take appropriate measures to protect critical equipment with fences or other temporary means. ○ Take action such as removing valve handles or locking valves to ensure continued service and to prevent possible damage to Company facilities. ○ Ensure regulatory required records are secure. These might include local operation equipment, manuals, compliance cabinet files • Contact the Gas Control Center to inform them of the local actions taken.
During Flooding



- Perform frequent patrols, as appropriate; to evaluate right-of-way conditions at water crossings during flooding and after flooding subsides.
- Have personnel available for emergency response action such as shutdown, isolation, and contamination.
- If gas is leaking at a facility due to physical damage or floodwater having extinguished a pilot light, gas should be shut off to that location (unless the location can be made safe without shutting off the gas supply, and there is a reason not to do so).
- Consider the effect on other consumers on the same pipeline.
- Coordinate with other pipeline companies in the flood area and provide personnel, as appropriate, to emergency response centers to act as liaison for pipeline issues. Provide maps and information on location of pipeline facilities and conditions to emergency responders as required.
- At facilities, use precaution in flooded areas due to the risk of electrocution, swift-moving water and debris, and submerged surface debris and damage.

After Flooding Subsides

- Obtain any necessary entry permits from local authorities.
- Inspect exposed facilities and evaluate for possible damage. Determine if flooding has exposed and/or undermined pipelines as a result of forming new channels or erosion of stream or riverbeds.
- Assure that line markers and signage are still in place. Remind emergency responders, highway departments, contractors and others involved in flood cleanup and clearing activities of the presence and location of pipelines in the area and the potential hazards due to reduced cover over the pipelines.
- Evaluate damage to electric motor and the electrical and control system before attempting to restart the facility.
- If necessary, purge lines prior to returning equipment to service.
Inspect right-of-way of affected pipelines to determine if depth of cover has been reduced. Notify affected landowners of any reduced cover. Agricultural agencies may be helpful in reminding farmers of potential hazards resulting from reduced cover over pipelines.
- Return line breaks or other automatic safety devices to service.
- Notify Gas Control Center of return to service.
- Document any patrols, inspections, repairs or notifications.

4.6.10 Landslide / Rockslide**Landslide****Mitigation Strategies**

- Preventative measures may include, but are not limited to:
 - Protect facilities to the extent possible by erecting barriers.
 - Should the construction of protective barriers not be feasible or effective and destructive damage to the facility is imminent, then other measures should be taken to isolate gas from the facility. Establish alternate means to supply customers (either temporarily or permanently) as required.

After a Landslide



- When a landslide occurs over a buried pipeline, the Area manager should contact the local Pipeline Services personnel to assist with determining subsequent actions that may be required. Temporary or permanent actions may include:
 - Removal of excess material,
 - Relieving stress on the pipeline where soil support has been removed,
 - Other actions as determined by the Pipeline Services personnel.
- If a pipeline facility is covered by a landslide, it may be necessary to shut off the supply to that facility before attempting to uncover. Company personnel should communicate with Gas Control to coordinate response to shutting off pipeline supplies unless the situation is an immediate threat to public safety, Company personnel should communicate with Gas Control as the situation warrants.
- Be sure to document all patrols, inspection or repairs in the Company's work management system. Return the facility to service.

4.6.11 Winter Conditions

Ice Storms/Blizzards	
Mitigation Strategies	
• If severe winter weather is forecast, arrange for additional personnel to travel to critical sites prior to onset of winter weather to provide relief to those on shift. Keep the person they are relieving on site for relief later. • Be aware of Changing Weather Conditions ○ Winter Storm Watch - Conditions are expected but not imminent. ○ Winter Storm Warning - A significant winter storm is occurring, imminent, or likely. ○ Blizzard Warning - Winds at least 56.3km/hr (35 mph), blowing snow frequently reducing visibility to 0.4 km (0.25 miles) or less, and dangerous wind chills are expected. • Listen to local radio stations for weather advisory and road condition reports, carry a survival kit, and start the trip with a full tank of fuel. • Employees that are working at critical company facilities should be prepared to stay on location by doing the following items: ○ Take a supply of emergency food and water to site (canned goods and dry goods) ○ Keep foldable cots and bagged sleeping bags on hand	
During an Ice Storm or Blizzard	
• Company employees should remain where they are and wait until conditions are safe to travel. • Monitoring weather forecasts and road conditions before leaving your safe location.	
After the Storm Passes	
• Obtain any necessary entry permits from local authorities. • Determine alternate routes to impacted Company locations. • Some Company facilities may require an inspection to verify that pressure control equipment has not been damaged as result of ice buildup or stresses to the equipment from the snow conditions. This inspection should be conducted when conditions are safe to do so.	

Avalanches	
Mitigation Strategies	



- For accessing certain mountainous area during winter, preventative measures may include, but are not limited to:
 - Get proper risk assessment done by subject matter expert or consultants. Summit Avalanche Consulting is one approved option.
 - Developing an Avalanche Safety Plan



4.6.12 Severe Thunderstorms

Thunderstorms are a natural event with lightning as a major threat. The potential of flash flooding is also possible when one area is affected for an extended period. A thunderstorm is a natural weather phenomenon where lightning and thunder occur. It is produced by a cumulonimbus cloud, usually producing gusty winds, heavy rain and sometimes hail. A thunderstorm is classified as “severe” when it contains one or more of the following:

- Hail one inch or greater in diameter
- Winds gusting in excess of 50 knots (93 kmh /58 mph)

Severe Thunderstorms	
Response Strategies	
• Ensure the “Company First Responder – All Hazards Checklist” has been completed • Assess the situation to ensure personal and others’ safety. • Notify Control Room of the situation if they are not already aware of latest status. • Assess the need to isolate the facility if possible and safe to do so. • Be aware of changing weather conditions. ○ Severe Thunderstorm Watch - Conditions are favorable to the development of thunderstorms. ○ Severe Thunderstorm Warning - A severe thunderstorm has been observed or is imminent. ○ Flood Watch - Flash flooding is possible within 6 hours after heavy rains have ended. ○ Flood Warning - Flash flooding is occurring or imminent. • Terminate outdoor work when lightning is occurring and move to shelter. • Avoid areas subject to sudden flooding until the thunderstorm passes. • Move to a safe area immediately. Evacuate personnel from the hazard area; consider the availability of safe evacuation routes. • Evaluate the situation after weather event. ○ Does standing water prevent visual inspection? ○ Have flood waters damaged the Pipeline? ○ Have flood waters exposed piping? ○ Has soil shifted that could lead to a landslide? • Evaluate the accessibility of pipeline facilities that may be in jeopardy, such as valve settings, which are needed to isolate water crossings or other sections of a pipeline. • Determine need for backup or outside resources. Contact Emergency Services as needed (911, where available). • Designate someone to monitor local weather information to keep apprised of the current and anticipated weather conditions.	
After Severe Thunderstorm	
• Extend regulator vents and relief stacks above the level of anticipated flooding, as appropriate. • Coordinate with emergency responders on pipeline location and condition. Provide maps and other relevant information to such responders. • Coordinate with other pipeline operators in the flood area and establish emergency response centers to act as a liaison for pipeline problems and solutions. • Deploy personnel so that they will be in position to take emergency actions, such as shut down, isolation, or containment.	



- Determine if facilities that are normally above ground (e.g., valves, regulators, relief sets, etc.) have become submerged and are in danger of being struck by debris.
- Perform frequent patrols, including appropriate overflights, to evaluate right-of-way conditions at water crossings during flooding and after waters subside. Determine if flooding has exposed or undermined pipelines as a result of new river channels cut by the flooding or by erosion or scouring.
- Perform surveys to determine the depth of cover over pipelines and the condition of any exposed pipelines, such as those crossing scour holes. Where appropriate, surveys of underwater pipe should include the use of visual inspection by divers or instrumented detection. Information gathered by these surveys should be shared with affected landowners. Agricultural agencies may help to inform farmers of the potential hazard from reduced cover over pipelines.
- Ensure that line markers are still in place or replaced in a timely manner. Notify contractors, highway departments, and others involved in post-flood restoration activities of the presence of pipelines and the risks posed by reduced cover.
- If a pipeline has suffered damage, is shut-in, or is being operated at a reduced pressure as a precautionary measure as a result of flooding. Advise the appropriate authority before returning the line to service, increasing its operating pressure, or otherwise changing its operating status. The appropriate authority will review all available information and advise the operator, on a case-by-case basis, whether and to what extent a line can safely be returned to full service.
- Make all necessary repairs.

