Emergency Response Plan

April 2023 (Redacted Version)

ENBRIDGE®
Life Takes Energy®

Company: Gas Distribution and Storage
Owned by: Emergency Management Department
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NOTE: *Links and email addresses have been disabled and/or redacted. They are protected from publication under Clause 1(a) of Order MO-006-2016 because there is a real and substantial risk that disclosure could impair the security of GDS's pipeline system, buildings or structures.*

Section 1 - Executive Summary

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1. Executive Summary

1.1 Overview

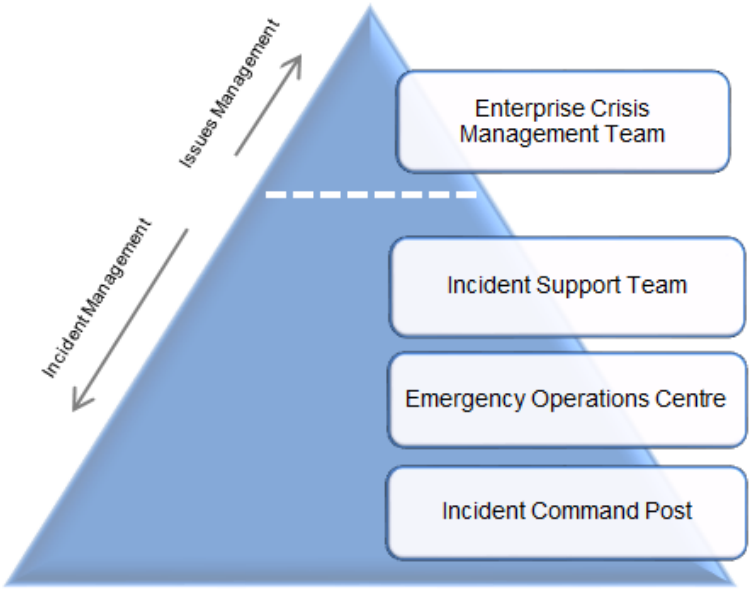
The Emergency Response Plan (ERP) falls under the Enbridge Gas Distribution and Storage (GDS) Emergency Management Program (refer to MP-02 Manual - Emergency Management Program). This program is one of GDS's mandatory protection programs under the Integration Management System (IMS) and applies to GDS including its affiliates and contractors who assist in emergency response. The IMS ensures that GDS meets the regulatory and corporate obligations related to safety and operational reliability, and ensures they are carried out in a common way across the organization.

Safety and operational reliability are our top priorities at GDS; and, as an organization, everything we do is built on this foundation. This means we relentlessly ensure the safety of our communities, customers, employees, contractors, and partners and take a proactive approach to identifying and preventing safety issues. When a safety issue is identified, we take immediate action and continually see ways to improve safety performance.

All incidents that occur on facilities owned or operated by GDS have the potential to impact several departments. Therefore, it is essential that all emergency situations be quickly assessed and addressed. The GDS response organization has considerable resources that can be, if necessary, mobilized to provide appropriate resources, equipment, and support to suit the complexity and severity of the emergency.

The GDS ERP operates in conjunction with the Enbridge Crisis Management Plan (CMP). The CMP defines the structure, and the ERP defines the emergency response organization. GDS emergency response is structured using the Incident Command System (ICS). This process ensures response to GDS incidents and emergencies is guided by the roles and responsibilities identified in the ERP.

Figure 1-1: Emergency Response Organization



The ERP is supported by the CMP, the Business Continuity Program, and associated Business Continuity Plans (BCPs), and the Public Health Emergency Plan (PHEP). All plans are part of the comprehensive Emergency Management Program which incorporates the four pillars of the CSA Z1600 standard (see **Table 1-1**) through a number of corporate programs and initiatives.

The program is in alignment with the requirements of CSA Z246.2, Emergency Preparedness and Response for Petroleum and Natural Gas Industry Systems.

Table 1-1: Four Pillars of Emergency Management

Pillar	Description
Mitigation/Prevention	Programs, plans and actions intended to prevent or reduce impacts. Includes applying learnings from investigations and how project integration, and hazard and risk assessment information is used in the Emergency Management Program.
Preparedness	The continuous cycle of planning, organizing, training, conducting exercises and taking corrective action in an effort to ensure effective coordination during an emergency response. It includes, but is not limited to, plans development and maintenance, training and exercise programs and equipment management.
Response	The activation, mobilization, and coordination of all necessary resources and activities to manage a hazard, exposure, or threat's immediate consequences in accordance with company emergency procedures.
Recovery	Actions after an incident or emergency which aim to restore the affected operation/area back to its pre-incident or better condition. Recovery programs and activities ensure that the response is reviewed as part of continuous improvement.

1.2 Purpose

The purpose of the Enbridge GDS ERP is to identify actions for activation, mobilization, and coordination for emergency response and recovery. The ERP identifies the appropriate resources, equipment, and support to be deployed to suit the complexity and severity of an emergency. This plan provides guidelines for:

- Immediate appropriate actions to:
  - Protect the public, our employees, company facilities, and the environment
  - Prevent or minimize property damage
  - Maintain the continuity of gas supply
  - Safely re-establish gas supply should an outage occur
  - Protect the Enbridge brand reputation and earnings
- The emergency response organization structure, roles, and responsibilities
- Operational readiness of emergency situations defined and the conditions that dictate the declaration of the emergency levels

- Effective internal and external information sharing and reporting
- Immediate investigation and reporting of Operational emergencies

The ERP is reviewed, updated, and provided annually to the Canada Energy Regulator (CER) as part of the CER Compliance Audit Program and audited once every three years by GDS Internal Audit.