4.6.13 Tornado / Straight-Line Winds

Although many disasters cannot be prevented or predicted, preparation can significantly reduce losses. In the event of a severe weather condition or a natural disaster, the Area Manager or assigned designee will be the IC.

Tornado / Straight-Line Winds	
Response Actions	
• Be Aware of Changing Weather Conditions ○ Tornado watch - Conditions are right for the formation of a tornado. ○ Tornado warning - A tornado has been sighted but is not in the area at this time. ○ Tornado alert - A tornado has been sighted in the immediate area, take cover immediately. • If Severe Weather Conditions Threaten ○ Carry a battery-operated portable radio and monitor conditions. ○ If a tornado is observed and time permits, evacuate the area. ○ If the tornado is approaching a facility, notify the Gas Control Center. ○ In vehicle, drive away from tornado at right angle. Seek shelter if tornado cannot be avoided. ○ If outdoors, shelter in ditch, excavation or other low spot and lie flat, face down. ○ Make certain that all personnel are aware of the condition. ○ Stay in shelter until conditions are safe. • Immediately After the Storm ○ Account for all personnel. ○ Survey for damages. ○ Initiate team for any repairs. ○ Refer to this Plan for additional response guidance regarding fires, spills, etc., as needed.	

4.6.14 Earthquake

The actual movement of the ground in an earthquake is rarely the direct cause of death or injury. Most casualties result from falling objects and debris because the shocks can shake, damage or demolish buildings and other structures.

Earthquake
Response Actions • Stay calm. Don't panic. • If you are indoors, stay there. Do not run outside. ○ If you are in a building, take cover under a heavy furniture or stand in an inside doorway away from windows. (A door frame or the inner core of a building is its strongest point and least likely to collapse.) ○ Exit building as situation determines. ○ If you are outside, stay there. Move away from buildings to avoid falling debris. Avoid damaged utility lines. • If you are driving, stop quickly and stay in your car. If possible, do not stop on a bridge, overpass or where buildings can fall on you. Your car can provide protection from falling debris. ○ Do not re-enter damaged buildings. Walls may collapse after the original shaking has ceased. ○ Evaluate the situation and initiate appropriate pipeline patrol by the most expedient means possible to determine extent of damage. • Make all necessary repairs as resources and conditions allow.

4.7 Response to Security Incidents

For detailed guidance for response to a Security Incident, refer to the following procedures:

- *Bomb and Sabotage Threat Response Process (CAN-US-MEX)* (Item ID [CD90000123](#))
- *Bomb and Sabotage Threats Form (CAN-US-MEX)* (Item ID [005783558](#))

In summary of the above procedures, the following pages provide guidelines for actions to be taken.

4.7.1 Bomb Threats

The following pages provide guidelines for actions to be taken in the event a bomb threat is received. A bomb threat to the pipeline system or personnel may present itself in any of several ways:

- Phone
- E-mail
- Fax
- Radio
- Mail
- Word-of-mouth
- Increase in the Homeland Defense Status

Other threats to pipeline system or personnel are often treated in the same manner as bomb threats. These may include:



- Terrorist threats
- Workplace violence threats
- General threat to an industry
- Civil disturbances

The following steps should be used as guidance when responding to the above situations. Actions during a real event will vary based on differences in circumstances, response activities, good judgment, etc.

Bomb Threat	
<i>Phone/Written Threats</i>	
<i>Person Receiving the Call</i>	
• Immediately open the Bomb Threat form, (this should be kept next to the phone), so you can use it during the conversation with the individual making the bomb threat call. If possible, complete the form during the call. • Remain calm and be engaging when talking to the person making a threat. • Obtain as much information as possible. ○ Ask him/her to repeat the message. ○ Try to write down every word spoken by the person. ○ If you have a small hand-held tape recorder available, try to tape the conversation. ○ Request the location of the bomb or the time of detonation/attack. ○ Pay particular attention to background noises, such as motors, music, and any other noise that may give a clue as to the location of the caller. ○ Listen closely to the voice (male, female), voice quality (calm, excited), accents, and speech impediments. • Report the threat call to the Gas Control Center. • Report the threat to Corporate Security. ○ Based upon discussion with Corporate Security, determine if the threat is credible. Then decide what actions to take. • If a full or partial facility evacuation is necessary, activate Building Evacuation Plan immediately. When in doubt, evacuate. • Encourage personnel to be vigilant for suspicious or out-of-place objects as they evacuate and leave their workstations. • Initiate operations "shut down" procedures, as necessary. • Secure the location and limit access to essential personnel only. ○ Notify emergency services (police).	

**Pipelines and Facilities – Additional Guidance**

- If the caller does not indicate the location of the bomb/substance or the time of possible detonation/attack, ask him/her for this information. Try to determine the Province, pipeline system, and specific location involved if possible.
- For offices and control center, inform the caller that the building/facility is occupied and the incident could result in death or serious injury to innocent people.
- For pipeline and facilities, inform the caller that an incident could result in death of the innocent general public or significant environmental impact.
- Additional actions to consider taking upon credible threats against pipelines and facilities:
 - Which if any system(s) should be shutdown
 - When any system(s) should be shutdown
- Survey from a distance with the aid of binoculars the valves and station piping.
- Due to the expanse of pipeline and facilities, aircraft should be considered in the surveying pipeline ROW.
- Notify the appropriate local and/or government agencies, upon discovery of suspicious or out-of-place object(s).

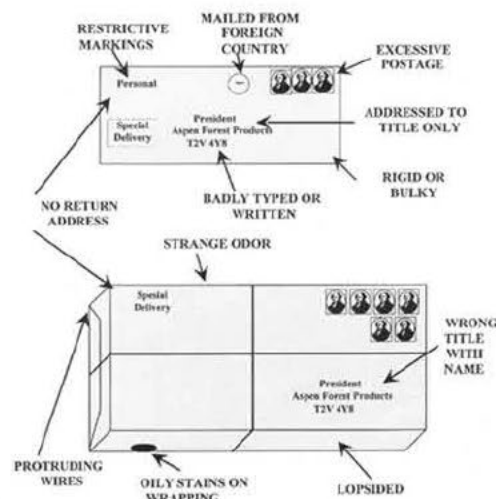
On-Call Manager

- Based upon discussion with Corporate Security, determine if the threat is credible. Then decide what actions to take, which can include:
 - Do Nothing
 - Attempt to determine which facility(s) are at risk
 - Stay and Search
 - Partial Evacuation or Internal Evacuation (offices or control center)
 - External Evacuation to an offsite Command Post (offices or control center)
- If a full or partial facility evacuation is necessary, activate Building Evacuation Plan immediately. When in doubt, evacuate. Encourage personnel to be vigilant for suspicious or out-of-place objects as they evacuate and leave their workstations.
- Initiate operations "shut down" procedures, as necessary.
- Secure the location and limit access to essential personnel only.
- Call the appropriate local and/or government agencies (fire, police, etc.) and inform them of the threat and your Incident Command Post location.
- Set up an Incident Command Post at a pre-determined offsite location. Ensure you have an ERP, Pipeline and Facility maps, access keys, cell phones and radios.
- Direct all members of the press to the designated spokesperson.

4.7.2 Suspicious Mail / Delivered Package

Frequently seen explosive devices have been incorporated, hidden, or camouflaged in letters, soft cover pocketbooks, hard cover books, manila envelopes, and cardboard boxes. While many are delivered by Canadian mail, they may arrive by private courier or express service. Be alert to recognize suspicious- looking or unexpected items especially those that have:

- Special handling marks (special delivery, air mail, registered, certified)
- Restrictive markings (personal, confidential, addressee only)
- Excessive postage
- Handwritten or poorly typed address
- Incorrect title, or title but no names
- Misspelling of common words
- Oily stains, discolorations, or odor
- No return address
- Excessive weight
- Lopsided, uneven, or ridged envelope
- Protruding wires or tin foil
- Excessive securing material (tape, string, etc.)
- Any evidence that the envelope has been opened and re-glued
- Mail item from a new or strange source



Suspicious Mail / Delivered Package	
Response Actions	
• If you receive or find a suspicious-looking letter or package: ○ DO NOT TRY TO OPEN IT. ○ Isolate the area around the letter or package to the degree possible, and make emergency notifications, and evacuate personnel to a safe distance. ○ DO NOT MOVE NOR HANDLE unless absolutely necessary. ○ If opened, preserve, BUT DO NOT TOUCH FURTHER all original envelopes, twine, shipping documents, or packaging materials for evidence and release to the police as requested. ○ Report incident to Gas Control Center and Area Manager.	