This Plan is validated through training exercises that include tabletop or drills, functional and full-scale simulations. These exercises practice the skills and protocols of emergency response, familiarize personnel with the roles and responsibilities, and allow for the development of working relationships with other emergency response organizations.

Any required updates or changes to the manual content can be requested through the Management of Change process Request for Change. The Emergency Management Manager is accountable to approve all changes.

The definitions of key terms used throughout this document can be found in **Section 11 - Glossary**.

Figure 1-2: Enbridge Health and Safety Principles

Our Path to Zero

Safety principles at Enbridge **OUR COMMITMENT**

Enbridge is committed to ensuring everyone returns home safely at the end of each and every day, and that our assets are operated in a safe and reliable manner.

We base our commitment to safety on our care for employees, contractors, the communities in which we operate and the environment.

Our values of Safety, Integrity, Respect and Inclusion guide our decisions, actions and interactions individually and as a company. Our Safety Principles support our values and highlight the fundamental beliefs we share on our path to a zero-incident workplace.

Safety. It's a core value that makes us Enbridge. It's our way of life.

Safety principles **OUR PATH TO ZERO**

1. All injuries, incidents, and occupational illnesses can be prevented.

Enbridge is committed to protecting the health and safety of our employees, our contractors and the public. Our goal is zero injuries, incidents and occupational illnesses. Striving for anything less can lead to the false belief that injuries, incidents and occupational illnesses are inevitable and acceptable. In every instance, protecting the health and safety of workers and the public requires strict adherence to company policies and procedures, including Enbridge's Lifesaving Rules.

2. All operating exposures can be controlled.

Enbridge believes that all operating exposures and uncontrolled releases that may result in injury, illness or environmental damage can be prevented. Through the rigorous application of process safety requirements we strive to eliminate hazards and minimize risks by implementing effective safeguards. When it is not possible or practical to completely eliminate hazards, we implement engineering controls such as fail-safe control systems, warning and detection devices, and automatic safety devices to reduce the risk. Administrative controls and/or personal protective equipment serve as the last line of defense against the hazards we face.

3. Leaders are accountable for safety performance.

People leaders are accountable for safe operations and the safety and health of the workers under their care. This includes accountability for establishing and maintaining a safe work environment through the application of our Management System. As well, it includes establishing, regularly reviewing and updating policies and procedures using disciplined change management, providing the proper equipment, completing appropriate training, correcting deficiencies promptly, and ensuring approved procedures are followed.

4. All employees/contractors are responsible for safety.

People are the most important element of our health and safety program and ensuring our operational reliability. Enbridge expects employees and contractors to take personal accountability for their safety, that of their co-workers and the general public, and the safe operations of our assets. Further, workers have not only a right but a duty to stop and/or refuse work they feel is unsafe. Our success depends on all levels and all members of the organization being committed and accountable for consistently adhering to our company policies and procedures as well as all applicable regulations, codes and standards. Working safely is a condition of employment.

5. Assessment and improvement are a must.

Enbridge is committed to continuously improving our safety performance through field and operational assessments, and diligent application of quality and safety assurance practices and processes. Further, we employ disciplined root cause analysis and thoughtful exploration of human factors during incident investigations to identify and learn from weaknesses in our safety systems. We promptly address deficiencies revealed through these activities, and communicate what we learn across the organization to strengthen our systems and make Enbridge even safer.

6. We promote off-the-job health and safety for our employees 24/7.

Our concern for the safety and health of employees extends beyond the workplace. An off-the-job injury is as painful and impactful as one suffered on the job. We encourage our employees to demonstrate their leadership and excellence in health and safety practices for the benefit of their families, friends and community. An engaged workforce is a key building block of a healthy safety culture.

We strive to create a vigilant and resilient safety culture, in which all members of our team keep themselves and others safe, leaders care for the health and safety of their people, and we learn from safety failures to prevent future incidents. Our Safety Principles are foundational to our safety culture and our long-term success as an organization.

1.3 References

- MP-02 Manual - Emergency Management Program
- Request for Change

Section 2 – Organization

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2. Organization

2.1 Incident Command System

The Incident Command System (ICS) is a command-and-control system delineating job responsibilities and organizational structure for the purpose of managing day-to-day operations for all types of incidents. It is an interdisciplinary and organizationally flexible, scalable tool that provides a common framework, common terminology, and a standardized listing of position responsibilities for an incident of any kind or size. It provides logistical and administrative support to operational staff and is efficient, effective and avoids duplication of efforts. The ICS allows personnel from a variety of agencies to meld rapidly into a common management structure.

2.2 ICS Principles

The ICS structure is based on the following principles:

Table 2-1: ICS Principles

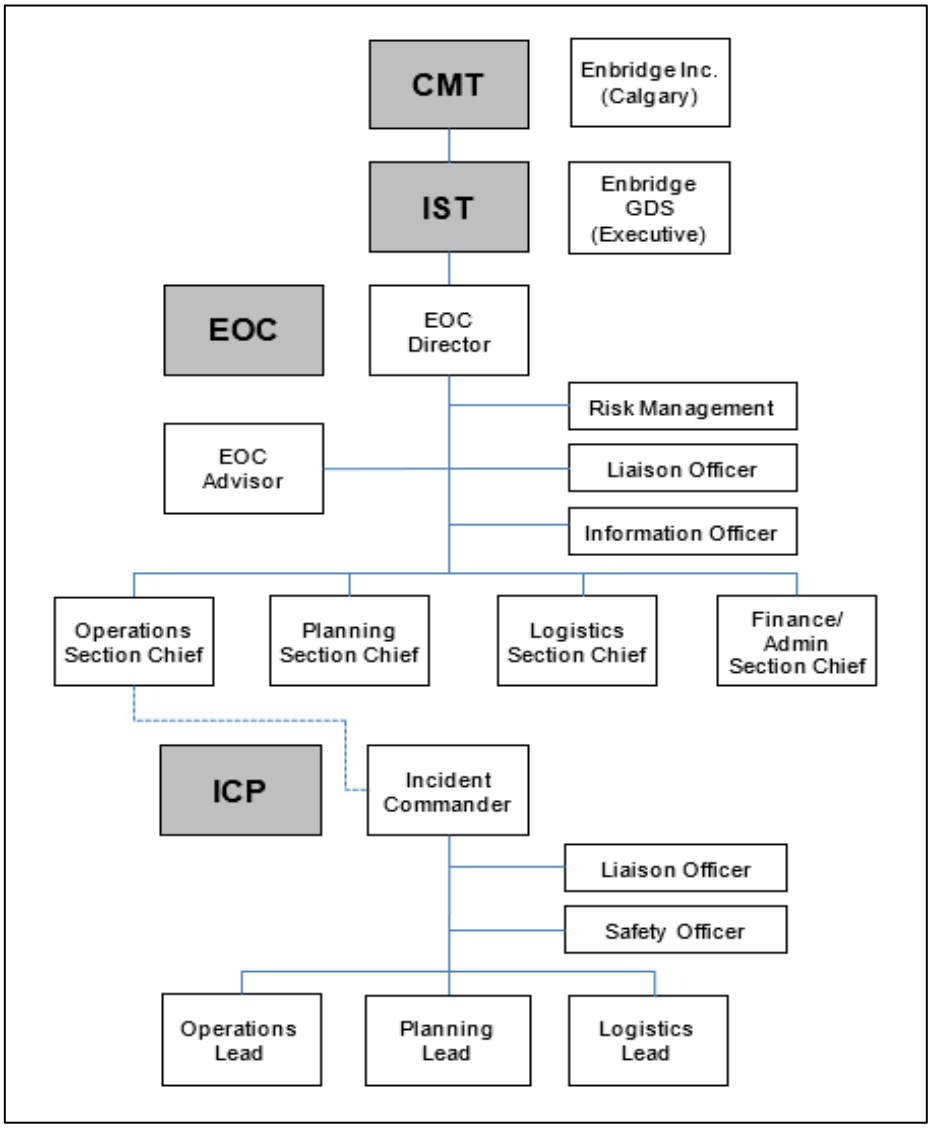
Principle	Purpose
Standardization	• Common terminology
Command	• Establishment and transfer of command • Chain of Command and Unity of Command
Planning / Organizational Structure	• Management by Objectives • Incident Action Plan • Modular Organization • Management span of control
Facilities and Resources	• Comprehensive Resource Management • Incident locations and facilities
Communications / Information Management	• Integrated communications • Information and Intelligence Management
Professionalism	• Accountability • Dispatch/Deployment

2.3 GDS Incident Response Structure

The Incident Command System structure for Gas Distribution and Storage (GDS) incident response is made up of the following:

- Crisis Management Team (CMT)
- Incident Support Team (IST)
- Emergency Operations Centre (EOC)
- Incident Command Post (ICP)

Figure 2-1: GDS Incident Response Structure



2.4 Response Organization

The details described within this section are specific to the response organization and roles that provide leadership support and response during an incident. All assigned roles must ensure a transfer of command when leaving an assigned role during an active incident.

Outside of regular work hours, the roles assigned in this section are staffed through an On-Call rotation (24/7/365) which ensures an adequate number of qualified resources. The rotation is comprised of both leadership and field responders who, during regular hours, are in the same role, have previously performed the same role, or have become qualified through training and mentorship.

2.4.1 Crisis Management Team

The Enbridge Crisis Management Team identifies and addresses strategic issues which might arise during an incident to ensure that the incident response is carried out in accordance with Enbridge's commitment to safety, and protecting people, the environment, assets, and reputation.

2.4.1.1 Activation

The CMT will be activated in the event of an incident where there is the potential for the following circumstances to exist:

- Loss of containment
- Significant process safety incidents, including fires and explosions
- Significant natural disasters
- Significant business interruptions
- Cybersecurity or privacy breaches
- Significant compliance or reputation issues
- Substantial financial events

2.4.1.2 Function

- Assess the potential impact of an incident or a crisis and identify measures that should be taken to eliminate or reduce the potential impact on the Corporation's viability, operability, and credibility.
- Ascertain the severity of the incident to determine what, if any, business continuity measures are to be taken. This will be completed in consultation with the Business Unit Incident Support Team.
- Address the concerns of high-level government officials, stakeholders, and other strategically important outside parties that are not directly involved in the response.
- Evaluate the Strategic Objectives of the Business Unit response organization to ensure that they are in alignment with those of the Corporation.
- Assist the Business Unit in obtaining resources during the response that would require Executive approval.
- Address Executive-level policy issues that may arise during incident response and crisis management operations which have the potential to impact beyond the affected Business Unit.

2.4.2 Incident Support Team

The GDS Incident Support Team provides strategic leadership and policy guidance to the EOC.

2.4.2.1 Activation

The IST will be activated in the event of a Level 3 - Complex emergency level (see **Section 3.3.4**) or whenever Senior Leader strategic decision-making during an emergency is required.

The following steps are to be followed:

- Crisis Leader will ask their Administrative Support to notify the members of the IST to report to the room or call in, as required.
- Once the required conference call has been set up, the IST will be updated by the EOC Director.