4.7.3 Technological Issues

Emergencies related to the operation of the CGCC can have severe negative impacts on company operations. Fire, explosion, natural disaster, power outage may damage the back-up power supply or cause other emergency conditions. Such an emergency can cause a loss of information stored electronically on computer systems and physical damage to hardware integral to the operation of the pipeline system.



If the CGCC has only been partially damaged computer hardware and software shall be inspected and evaluated to determine whether operations can be resumed from the location. If the computers are operable but the software is damaged, back-up software shall be retrieved from off-site back-up facilities.

4.7.4 Terrorist Threats

Terrorism is the use of violence and threats against persons or property for the purposes of intimidation, coercion or ransom. The direct targets of violence are not the main targets of a terrorist but a means to draw the attention of the local populace, the government and the world to their cause. A terrorist group commits acts of violence to:

- Produce widespread fear
- Obtain worldwide, national, or local recognition for their cause by attracting the attention of the media
- Destroy facilities or disrupt lines of communication in order to create doubt that the government can provide for and protect its citizens
- Discourage foreign investments, tourism or assistance programs that can affect the target country's economy and support of the government in power
- Influence government decisions, legislation or other critical decisions
- Satisfy vengeance

Acts of terrorism include threats of terrorism, assassinations, kidnappings, hijackings, bomb scares and bombings, cyber-attacks, and the use of chemical, biological, nuclear and radiological weapons.

Examples of Petroleum Assets Subject to Risk

- Buildings: Administration offices, corporate offices, control rooms
- Equipment: Process units and associated control systems, product storage tanks, surge vessels, boilers, turbines, process heaters, sewer systems
- Support Systems: Utilities such as natural gas lines, electrical power grid and facilities (including back-up power systems), water-supply systems, wastewater treatment facilities
- Transportation Interfaces: Railroad lines and railcars, product loading racks and vehicles, pipelines entering and leaving facility, marine vessels and dock area, off-site storage areas
- Cyber systems and information technology: Computer systems, networks, all devices with remote maintenance ports, SCADA systems, laptops, PDAs and cell phones.

Dealing with Terrorism

All threats and incidents should be reported to the RCMP Terrorism Tip Line at 1-800-420-5805.



In order to deal with threats of terrorism, it is important to establish a security management system to effectively manage security risks. This system should include a security risk management process incorporating asset characterization, threat assessment, vulnerability assessment, risk assessment, risk mitigation, communication and recommendations.

In the event TC Energy Assets are involved or targeted in any way the local law enforcement should be contacted first. TC Energy workers can also access the National Security Tip Line and report any suspicious activity that could be related to a security threat.

4.7.5 Cyber security

Cyber Security incidents are handled by our Information Services as part of our Business Continuity processes. The main components are:

- Report suspicious cyber activities to the Cybersecurity Office by calling the Service Desk immediately (24 hours per day, 7 days per week) at 1-888-546-3484
- Work collaboratively with the Cybersecurity Office to sustain/repair safe, secure and resilient digital assets via Virtual IMT
- Cybersecurity Office implements the Cybersecurity Incident Response Process.

More information can be found here: [CSO PRO Cybersecurity Incident Response Process](#)

4.8 Communications

The development and implementation of effective communications during a response is essential. The Incident Commander is responsible to ensure that internal communication among Incident Management Team (IMT) members is effective. The Liaison Officer interfaces with government agencies involved in the response and obtains support from the Assistant Liaison Officer.

The Operations Section Chief supervises tactical planning and response zone activities to maximize public protection (including communicating the response zone information to the public).

TC Energy will supply the communications systems and equipment required to provide effective communications between the Incident Command Post (ICP) and the following response personnel and operation centres:

- Evacuation, roadblock, and air monitoring personnel
- Staging Area
- Reception Centre
- Virtual IMT
- IST

Communications equipment will be dependent on the logistics associated with the incident, local cellular coverage, and availability of land lines.

The Public Information Officer (PIO) gathers the incident information and implements the TC Energy communication strategy (internally and externally) to interface with media and key stakeholders. The



PIO will coordinate their activities to ensure that stakeholders and TC Energy employees are informed about the incident and populate these public facts and information in various tools.

4.8.1 External Communications Requirements

TC Energy will develop a communications plan and may be required to share this plan with regulators (depending on the situation) explaining how and when we will share information with affected stakeholders.

Where possible, TC Energy will coordinate or share media releases with regulatory agencies involved in the incident prior to issuing the media release. This is to ensure consistency and accuracy of information. Information can be communicated through written news releases, news conferences and any effective methods TC Energy chooses to use (i.e., social media, website, electronic updates, information centres, etc.).

Indigenous Relations departmental response guidelines can be found here: [Indigenous Relation Departmental Response Plan](#).

4.8.2 Media Approval Requirements

The Incident Commander or designate will review and validate all TC Energy media releases and public/external information. Prior to issuance, all media releases / public materials should be approved by the appropriate/available Executive in charge, Media/Communications and Legal departments. During the initial response while the Incident Commander is focused on Life Safety and Incident Stabilization, the IST Leader or applicable Director may review and approve media releases.

4.8.3 Media Interaction Guidelines

Media Access: The number one priority in any emergency is life safety, including the safety of any media representatives. During an emergency, media access to the incident site is strictly prohibited, unless the Public Information Officer or an approved designated media handler has received approval from the Incident Commander.

- If denied, provide an explanation to media that for their own safety they are denied access to the area.
- If access is granted, limited numbers of media personnel must be safely escorted by TC Energy personnel while on TC Energy property and activities such as photographing/filming are only allowed when safe to do so and in compliance with TC Energy requirements.

Depending on the severity of an incident, the media may attempt to contact TC Energy representatives. These representatives could include Public Protection Group personnel, local response personnel, other company personnel. All personnel are to direct these inquiries to **Communications / Media Relations at 1-403-920- 7859**.



	If Approached by Media
☐	Be polite.
☐	Never use the phrase "No comment."
☐	If a more senior person is immediately available at your location, redirect the inquiry to that person.
☐	Advise the media that you are not a company spokesperson.
☐	Gather the information.
☐	Advise the media that the PIO or an appropriate team member will be in contact with them.
☐	Forward the Media Inquiry or any call back commitments to your supervisor, Public Information Officer as soon as possible. The media will be working to a deadline.
☐	Be careful not to deny or confirm information or facts. Again, simply state that you are not the Public Information Officer, and you will immediately direct their inquiry.
☐	Never disclose any information about the names of those injured or the extent of their injuries. Next-of-Kin notification must be completed before this information is released.

4.8.4 General Media Statement

“We are currently dealing with the situation at hand to ensure the safety of the public, our personnel, and the environment. A statement will be released by the company once the facts have been determined. If you would like to leave your business card or phone number, a company representative will provide you with more information as it becomes available.”

4.8.5 Initial Holding Statements

An integral part of crisis response is the timely development of appropriate and effective communications which convey care and concern and provide relevant factual information. The initial holding statement below is one of the first communication tactics which may be used in an incident. The below initial holding statement should be filled out by the PIO with support from the Media/Communications department. The initial holding statement will be reviewed by Legal and approved by the IC and available Executive.

**Pipeline/Facility Release Initial Holding Statement**

At approximately _____ ☐ a.m. ☐ p.m. on _____ (date), Canada Gas Operations experienced a _____ (type of) release at our _____ (pipeline / facility)

☐ East ☐ West ☐ North ☐ South of _____ (city/town/municipality).

We have initiated our emergency response plan, and the (regulator) has been notified. Our staff is working with local first responders on site. Our current priorities are to ensure the safety of all involved, protection of the environment and stabilization of the incident.

The cause of the incident is not yet known. We will provide additional updates as information becomes available.

If you have a media inquiry, please contact Media / Communications Department on our media line at 1-403-920-7859.

Approved by Incident Commander: _____



4.9 Post Emergency Response

Even after the immediate threat to life is over, there is much work to be done before the Company can return to routine operations. These post emergency actions vary depending on the scope, magnitude, type and impact of the emergency. However, return to service and incident investigation are always two of the key elements of an emergency.

4.9.1 Return to Service

While outside pressures may rush the Company personnel to return an asset to service, this must not be done in haste. A comprehensive inspection and return to service plan should be developed before services are restored. All facilities, equipment and controls must be thoroughly inspected for damage, and repairs conducted as necessary prior to putting any critical equipment back into service.

If Company facilities or assets are damaged or destroyed, they may not necessarily be rebuilt. Operations personnel will evaluate needs and staffing levels through a damage assessment review.

Before repairs are made, all Company safety policies and procedures, as well as the appropriate Job Hazard assessments, should be reviewed as necessary.

4.9.2 Investigation

It is not necessary to investigate every emergency. The hazard, impact and severity of the emergency should be considered when determining whether an investigation is necessary.

When an investigation occurs, it must be conducted in accordance with the *Incident Management Standard (CAN-US-MEX)* (Item ID [1020362467](#)).

5 RESPONSE RESOURCES

5.1 Public Response Resources

Emergency response resources from the public sectors (i.e., Provincial, and Local Governments) have authorities and resources which aid industry operators, including CGO, in managing emergencies and protecting the public. Public agencies, including federal, provincial, municipalities and local emergency response agencies, often maintain their own emergency response equipment. While the Company will not solely rely on these resources to respond to a company emergency, they may be used if the agency owning the resources wishes to engage in the response. In all cases, local emergency response agencies will maintain their accountabilities to their jurisdiction which will likely require them to employ local resources to provide public security, emergency medical services, and public health services.

If public resources are not required to be involved, the Company and the agency may mutually agree that use of the equipment would improve the response; if this occurs, the public agency may willfully support the Company's response but shall never be dictated to do so by the Company. If the Company requests use of emergency services resources, the Company expects to assume associated costs based on established rates for use of the equipment requested.



Emergency service resources shall not be requested or expected to support long-term operations; if long term support is required, these resources shall be procured through contract resources.

5.1.1 Local Response

Local Emergency Response Resources may be the first non-TC Energy response resources to arrive during an emergency. Like Provincial Responders, Local Emergency Response Agencies have authorities and resources which aid Industry Operators, including CGO, in managing emergencies and protecting the public. Law enforcement, Local Fire Department, Emergency Medical Services and Hospital.

5.1.2 Local Emergency Management

The safety of all residents within a Municipality is ensured through a Municipal Emergency Plan (MEP) should a disaster occur within the Regional Municipality. Emergency responders elected officials and municipal employees receive training to understand their roles should the MEP ever have to be activated.

5.1.3 Federal Response Roles and Responsibilities

See *Generic Federal Roles & Responsibilities* in [Appendix F: External Agencies Information and Contacts](#).

5.2 Contracted Resources

Canada Gas Operations has secured external emergency response resources to augment company owned emergency response resources. The Company maintains contracts with response contractors that are capable of responding to all Company emergencies. Contracts have been established with equipment rental companies, spill removal organizations, and environmental contractors; these contracts should be referenced in the local or asset specific emergency response plans for the assets supported by contract resources.

When feasible, contract resources shall be vetted and approved through Supply Chain's contractor approval process prior to an emergency. However, in cases of emergencies, when approved contractors are not available in a timely manner, resources can still be accessed.

Casual and Volunteer Laborers

Volunteers will not be utilized by the Company for response operations. In Canada, if volunteers are used during a Company emergency, they shall be coordinated through and directed by public agencies.

Emergency Procurement

In an emergency, the Company shall make all efforts to use Supply Chain approved resources; however, in emergencies, if contracted resources are not available, the Company may make other arrangements to use otherwise available resources to protect people and the environment. If resources not previously approved by Supply Chain must be used, Supply Chain shall be immediately notified and shall work cooperatively with the Incident Management Team to expedite approval and payment of required resources.



Response Assistance Agreement

Response Assistance Agreements are reciprocal documents drawn up between the Company and other parties where the Company is either requesting assistance or aiding in a local area. The Response Assistance Agreements states the mutual aid partner's intention to provide service, equipment or personnel on a "best efforts" basis.

Where feasible and when local services are available, Canada Gas Operations may enter into Response Assistance Agreements with Fire, Police and Ambulance agencies.

This procedure outlines the process for determining when a Response Assistance Agreement is appropriate, and the steps to take in making such an agreement.

CA Industry Mutual Emergency Assistance Agreement

One of the Company's major Mutual Aid Agreements applicable to Canadian Gas Pipelines is the CA Industry Working Group's Mutual Emergency Assistance Agreement.

The Mutual Emergency Assistance Agreement provides a mechanism for the CA Industry Working Group Members to request Emergency Assistance from one another in the event of an Emergency using the Assistance Request Form. More information of the Mutual Assistance program can be found on the Company's Emergency Management website.

5.3 Company Owned Equipment

Company owns and operates response equipment. This equipment is primarily designed for response to an oil spill from a liquid pipeline; however, it may be used for any Company emergency.

Company owned response equipment is contained within warehouses or response trailers strategically staged to expedite response; this takes into account asset-based risk and availability of contract, mutual aid, and cooperative resources.

Company owned response resources can be requested for response to a Company emergency by the Incident Commander through the IMT if appropriate. Company owned equipment may also be deployed to Mutual Aid Partners and governmental agencies for non-Company emergencies; Line of Business (LOB) Leadership accountable for the specific resource shall approve loaning equipment to third parties. Before loaning equipment, consideration is given to maintaining the Company's ability to respond to a potential internal emergency. CGO owns a variety of Response Equipment staged strategically across the pipeline systems.

Refer to applicable Annex Response Documents for a list of equipment staged near the pipeline

6 RELEASE DETECTION

6.1 Release/Rupture/Discharge Detection

TC Energy's CGCC and field technicians are responsible for ensuring the integrity of facilities and detecting releases.

There are four primary types of indications that a release may be occurring:

- An unexplained upset condition observed in the pipeline system operating data.



- A consistent unexplainable pipeline system shortage occurring over several check time periods.
- An alarm from a Supervisory Control and Data Acquisition (SCADA)-based leak detection system.
- A report of a direct observation of a release received from an employee or the public.

All indications, including supposedly direct observation, are subject to confirmation; however, the Company policy is to shut down if any doubt exists as to the integrity of the pipeline system. The simultaneous occurrence of two or more of the indicators above greatly increases the probability that the pipeline system has lost integrity.

Specific guidance for response to abnormal operating conditions and determining the location of a suspected pipeline release may be found in the Company's Operations and Maintenance Manual, maintained separately.

Routine actions to be taken by TC Energy employees to ensure facility integrity and detect releases are listed as follows:

- CGCC monitors pressures using SCADA
- Perform routine station/ROW checks
- Conduct routine aerial surveillance
- Monitor 24-hour emergency reporting phone number

6.2 Detection of an Incident: Release/Leak Detection Systems

Leak detection systems utilized along various assets include:

- System-level indication is accomplished through usage of a SCADA system. This system is capable of monitoring flow rates, pressure, metering information (delivery/receipt volumes), temperature, and valve positions.
- SCADA system is monitored on a 24-hour per day basis by both the centralized Pipeline Control Center and Secondary Control points.

6.3 Release/Rupture/Discharge Prevention

The Company maintains and executes a rigorous Maintenance Program to ensure the integrity of assets is sound. The Maintenance Program is the foundation of the Company's emergency mitigation and prevention efforts.

Prevention is accomplished through the following measures:

- Pipelines and related structures have grounding systems to reduce the possibility of accidental ignition due to lightning.
- Discharge prevention is also accomplished through the use of general housekeeping procedures and leak inspection system.
- Aerial patrols by fixed or rotary wing aircraft to monitor for unauthorized activities on ROW, slope and river crossing anomalies and any other significant observances.
- Cathodic protection is applied to the pipeline to minimize the effects of external corrosion



- Placing conspicuous pipeline warning signs at road crossing and other high hazard areas.
- Maintaining an active pipeline damage prevention program.
- Maintaining the integrity of the pipelines by actively assessing pipeline integrity via smart In Line Inspection (ILI) tools and assessing anomalies and repairing areas of the pipeline, which do not meet specifications.