2.4.2.2 Function

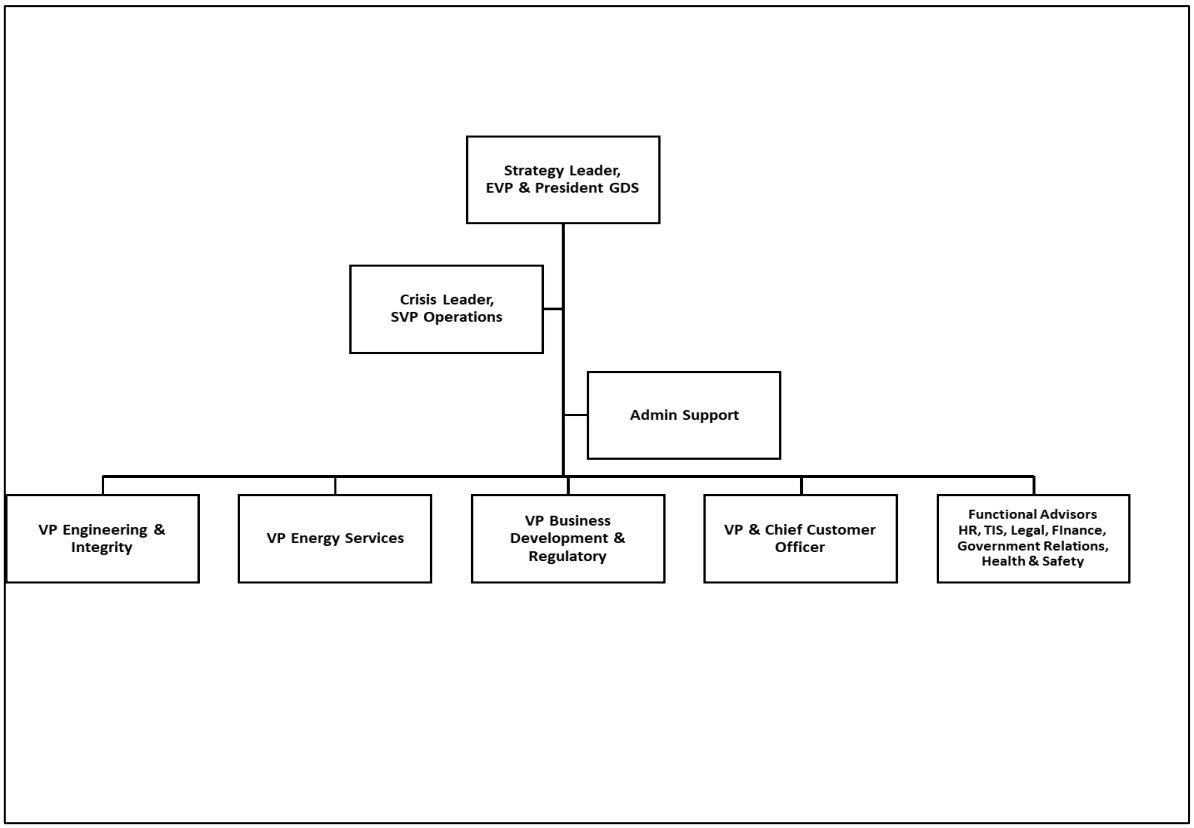
- Approve, where necessary, the plans to ensure the immediate safety and security of the public, the employees, contractors and the incident site.
- Ensure appropriate actions are taken to protect the Corporate brand; approve external media releases, ensure adequate communications to our senior external stakeholders, government officials, and regulators, etc.
- Set long-term goals for incident response.
- Provide advice and support to the EOC.
- Liaise with the Enbridge Crisis Management Team.
- Communicate with key external contacts that include Senior Industry Leaders, i.e., Canada Energy Regulator (CER), Ontario Energy Board, Technical Standards & Safety Authority (TSSA), TC Energy, Municipal, Provincial, and Federal governments.

2.4.2.3 Support Aids

- Emergency Response Plan and Crisis Management Plan
- Cell and conference phone (chargers)
- Projector and whiteboard
- Basic stationery supplies (pens, markers, and highlighters, etc.)

2.4.2.4 Roles and Responsibilities

Figure 2-2: IST Staffing



2.4.2.4.1 Strategy Leader

Assigned: Executive Vice President & President, Gas Distribution & Storage

Alternates: Senior Vice President, Operations or Vice President, as assigned

Role: Approve the appropriate corporate strategy during a major emergency

Responsibilities:

- Provide strategic direction to the Incident Support Team.
- Is primary contact for senior Federal or Provincial Regulators, senior commercial or industrial market customers and senior stakeholders involved in the emergency.
- Authorize declaration of a force majeure.
- Ensure appropriate steps are taken to protect the corporate brand during the emergency.
- Ensure the Crisis Management Team is well informed of actions taken by the Company and key issues.

2.4.2.4.2 Crisis Leader

Assigned: Senior Vice President, Operations

Alternates: Vice President, Engineering & Integrity; Vice President, Operational Services & Governance

Role: Provide strategic leadership and policy guidance for the EOC

Responsibilities:

NOTE: *These responsibilities may be delegated as appropriate.*

- Ensure appropriate steps are taken to protect the Corporate brand during the emergency.
- Determine when to activate/deactivate the IST.
- Assign roles as required.
- Authorize declaration of a force majeure.
- Approve the GDS Crisis Management Strategy.
- Approve any changes in the Company's Security Threat Response Plan threat level.
- Approve the internal and external EOC Communications Strategy.
- Participate in briefings and receive updates from the EOC Director.
- Communicate to the Crisis Management Team Business Unit Leader as required.
- Communicate with Senior Regulators, Market Customers and Stakeholders involved in the incident.