6.4 Investigation of Public Complaints or Inquiries

Reports of a pipeline system emergency from a third party will be responded to as if an emergency has occurred. A CGO representative will be dispatched to the site of the reported emergency to verify accuracy of the report. Upon verification of the incident, appropriate CGO entities will implement this Plan. In such case, emergency response operations will become CGO's first priority.

When third party reports do not come from an emergency services organization, CGO will contact the Local Authority to determine whether other similar reports have been received. CGO will rely on local emergency responder's reports of the incident. CGO will always work cooperatively with local emergency services to verify and respond to an emergency event.

Since some of CGO's assets are close in proximity to other producers and pipeline operators, it may be challenging for Public First Responders or members of the general public to determine the source of a release.

If you receive complaints, or experience threats while carrying out emergency related activities, advise your supervisor at once, or as soon as practicable. Public interaction / conflict resolution is managed through TC Energy's Community Relations and Security Management Program.

7 MAINTAINING PREPAREDNESS

Canada Gas Operations recognizes Emergency Preparedness, including planning, training, and exercises, as critical elements of an Emergency Management Program. This section describes the Emergency Preparedness measures which are taken to prepare site personnel and the company to safely and efficiently manage an emergency.

7.1 Emergency Preparedness Standards

CGO's training methods address pipeline system emergencies from several perspectives: human health and safety, rupture control and repair operations, pollution control, and overall (crisis) management of the emergency.

Through the various training methods described in this section, CGO's training program is intended to ensure the following results:

- That all personnel know:
 - Their responsibilities under the plan.
 - The name, address and procedures for contacting the operator on a 24-hour basis.
- That all reporting personnel know:



- The pipeline details for the affected area.
 - The telephone number of the Federal, Provincial and local agencies and other required notifications.
 - The notification processes.
- That all response personnel know:
 - The characteristics and hazards of the gas discharged.
 - The conditions that is likely to worsen emergencies, including the consequences of pipeline malfunctions, and the appropriate corrective actions.
 - The steps necessary to control any accidental discharge of gas and to minimize the potential for fire, explosion, toxicity or environmental damage.
 - The proper firefighting procedures and use of equipment and breathing apparatus.
- Only trained persons will be utilized for response to fires. CGO personnel are only trained on the use of handheld fire extinguisher units for small incipient fires.

All Response Team Members should review the ERP whenever their job position or responsibilities change under the plan. A copy of this Plan will always be available to CGO personnel responsible for responding to or reporting an emergency.

7.2 Emergency Preparedness Team

CGO's Emergency Preparedness Teams (EPT) are the means through which the Emergency Management Program is implemented at the field level. CGO's Line of Business EPT is responsible for ensuring compliance with the requirements of TC Energy's Emergency Management System and takes the lead role in organizing emergency exercises and training for each Line of Business.

In accordance with TC Energy Emergency Management Program, the CGO EPT is responsible for the following:

- Identifying local hazards and conducting risk assessment
- Identifying roles and responsibilities
- Identifying resources
- Training employees
- Updating ERPs
- Ensure preparedness

7.3 Emergency Response Training

TC Energy recognizes that CGCC and Operations Personnel must both be adequately trained and prepared to work collaboratively to effectively manage initial response to an emergency. To this end, this section describes the training programs for Operations Personnel; these training programs are designed to be complimentary of one another and to be executed in parallel with each other.



7.3.1 Canada Gas Control Center (CGCC) Training and Procedures

Training and certification ensure Controllers recognize all manners of pipeline operation, including start-up and shutdown, steady state and transient operations. Controllers are not permitted to operate the system on their own until they have successfully achieved the necessary competency and have been appropriately certified. Regular re-training and re-certification ensures skills and awareness of procedures are maintained. Controllers are trained to recognize abnormal conditions in pipeline operations and have a complementary set of emergency procedures to ensure safe response to events.

Controllers are adjacent to one another and are in constant communication. Team training and a team culture within the control room ensures a collaborative response to anomalous events.

Controllers are empowered to isolate the pipeline at their discretion if a leak is suspected. All non-routine alerts or concerns are investigated immediately by pipeline controllers and field staff. A line which was suspected of integrity risk cannot be returned to service without the approval of Pipe Integrity.

7.3.2 Operations Personnel

TC Energy training standards require CGO Operations Personnel to maintain at a minimum, "Company First Responder" training.

Operations Personnel and other Response Team Members will also receive ICS training and supplemental training in other related topics. See graphic below for more detail on TC Energy's scaled training approach.

CG EM Strategy - Scaled Training



Emergency response training records are maintained by TC Energy's Employee Development



Department. Training records for response personnel will be maintained for as long as personnel have duties in this ERP.

7.4 Emergency Response Training for Casual and Volunteer Laborers

CGO will not utilize casual or volunteer laborers to assist in the response to hazardous incidents. If Casual or Volunteer Laborers are ever utilized for any aspect of emergency response, a specific training program will be developed to ensure these laborers are prepared to safely and efficiently conduct their assignments.

7.5 Emergency Response Drills and Exercises

Emergency Response Drills and Exercises are conducted to ensure maximum effectiveness of the site's various plans and procedures and to keep personnel aware of their responsibilities in an emergency. To meet this objective, and to satisfy all requirements which impact Canada Gas Operations assets, CGO's drill and exercise program will adhere, at minimum, to the applicable region Regulator's exercise requirements.

7.5.1 Participation in Other Exercises

CGO is not required to participate in any other exercises. However, CGO may participate in exercises conducted by mutual aid groups and industry cooperative to support development of a culture of preparedness across the petroleum industry.

7.5.2 TC Energy Drills and Exercises

TC Energy exercises could include the following:

- Drills – a supervised informal activity that tests a specific operation or function. Participants will gain exposure on new equipment, test new procedures, practice and maintain skills, and/or prepare for more formal exercises.
- Tabletop – an informal group discussion centered on a scenario. Its purpose is to test existing plans, policies, and procedures without incurring the cost associated with deploying resources. It also allows participants to thoroughly work through a problem without feeling as much pressure as they would in an operations-based exercise. Participants will identify strengths and shortfalls, enhance understanding of new concepts, and seek to change existing attitudes and perspectives.
- Functional – an activity designed to evaluate capabilities and multiple functions using simulated response. A functional exercise will simulate the deployment of resources and rapid problem solving. Participants will evaluate management of the command and coordination centres and assess the adequacy of emergency response plans and resources.
- Full scale (major) – a multi-agency, multi-jurisdictional activity involving actual deployment of resources in a coordinated response, as if a real emergency had occurred. The full-scale exercise includes the mobilization of units, personnel, and equipment. Participants will assess plans and procedures and evaluate coordinated responses under crisis conditions.



7.5.3 Coordination / Conduct of Exercises

A scenario will be developed for each formal exercise. The scenarios shall include, but not be limited to, the following:

- The basic objectives of the exercise.
- The date, time and place of the exercise.
- The organizations and/or personnel participating in the exercise.
- A narrative summary of the scenario that details the initiating events and expected responses.
- Inject messages to support the scenario.

The scenarios will be structured to allow for as much free play, discussion and decision making as possible. The scenarios at each site will be rotated from year to year to ensure all elements of the plan/procedures are tested.

As stated, appropriate offsite response organizations will be invited (and should be encouraged) to participate in the annual field exercises. A series of tabletop and/or training drills may be held prior to an exercise as a form of additional training for response personnel.

Applicable procedures will be utilized to ensure adequacy of the communication systems and overall response.

Once the exercise is deemed complete, all paperwork (e.g. procedural checklists, notes, ICS Forms, Initial Actions Plans, etc.) that were generated during the exercise shall be routed to the exercise Documentation Unit Leader or, if a DUL was not assigned during the exercise, to the site's EPC or a designate.

7.6 Training, and Exercise Recordkeeping

Exercise observers and controllers shall be stationed at various locations throughout the exercise to evaluate the response of personnel and adequacy of the ERP. The notes taken by these observers and controllers and the exercise debriefing explained below, provide critical information used to improve the Plan and emergency response program.

An exercise debriefing, a post-exercise discussion, must be completed immediately following an exercise or drill and should include a review of the exercise assessing results of the exercise objectives. The discussion should be led by an appropriate management representative from Canada Gas Operations and should include input from all involved personnel. One or more individuals should be made available to document the post-exercise discussions. At a minimum, the following debriefings should be conducted:

- One debriefing with the response team, emergency services personnel, and, if applicable, members from any media organizations that participated.

Regardless of the number of debriefings conducted, a Debriefing Template Form shall be completed for each session. The template for the Debriefing Template Form can be accessed at the following location:



[Forms, Templates, and TOPs \(sharepoint.com\)](#) All completed Debriefing Forms shall be attached to the Issue/Incident that is generated for the exercise.

The exercise shall be entered into the TC Energy Enablon system database within 30 days from completion of the event. The EPC shall ensure that scans of relevant paperwork (in accordance with Corporate documentation requirements) are attached to the Enablon record. Photos taken during the event should also be attached.

Provide the exercise attendance sheets to the Learning Management System's Coordinator who is responsible for entering the exercise participation data in the learning management system. If exercise credit is being taken for an actual emergency, it is the responsibility of the Canadian Gas Emergency Management Team to provide the Learning Management System Coordinator with a comprehensive list of event participants.

7.7 Review and Revision of this Plan/Manual

This section provides procedures and information useful to responders for post incident/exercise review and evaluation. Post incident/exercise reviews should be conducted in a timely manner following an incident/exercise. The Plan should be evaluated to determine its usefulness during the incident/exercise and appropriate revisions should be made. All incident/exercise documentation should be included in the Plan evaluation process.

Lessons learned from exercises are a valuable source of information and reference data for the emergency planning program. Any outcomes that necessitate change to this Plan must be implemented and the plan must be updated appropriately. If additional training is required, TC Energy must schedule the training.

7.7.1 Annual Review

The Canadian Gas Operations EPT is responsible for conducting annual reviews of all ERPs pertaining to facilities/assets within each Line of Business. As a minimum, ERP reviews will address the following:

- Lessons learned from exercise or actual events.
- Changes that have occurred at the facility including organizational changes.
- Changes in federal, provincial, or municipal requirements.

Once the annual ERP review is completed, the necessary revisions will be made to the Plan. Copies of the revisions will be submitted to all controlled copy holders of the response plan, and a Record of Change will be entered in the Administrative Section of the Plan. In the event that no revisions are required, the completion of the annual review will be recorded on the Record of Changes page and a letter will be sent to all controlled copy holders indicating that the Plan remains valid with no changes.

7.7.2 Review following an Incident

Like exercises, actual emergency incidents provide an opportunity to review ERPs and processes. After the facility has been returned to operations following an emergency event, key personnel will meet to review the incident. The focus of the meeting will be to assess the effectiveness of the emergency response. The meeting may result in recommendations for physical changes to the



facility, the purchase of new or different equipment, and/or changes to the ERP and response procedures. Meeting notes will be kept on file for reference. Opportunities to improve the ERP identified following an actual emergency will be incorporated at the time they are identified; these changes will be incorporate in the same manner as improvements identified during the annual review process, but the EPT will not wait for the annual review to make the changes.

7.7.3 Required Changes

Revisions or amendments to the ERP will be made whenever there is:

- A change in the design configuration, construction, operation, or maintenance that significantly affects the information included in the ERP.
- Awareness of a deficiency in the plan after an evaluation of the response to an emergency is completed in accordance with CSA Z246.2.
- Awareness of a deficiency in the plan that risks the safety of emergency response staff, TC Energy employees, or the public.
- A change in the type of hazardous substances handled, stored, or transported that affects the required response resources.
- A change in the facility's operating area.
- Any other change that significantly affects the implementation of the ERP.

All call-out lists which support notification procedures will be updated semi-annually in order to maintain accuracy. More frequent updates will be made, if required.



APPENDIX A: Contact Information

Gas Control Center		
Agency	Telephone Number	Address
Canadian Mainline: West Console		
Canadian Mainline: East Console		
NGTL: Central Console		
NGTL: North Console		
NGTL: East Console		

Incident Management Team (IMT) Conference Lines			
IMT	Telephone Number	Conference ID	PIN
NGTL North			
NGTL South			
Mainline / Prairies			
Ontario / TQM			

TC Energy Emergency (24hr) Telephone Number		
Agency	Telephone Number	Address
Emergency Line (SureCall)	1-888-982-7222	N/A



TC Energy CGO Leadership

Name	Title	Office Phone	Cell Phone
	Vice President, CDN Natural Gas Pipelines Operations		
	Director, Mainline / TQM		
	Director, NGTL		
	Director, Northern BC / CGL		

Site Specific leadership contact information, which does not apply to the entire CGO line of business, is included in the applicable Response Zone Annex



APPENDIX B: Forms

Initial response forms:

- [*CG Company First Responder Checklist*](#)
- [*CG IMT PSC Checklist*](#)
- [*CG IMT SOFR Checklist*](#)
- [*CG IMT OSC Checklist*](#)
- [*CG IMT IC Checklist*](#)
- [*CG IMT LSC Checklist*](#)
- [*ICS 201 Incident Brief*](#)
- [*ICS 214 Activity Log*](#)
- [*Emergency Planning Zones*](#)
- *Portable Gas Detector Monitoring Measurements Recording Form* (Item ID [003839069](#))
- [*Guidelines for Note Taking, Communications and Other Records Produced During an Emergency*](#)

All other Incident Management Team Role Kits and ICS Forms can be accessed through the Emergency Management Department Website.

Operating Procedures

- *Critical Injury and Fatality Response Procedure (CAN-US-MEX)* (Item ID [006198710](#))
- [*Critical Injury-Fatality ERP first-hour Checklist*](#)
- *Emergency Management System Incident Command Post Kit Requirements Checklist* (Item ID [003674777](#))
- [*CGO Regional On-Call Manager Checklist*](#)

Miscellaneous Forms

- [*Emergency and Exercise Event Debrief Form*](#)
- [*Evaluation Form – Training & Exercises*](#) – Internal Participants
- [*Exercise Notification Form*](#)

APPENDIX C: Information Resources for Response

Real-Time Hydrometric Data from Environment Canada

- https://wateroffice.ec.gc.ca/mainmenu/real_time_data_index_e.html

Response Zone Annexes

Response Zone Annexes		
Response Zone	Description	OpenText Item ID
1	NGTL North & Northern BC	1016939210
2	NGTL South	1016939215
3	Mainline - Prairies	1016939218
4	Mainline - Ontario / Quebec (TQM)	1016939223

**APPENDIX D: Regulatory Cross Reference**

Regulation		
Code	Description/Summary	Location in Plan
SOR 99-294		
32	Emergency Management Program	
32 (1)	The company shall develop, implement and maintain an emergency management program that anticipates, prevents, manages and mitigates conditions during an emergency that could adversely affect property, the environment or the safety of workers or the public.	Sections 1 & 7
32 (1.1)	A company shall develop an emergency procedures manual, review it regularly and update it as required.	All
32 (2)	A company shall submit the emergency procedures manual and any updates that are made to it to the Board.	Section 7
33	A company shall establish and maintain liaison with the agencies that may be involved in an emergency response on the pipeline and shall consult with them in developing and updating the emergency procedures manual.	Section 5
34	A company shall take all reasonable steps to inform all persons who may be associated with an emergency response activity on the pipeline of the practices and procedures to be followed and make available to them the relevant information that is consistent with that which is specified in the emergency procedures manual.	Sections 4.4 & 4.8

H2Safety Services Inc. has reviewed this ERP to ensure regulatory compliance with SOR 99-294.