2.4.2.4.3 Crisis Advisors

Assigned: Vice President, Engineering & Integrity; Vice President & Chief Customer Officer; Vice President, Business Development & Regulatory; Vice President, Energy Services; and other leaders as required

Role: Support the Crisis Leader

Responsibilities:

- Support the development of longer-term recovery strategies.
- Assist in developing external communications to the large key stakeholders as required.

2.4.2.4.4 Functional Advisors

Assigned: Senior representatives from Central Service functions: HR, TIS, Legal, Government Relations, Health & Safety, Enterprise Security and others as required

Role: Support the Crisis Leader

Responsibilities:

- Support the development of longer-term recovery strategies.
- Provide subject matter expertise relative to their work function.

2.4.2.4.5 Administrative Support

Assigned: Administrative Assistant

Role: Provide Administrative Support for the IST

Responsibilities:

- Document the events and key decisions agreed to by the IST.
- Activate conference calls between the IST and the Enbridge CMT.
- Liaise with the EOC regarding status updates as required.

2.4.3 Emergency Operations Centre

The GDS Emergency Operations Centre is the central decision-making and communication centre responsible for strategic incident response at the region level.

2.4.3.1 Activation

The EOC may be activated at a Level 1 - Limited emergency level (see **Section 3.3.2**) and will be activated at a Level 2 - Severe emergency level (see **Section 3.3.3**) or whenever assistance is required to support the Incident Command Post or as requested by the Incident Support Team.

The following steps are to be followed when activating the EOC:

1. Verify communication systems are operational and establish communication with ICP.
2. Open the incident event log and event status board, and formally declare the EOC is activated.
3. Assemble the appropriate incident response plans.
4. Assign all Section Chief Roles as required.
5. Conduct an initial briefing and establish a schedule for ongoing briefings.
6. Determine whether to recommend activation of the IST.

2.4.3.2 Function

- Maintain regional control over all incident operations.
- Provide overall direction and support to the ICP and field resources for regional response activities.

- Ensure strategies, goals and tactics for response, make safe, repair, recovery and stand-down phases are developed, understood and followed.
- Ensures practices, processes and procedures are in place to guide the response.
- Establish and maintain communications with the IST and key stakeholders as required.
- Manage the public and media relations activities within the region.

2.4.3.3 Support Aids

- Plans and Listings:
  - Emergency Response Plan
  - Relevant Municipal and Utility Incident Plans and directories (if available)
- Equipment and Supplies:
  - Laptop with standard suite applications and Internet access
  - Cell and conference phone (chargers)
  - Satellite phone or access to Push to Talk radios
  - Projector, whiteboard and flip charts for status documentation
  - Close proximity to a printer, fax machine, photocopier
  - Radio, television, or streaming access
  - Basic stationery supplies (pens, markers, and highlighters, etc.)
  - Access to emergency backup power (electrical)
- Maps and Drawings (access to):
  - Maps showing the primary distribution systems in the regions
  - Maps showing current TC Energy and transmission systems and all points of connection to GDS
  - Local street maps
  - Schematics / station isometric drawings:
    - iViewer
    - Station Isometric Manual

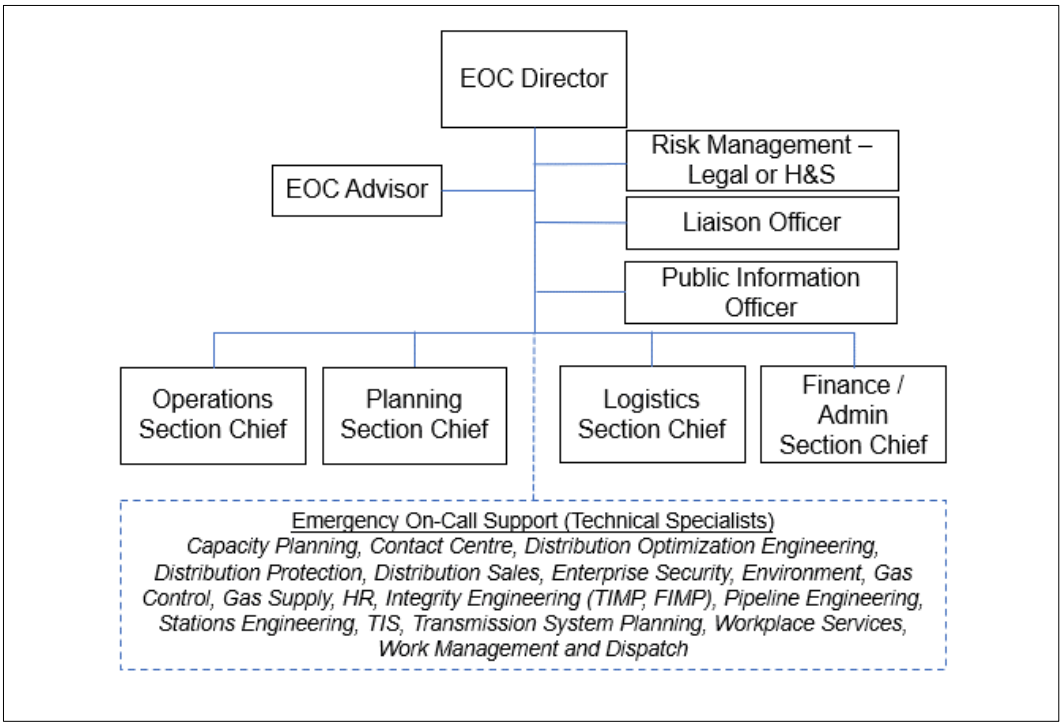
    NOTE: *Station drawings can also be found in ProjectWise (restricted access) and paper records.*
- ICS Forms available on the Emergency Management Program page in the GDS Document Library

2.4.3.4 Roles and Responsibilities

The incident characteristics will dictate the scale of the response and the appropriate organizational leadership for the EOC.