**APPENDIX E: Acronyms and Definitions**

Acronyms and Definitions	
<i>Term / Abbreviation</i>	<i>Description</i>
CGO	Canada Gas Operations (a TC Energy Business Unit)
CRC	Canadian Regulatory Compliance (a TC Energy Support Department)
CSA	Canadian Standards Association
EOC	Emergency Operations Center
EPC	Emergency Preparedness Coordinator
EPZ	Emergency Planning Zone
ERP	Emergency Response Plan
ESD	Emergency Shut-Down
ESDC	Employment and Social Development Canada
IAP	Incident Action Plan
ICP	Incident Command Post
ICS	Incident Command System
IMT	Incident Management Team
MEAA	Mutual Emergency Assistance Agreement
NGTL	Nova Gas Transmission Line
NPS	Nominal Pipe Size (inches)
OPR	Onshore Pipeline Regulations
PPE	Personal Protective Equipment
TQM	Trans Quebec and Maritimes Pipeline



Term / Abbreviation	Definition
Emergency Operations Centre	An Emergency Operations Centre is a designated facility in a suitable location (i.e. head office, regional office, etc.) established by the permit holder to support Incident Command and to manage the larger aspects of an emergency. In a high-impact emergency, there may be a number of EOCs established to support the response. They may include the Incident Command Post, a municipal EOC (MEOC), and the provincial government EOC (POC).
Emergency Preparedness Coordinator	The person accountable for emergency response programs at a TC Energy entity including plan and procedure maintenance, maintenance of the site's Incident Command Post, drill and exercise programs, and training programs.
Emergency Planning Zone	The geographical area that surrounds a well, pipeline or facility containing hazardous product that requires specific emergency response planning by the licensee.
Emergency Response Plan	An Emergency Response Plan is a document that outlines the course of action developed to mitigate the damage of potential events that could endanger an organization's ability to function. Such a plan should include measures that provide for the safety of personnel and, if possible, property and facilities. It should also include provisions to assess the severity of an incident and implement steps to eliminate the problem - for example, contacting firefighters in case of a fire.
Emergency Shut-Down	A system that is capable of shutting down and isolating all potential sources of ignition and flammable liquids or gases.
Incident Action Plan	An oral or written plan containing general objectives reflecting the overall strategy for managing an incident. It will include the identification of operational resources and assignments, and attachments that provide direction and important information for management of the incident. An IAP is written to cover a single Operational Period.
Incident Command Post	The location at which the primary tactical-level incident command functions are performed. Note, the ICP may be either a physical location or stood up in a virtual setting.



<i>Term / Abbreviation</i>	<i>Definition</i>
Incident Command System	The Incident Command System is a management system used for the command, control, and coordination of emergency response.
Incident Management Team	Under the Incident Command System, refers to qualified personnel who coordinate preparedness and incident management. Typically consists of Command, Operations, Planning, Logistics, and Finance and Administration sections.
Mutual Emergency Assistance Agreement	Agreement under which resources, personnel teams, facilities, equipment, and supplies may be shared amongst members.



APPENDIX F: External Agencies Information and Contacts

SEE NEXT PAGE

	Before the Incident	During the Incident	After the Incident
*ECCC	Environment & Climate Change Canada's Environmental Emergencies Program (EEP) protects Canadians and their environment from the effects of environmental emergencies through provision of <u>science-based expert advice</u> and <u>regulations</u>. The key Acts and Regulations that govern ECCC's role in environmental emergencies that allow it to deliver its mandate are: ☐ <i>Canadian Environmental Protection Act, 1999</i> ☐ <i>Fisheries Act—Pollution Prevention Provisions;</i> ☐ <i>Migratory Birds Convention Act, 1994;</i> ☐ <i>Statutory Notification Requirements—EC's Environmental Notification System.</i> ☐ <i>Environmental Emergencies Regulations.</i>	During an environmental emergency, <i>The National Environmental Emergencies Centre (NEEC)</i> is the focal point for ECCC. ECCC's services during an environmental emergency: ☐ Collaborate with federal, provincial, territorial and international environmental protection agencies to enable rapid sharing of information. ☐ Convene and chair a Science Table of experts and stakeholders to develop consensus based advice to the Lead Agency. ☐ Identify environmentally sensitive areas and priorities (sensitivity and resource at risk mapping). ☐ Advise on mitigation and cleanup measures. ☐ Provide support and guidance in the assessment of oiled shorelines to prioritize their protection and cleanup (Shoreline Cleanup Assessment Technique (SCAT)). ☐ Advice on the fate and behavior of the spilled product. ☐ Advice on sampling and laboratory analysis. ☐ Provide weather forecasting and spill dispersion modelling to identify where these substances are likely to move in the environment. ☐ Provide expertise on the migratory bird resources and species at risk, including on-site assessment and determination of wildlife impact. ☐ Can conduct post-emergency assessments.	☐ ECCC can conduct post-emergency assessments. ☐ Provide specialized advice in shoreline clean-up assessment techniques (SCAT). ☐ Provide Advice on mitigation and cleanup measures..
*DFO	The Canadian Coast Guard is the lead federal agency for ensuring appropriate response to all ship-source and unknown mystery spills in Canadian waters and waters under international agreements. ☐ Establishes appropriate and nationally consistent level of preparedness and response services in Canadian waters. ☐ Design and develop related regulations, policies, strategies and tools. ☐ Review, assess and monitor activities associated with fish habitat to ensure their compliance with the Fisheries Act and Species at Risk Act. ☐ Conduct environmental assessments under the Canadian Environmental Assessment Act. ☐ Design, develop and implement communication and education strategies.	☐ Any amount of hydrocarbons entering a waterway frequented by fish or occupied by waterfowl is deemed to be in contravention of the Federal Fisheries Act and must be reported to the Department of Fisheries and Oceans. ☐ Work together with provincial environment protection agencies and may be initially notified by ECCC. ☐ May send personnel to the site if there has been or could potentially be an impact to fish or fish habitat. ☐ Monitors and investigates all reports of marine pollution in Canada in conjunction with other federal departments. ☐ Maintains communications with the program's partners, including Transport Canada and ECCC, to ensure a consistent coordinated approach to marine pollution incident response. ☐ Aids in search and rescue operations.	☐ Work closely with ECCC, The Canadian Coast Guard and other provincial environmental agencies.
NAV Canada	NAV Canada is a private company who coordinates the safe and efficient movement of aircraft in Canadian domestic airspace and international airspace assigned to Canadian control. Flight Information Centre (FIC) – FIC Services Each Flight Information Centre is responsible for providing its particular service area with the following services, which pilots rely upon for safe flight planning and operations: ☐ Emergency ☐ Aviation Weather Briefing ☐ Flight Planning ☐ En-route Flight Information Services ☐ Remote Aerodrome Advisory Services (RAAS)	☐ As requested by the oil and gas company, the Flight Information Centre will issue a NOTAM (Notice to Airmen). ☐ To close air space beyond an airport (e.g. above a sour gas release), Refer to Transport Canada on back side of this page.	☐ Rescind the NOTAM.
Health Canada	☐ Sets national standards to keep the environment healthy, keep water and air pollution low and Canadians safe. ☐ Maintains a nationwide network of radiation monitoring stations and can act if levels spike. ☐ Under Chemicals Management Plan, assess health risks from chemicals used in manufacturing and agriculture and require users to prove they actually need the chemicals to make their products ☐ Sets strict rules on how chemicals are used in order to limit human exposure. ☐ Preparedness exercises are designed to test how well the plans and procedures work during simulated emergency situations. Such exercises help the government identify strengths as well as any problems or inadequacies in preparedness plans and procedures so that these can be addressed before, not after, an actual emergency.	☐ During a health emergency or disaster, Health Canada and the Public Health Agency of Canada are responsible for supporting emergency health and social services in the provinces and territories.	☐ Work collaboratively with the provinces and territories to test ways in which the Canadian health care system can be improved and ensure its sustainability for the future.
Public Health Agency of Canada	The Centre for Emergency Preparedness and Response (CEPR) is responsible for: ☐ Developing and maintaining national emergency response plans for the Public Health Agency of Canada and Health Canada. ☐ Assessing public health risks during emergencies. ☐ Contribution to keeping Canada's health and emergency policies in line by collaborating with other federal and international health and security agencies. ☐ The health authority in the Government of Canada on bioterrorism, emergency health services and emergency response. ☐ Strengthen intergovernmental collaboration on public health and facilitate national approaches to public health policy and planning. ☐ Manages emergency preparedness and emergency response plans and keeps them up to date. ☐ Develops and runs exercises to train emergency workers. ☐ Develops and delivers training courses that teach health workers how to respond to emergencies.	☐ In an emergency situation, the Office of Emergency Response Services (OERS) is responsible for supporting emergency health and social services in the provinces, territories or abroad. It manages the National Emergency Stockpile System (NESS), which includes medical, pharmaceutical and related emergency supplies. The Office is responsible for the federal response to emergencies that have health repercussions; this includes the deployment of health emergency response teams (HERT). ☐ If a public health emergency grows beyond one province and/or territory, the Public Health Agency of Canada usually gets involved.	☐ Work with Health Canada to test ways in which the Canadian health care system can be improved and ensure its sustainability for the future.