The EOC will be led by the Operations / STO Manager (Manager On-Call) for Level 1 emergencies or the Region / STO Director for Levels 2 and 3 Incidents. For Levels 2 and 3 Incidents, the Operations / STO Manager (Manager On-Call) will assume the role of the Operations Section Chief.

Figure 2-3: EOC Staffing



2.4.3.4.1 EOC Director

Assigned: Region / STO Director or Manager (see **Table 2-2**)

Table 2-2: EOC Director – Levels 1 and 2

Level 1 (Limited)	Level 2 (Severe)
• EOC Director is staffed by the Operations / STO Manager (or delegate). • ICP is activated under the Operations Manager or delegate. • Field Supervisors require additional tactical strategic support. • Incident duration is one operational period.	• EOC Director is staffed by the Region / STO Director (or delegate). • ICP is activated under the Region / STO Director. • ICP requires elevated strategic support beyond the Operations Manager that includes elevated internal and external communication and broad support (i.e., force majeure, curtailment, and widespread media, etc.). • Operations Manager or delegate assumes the role of Operations Section Chief. • Incident duration is greater than one operational period.

Role: Provide overall management and direction for activation, coordination, and demobilization of the EOC

Responsibilities:

- Set the strategy for the overall incident, including the short- and long-term goals.
- Determine when to activate/deactivate the EOC and advise the Incident Commander.
- Determine required roles based on the characteristics and size of the incident, and staff and assign roles accordingly.
- Notify the Crisis Leader (and Region / STO Director) of the incident as required.
- Ensure the Dawn Master Control Room and Gas Control are advised of the EOC activation as required.
- Ensure the appropriate authorities are notified of the incident.
- Lead the EOC conference call briefings.
- Prepare briefings for the Crisis Leader (and Region / STO Director) as required.
- Ensure ongoing communication between the EOC and ICP.
- Monitor all activities in the EOC to ensure all roles are completing their objectives.
- Request additional resources from other Region / STO Directors if required.
- Ensure media requests are dealt with by the Information Officer and designate a local media spokesperson if required.
- Determine required documentation / ICS Form(s) needed based on the incident characteristics and maintain written records of all activities for this position.

2.4.3.4.2 EOC Advisor

Assigned: Emergency Management Personnel

Role: Coordinate EOC activities

Responsibilities:

- Assist the EOC Director in staffing the EOC based on the characteristics and size of the incident.
- Set the agenda and coordinate the EOC conference call briefings.
- Assist the EOC Director in monitoring all activities in the EOC to ensure groups are completing their objectives and assigned tasks.
- Assist the EOC Director in setting short- and long-term goals for the operations, monitor progress for the goals and report results to the EOC Director.
- Advise the EOC Director of any change in emergency levels and advise EOC staff of any security threat level changes.

2.4.3.4.3 Risk Management – Health and Safety

Assigned: Health and Safety

Role: Monitor safety for the incident event and identify strategies to manage and mitigate

Responsibilities:

- Identify, monitor and evaluate activities to ensure applicable standards are implemented and followed.
- Advise the EOC Director of strategies for risk management and loss reduction.
- Provide guidance and recommendations to the EOC regarding actions to protect themselves from the incident.
- Assist the Information Officer in reviewing communications from a safety management perspective.
- Participate in EOC conference call briefings.

2.4.3.4.4 Risk Management – Legal

Assigned: Legal

Role: Monitor safety and liability for the incident event and identify strategies to manage and mitigate

Responsibilities:

- Identify, monitor and evaluate activities to ensure applicable standards are implemented and adhered to.
- Advise the EOC Director of strategies for risk management and loss reduction, and any conditions and actions that might result in liability.
- Provide guidance and recommendations to the EOC regarding actions to protect themselves from the incident.
- Gather, review and organize evidence and documentation that may be required in future.
- Assist the Information Officer in reviewing communications from a risk management perspective.
- Participate in EOC conference call briefings.

2.4.3.4.5 Liaison Officer

Assigned: Region / STO Manager or Supervisor or Sr Advisor Municipal Stakeholder & Community Engagement

Role: Liaise with relevant external agencies, authorities and organizations

Responsibilities:

- Establish and maintain a point of contact with representatives from other agencies and organizations as required.
- Provide information and guidance related to external agencies and organizations to the EOC Director and Section Chiefs.

- Participate in EOC conference call briefings.

2.4.3.4.6 Public Information Officer

Assigned: Crisis Communication Team Lead

Role: Coordinate public information, media relations and internal information sources for the EOC

Responsibilities:

- Gather information about the incident from EOC.
- Assess the need for a communications response to an incident.
- Review level of emergency and associated tactics.
- Develop a communications response appropriate to the incident and mobilize other Crisis Communication personnel and resources as applicable.
- Develop statements and circulate to the ECO Director and Legal (if activated as part of the EOC response) for approval.
- Issue Preliminary Incident Notifications if incident meets the criteria.
- Assist the EOC Director in identifying an onsite media spokesperson if required.
- Obtain contact information for Communication Leads in other incident response organizations (i.e., municipalities, and fire, etc.).
- Notify Corporate Public Affairs Communication when appropriate.
- Ensure the public within the affected area receives complete, accurate and consistent information.
- Participate in EOC conference call briefings.

2.4.3.4.7 Operations Section Chief

Assigned: Region Operations / STO Manager (Manager On-Call)

Role: Coordinate the make safe and recovery plans

Responsibilities:

- Coordinate all operational functions between the EOC and ICP.
- Work with the ICP and required support groups to develop an action plan and activities for make safe and repair to restore service.
- Approve, where appropriate, the plans and activities leading to full recovery.
- Provide operational expertise and direction to the ICP regarding Company standards, policies and procedures.
- Review scope and cost estimate for repairs.
- Identify and coordinate additional resources required to make safe and repair.
- Communicate activities to the EOC Director.
- Maintain a written record of all activities for this position.
- Participate in EOC conference call briefings.

2.4.3.4.8 Planning Section Chief

Assigned: Region / STO Manager or Supervisor

Role: Coordinate the EOC action planning process and track resources

Responsibilities:

- Coordinate all incident information.
- Develop incident action plan.
- Activate the appropriate Units (Situation, Resource, Documentation, Demobilization, and Technical Specialists) based on the functions required within the section and designate personnel, as required. **Table 2-3** includes the Technical Specialists (Emergency On-Call Support) available.
- Document and display updates and information about the incident as it occurs.
- Record and maintain resource and event status information and assignments.
- Coordinate planning activities and ensure technical expertise is available to support the EOC functions.
- Communicate with the EOC Director on activities.
- Collect all records from EOC and ICP for the purpose of the post-incident reviews.
- Maintain a written record of all activities for this position.
- Participate in EOC conference call briefings.

2.4.3.4.9 Logistics Section Chief

Assigned: Region / STO Manager or Supervisor

Role: Coordinate telecommunication services and information technology; locate or acquire tools and equipment, supplies, facilities, transportation, and other support services as required for the EOC and ICP

Responsibilities:

- Coordinate telecommunication services and technology, tools and equipment, vehicles, materials and supplies, including food and lodging.
- Liaise with Workplace Services to maintain facilities support and the Operations Section Chief to ensure timely procurement of services, tools and equipment for site response remediation.
- Activate the appropriate Situation Units (i.e., Information Technology, EOC Support Supply, and Personnel Transportation) based on the functions required within the section and designate personnel, as required.
- Ensure staging of equipment near the incident site.
- Maintain a current record of allocated vehicles, tools, and equipment.
- Communicate with the EOC Director on activities.
- Coordinate evacuation procedures with local authorities to establish incident shelters if required.

- Support the Logistics Lead in acquiring the Emergency Customer Service Address Listing.
- Maintain written records of all activities related to the position.
- Participate in EOC conference call briefings.

2.4.3.4.10 Finance / Administration Section Chief

Assigned: Region / STO Manager or Supervisor

Role: Coordinate all financial tracking and records for the incident

Responsibilities:

- Provide and maintain all accounting and financial needs.
- Analyze and monitor response and recovery costs.
- Track personnel time.
- Communicate with the EOC Director on activities.
- Activate the appropriate Situation Units (i.e., Time Procurement; Compensation and Claims; and Cost Accounting) based on the functions required within the section and designate personnel as required.
- Participate in EOC conference call briefings.

2.4.3.4.11 Emergency On-Call Support

On-Call Support resources (see **Table 2-3**) are technical specialists available to provide subject matter expertise during incidents 24/7/365. The On-Call Support schedule is emailed weekly to roles that provide standby leadership support.

Table 2-3: Emergency On-Call Support

On-Call Support	Role
Capacity Planning	Provide information for system capability and demand.
Corporate Security	Provide guidance and support for threats or security issues and risks.
Contact Centre	Mobilize the public notifications (IVR and Dialer). Receive customer inquiries during emergencies (Southwest, Southeast and North Regions only).
Distribution Optimization Engineering	Provide system information for supply, system capability, and network issues (i.e., locations and details of valves, stations and mains).
Distribution Protection	Provide support for validating and locating natural gas plant.
Distribution Sales	Mobilize the customer notification process for curtailment to meet determined volumetric requirements.
Environment	Provide guidance and support for incidents with environmental impacts.

On-Call Support	Role
Gas Control	Monitor and provide current and forecasted system operating conditions and capabilities including scheduled flows.
Gas Supply	Provide system information for supply and peak day demand.
Human Resources	Provide guidance and support to identify and address personnel-related issues.
Information Technology	Provide guidance and support for application and communication technology-related issues.
Pipeline Engineering	Provide technical guidance and support in terms of construction and design for pipelines.
Transmission Integrity Management Program (TIMP) Engineering	Provide technical guidance and support in terms of construction and design for TIMP designated assets
Station Engineering	Provide technical guidance and support in terms of construction and design for stations.
Real Estate and Workplace Services (REWS)	Provide guidance and support for facility-related issues.
Work Management / Dispatch	Coordinate dispatch mobilization to and from the incident.

2.4.3.4.12 Emergency Operations Centre Contacts

Emergency Operations Centre contacts (listed in **Table 2-4**) will staff the EOC during non-regional or multi-regional events.

Table 2-4: Emergency Operations Centre Contacts

Redacted. This table contains the names and titles of GDS employees. It is protected from publication under Clause 1(a) of Order MO-006-2016 because it discloses information about identifiable individuals.

2.4.4 Incident Command Post

2.4.4.1 Activation

The GDS Incident Command Post (ICP) will be activated to support the field responders and provide resource management at the ICP. The location for the ICP will be at or near the incident site and must be able to provide the necessary support for sufficient parking, a staging area, workstations and bathroom facilities. The ICP may be located inside a building, vehicle, trailer, tent or similar enclosure. Cell phone coverage, a display area for maps, and a quiet space for conference calls is also required. If an all-weather trailer is required for the purpose of an Incident Command Post, two options are available:

1. To request temporary loan of the Incident Command Trailer, contact the Enbridge Liquid Pipelines Control Room, On-Call Manager. Transportation of the trailer can be provided by a licensed and equipped towing vehicle.