	Before the Incident	During the Incident	After the Incident
Transport Canada	❑ Maintain a 24 hour emergency telephone service. *CANUTEC ❑ Regulate the handling, offering for transport and the transport of dangerous goods by all modes in order to ensure public safety. ❑ Federal regulations require that CANUTEC be contacted in the event of an incident or accident involving dangerous goods and infectious substances. ❑ Maintains records of over 3 million Safety Data Sheets (SDS). Aviation Operations Centre (AVOPCS) ❑ Federal regulations require that AVOPCS be contacted if there is imminent and immediate threat to aviation and public safety.	*CANUTEC ❑ Assist emergency response personnel in handling dangerous good emergencies including advice on ❑ Chemical, physical and toxicological properties and incompatibilities of the dangerous goods ❑ Health hazards and first aid ❑ Fire, explosion, spill or leak hazards ❑ Remedial actions for the protection of life, property and the environment ❑ Evacuation distances ❑ Personal protective clothing and decontamination ❑ CANUTEC staff does not go to the site of an incident, however, should on-site assistance be required, CANUTEC can assist in the activation or industry emergency response plans. ❑ Provide communication links with the appropriate industry, government or medical specialists. Aviation Operations Centre (AVOPCS) ❑ To close air space beyond an airport in a defined area (e.g. above a sour gas release), AVOPCS can be contacted by the oil and gas company.	*CANUTEC ❑ Maintain voice communication and written information records for two years for the protection of all parties. Aviation Operations Centre (AVOPCS) ❑ Rescind the NOTAM and re-open air space that was closed due to emergency.
*PSC	❑ Public Safety Canada works with provincial and territorial officials to ensure first responders and emergency management personnel are well-prepared through education, support and exercises. ❑ Responsible for promoting and coordinating the preparation of departmental emergency management plans as well as coordinating the government's response to an emergency through the Government Operations Centre (GOC).	❑ Public Safety Canada houses the Government Operations Centre at the hub of the national emergency management system. It's an advanced centre for monitoring and coordinating the federal response to an emergency.	❑ In the event of a large-scale natural disaster where response and recovery costs exceed what individual provinces and territories could reasonably be expected to bear on their own, PS provides financial assistance to the provincial and territorial governments through the Disaster Financial Assistance Arrangements (DFAA). Assistance is paid to the province or territory – not directly to individuals or communities. The provincial or territorial governments design, develop and deliver disaster financial assistance, determining the amounts and types of assistance that will be provided to those who have experienced losses.
*Canada Energy Regulator Roles & Responsibilities The CER's top priority in any emergency is to make sure that people are safe and secure, and that property and the environment are protected. Any time there is a serious incident, CER inspectors may attend the site to oversee a company's immediate response. The CER will require that all reasonable actions are taken to protect employees, the public and the environment. Further, the CER will verify that the regulated company conducts adequate and appropriate clean-up and remediation of any environmental effects caused by the incident. As lead regulatory agency, the CER: ❑ Monitors, observes and assesses the overall effectiveness of the company's emergency response in terms of: • Emergency Management • Safety • Security • Environment • Integrity of operations and facilities; and • Energy Supply. ❑ Investigates the event, either in cooperation with the Transportation Safety Board of Canada, under the Canada Labour Code, or as per the <i>Canada Energy Regulator Act</i> or <i>Canada Oil & Gas Operations Act</i> (whichever is applicable) ❑ Inspects the pipeline or facility ❑ Examines the integrity of the pipeline or facility ❑ Requires appropriate repair methods are being used ❑ Appropriate environmental remediation of contaminated areas is conducted ❑ Coordinate stakeholder and Aboriginal community feedback regarding environmental clean-up and remediation ❑ Confirms that a company is following its Emergency Procedures Manual(s), commitments, plans, procedures, and CER regulations and identifies non-compliances ❑ Initiates enforcement actions as required ❑ Approves the restart of the pipeline. If applicable; refer to the CER site section behind the blue Area Specific Information tab for further regulations, definitions and, reporting guidelines for CER related incidents specific to this ERP.			
*Transportation Safety Board Mandate The Canadian Transportation Accident Investigation and Safety Board Act provides the legal framework that governs TSB activities. Our mandate is to advance transportation safety in the marine, pipeline, rail and air modes of transportation by: ❑ conducting independent investigations, including public inquiries when necessary, into selected transportation occurrences in order to make findings as to their causes and contributing factors; ❑ identifying safety deficiencies, as evidenced by transportation occurrences; ❑ making recommendations designed to eliminate or reduce any such safety deficiencies; and ❑ reporting publicly on our investigations and on the findings in relation thereto. As part of its ongoing investigations, the TSB also reviews developments in transportation safety, and identifies safety risks that they believe the government and the transportation industry should address to reduce injury and loss. To instill confidence in the public regarding the transportation accident investigation process, it is essential that an investigating agency be independent and free from any conflicts of interest when investigating accidents, identifying safety deficiencies, and making safety recommendations. As such, the TSB is an independent agency, separate from other government agencies and departments, that reports to Parliament through the President of the Queen's Privy Council for Canada. Our independence enables us to be fully objective in making findings as to causes and contributing factors, and in making transportation safety recommendations. In identifying the causes and contributing factors of a transportation incident, it is not the function of the Board to assign fault or determine civil or criminal liability. However, the Board does not refrain from fully reporting on the causes and contributing factors merely because fault or liability might be inferred from the Board's findings. No finding of the Board should be construed as assigning fault or determining civil or criminal liability. Findings of the Board are not binding on the parties to any legal, disciplinary, or other proceedings. http://tsb-bst.gc.ca/enq/qui-à-propos/index.html			
*Indigenous Services Canada, Regional Operations and First Nations and Inuit Health Branch Since the Government of Canada's renewed commitment to a stronger relationship with Indigenous peoples in Canada, measures were initiated to effect a shift in the way the Government delivers services to Indigenous peoples. This included the creation of two new departments, which was announced on December 4, 2017. The two newly created departments, Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and Indigenous Services Canada (ISC), are intended to improve the delivery of services while accelerating movement towards self-government and self-determination of Indigenous peoples. As part of the departmental transition, both the former Regional Operations (RO) part of Indigenous and Northern Affairs Canada (INAC) and all of First Nations and Inuit Health Branch (FNIHB) of Health Canada have been absorbed into the newly created Indigenous Services Canada (ISC). RO and FNIHB work closely and collaborate towards the provision of emergency preparedness and response activities to First Nations communities in Canada. In regards to First Nations emergency management, the role of RO is to liaise, communicate, cooperate, coordinate and collaborate with First Nations and public, private, and non-government sector partners in support of on reserve emergency management service delivery. ISC-RO supports First Nations in the four pillars of emergency management through service agreements with partners such as provincial emergency management agencies and the Red Cross. FNIHB carries out the public health preparedness and response activities related to natural and man-made disasters. This includes Communicable Disease Control and Environmental Public Health Services. In addition, FNIHB administers Non-Insured Health Benefits to First Nations clients, which includes extended coverage for medical transportation, pharmaceuticals, medical devices and mental health supports. During an emergency, FNIHB works with First Nations leadership and health service providers to ensure health needs of First Nations communities are met. Provincial specific FNIHB roles & responsibilities will be found in this section of the ERP, if applicable or as appropriate.			
*Indian Oil & Gas Canada IOGC is an organization committed to managing and regulating oil and gas resources on First Nation reserve lands. It is a special operating agency within Indigenous Services Canada. IOGC is responsible for oil and gas on First Nation reserve lands across Canada, but only a handful of reserves exist north of the 60th parallel. Therefore, practically all of IOGC's work is south of the 60th parallel, with most of that in the Western Canada Sedimentary Basin. IOGC's general responsibilities are to: ❑ identify and evaluate oil and gas resource potential on Indian reserve lands; ❑ encourage companies to explore for, drill and produce these resources through leasing activity; ❑ ensure equitable production, fair prices and proper collection of royalties on behalf of First Nations; and ❑ secure compliance with and administer the regulatory framework in a fair manner. IOGC operates pursuant to the <i>Indian Oil and Gas Act</i>, 2009, and its associated <i>Indian Oil and Gas Regulations</i>, 2019, as well as other relevant legislation and guidelines (see Acts and Regulations) which came into force and became law on August 1, 2019. Oil and gas activity on First Nation reserve lands depends on agreements involving First Nation band councils, oil and gas companies, and Indian Oil and Gas Canada. Additional information is available at http://www.pgio-igc.gc.ca/enq/100110010468/100110010464 Acts and Regulations: https://www.pgio-igc.gc.ca/enq/100110010437/100110010438			