2. To request delivery and onsite setup of a trailer, contact the On-Call Facilities Supervisor. The trailer will require heating / air conditioning, a washroom, electrical power, Wi-Fi, a meeting table and chairs.

   NOTE: *This option is generally preferred for a longer-duration ICP.*

The following steps are to be followed when activating the ICP:

1. Establish communication with Field Responders.
2. Establish communication with EOC when activated.
3. Record and maintain key actions and decisions concerning the incident.
4. Provide briefings to arriving ICP members.

2.4.4.2 Function

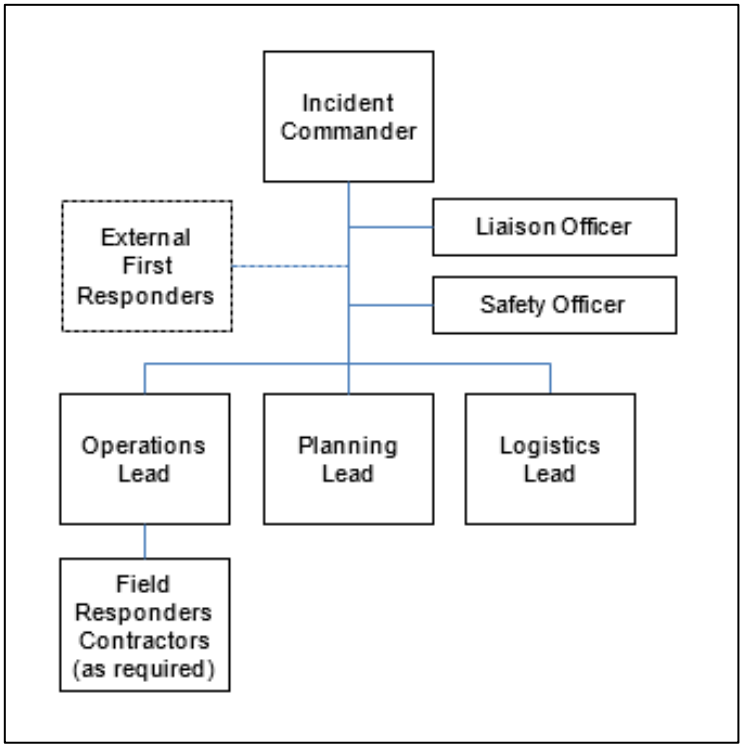
- Work as a team in dealing with aspects of the incident that are the responsibility of GDS.
- Provide resources to assist in incident operations.
- Be scalable in nature, depending upon the scope of the incident.
- Update the Operations Section Chief regarding situational status, as required.

2.4.4.3 Support Aids

- Emergency Response Plan (required)
- PPE - e.g., hard hat; safety footwear, safety glasses, safety vest, flame-resistant garments, and hearing protection (required)
- Tools - e.g., tapers, matches, gloves, telescoping pilots, 24-inch universal thermocouples, flashlight, batteries, and measuring tape (recommended)
- Incident Commander identification using a green hard hat or an Incident Commander Vest (required)
- Cell phone – e.g., camera, flashlight (required)
- First aid kit, sunblock, bug spray, rain suit, and gloves (recommended)
- Basic stationery – e.g., paper, pens, pencils, markers, highlighters, and legal-size clipboards
  - Access to fax/printer for copies (recommended)
  - Cards/Tags (recommended):
    - Infraction
    - Evidence
    - Can’t Get In
    - Meter Location Code
    - ICS Forms available on the ERP program page in the GDS Document Library

2.4.4.4 Roles and Responsibilities

Figure 2-4: ICP Staffing



2.4.4.4.1 Incident Commander

Assigned: Region / STO Field Supervisor (or delegate)

Role: Coordinate all response activities undertaken by field personnel and contractors working on behalf of GDS at the incident site

NOTE: The Incident Commander will determine if there is a need for separate Leads and Officers at an incident. Until a Lead or Officer position is filled, the Incident Commander will have direct control of the functions.

Responsibilities:

- Ensure the safety of all site personnel.
- Conduct an initial assessment (size up), noting the following;
  - Current situation
  - Outstanding issues and challenges
  - Anticipated priorities
  - Safety, media and other information
- Manage, direct, and oversee all field operations at the incident site.
- Work with the Operations Section Chief and the required support groups to develop an action plan and activities for make safe and repair to restore service.
- Request and assign ICP roles, as required.

- Conduct planning meetings and briefings for the Incident Command staff and leads.
- Prepare briefings and updates for the Operations Section Chief.
- Ensure written records of all field incident operations are maintained.
- For critical injuries and fatalities:
  - Clear area of all nonessential personnel and ensure the area is cordoned off.
  - Implement area shutdown or evacuation as situation warrants.
  - Notify the EOC Director.
  - Instruct any witnesses to record in writing what they saw and collect statements of fact from those involved.
  - Consider requirements for scene security/preservation of evidence.

2.4.4.4.2 Safety Officer

Assigned: Region / STO Field Supervisor (or delegate)

Role: Monitor safe work practices for the incident event

Responsibilities:

- Ensure applicable safety standards are implemented and followed.
- Provide guidance to field responders regarding actions to protect themselves from the incident.
- Provide updates and information to the Incident Commander.

2.4.4.4.3 Liaison Officer

Assigned: Region / STO Field Supervisor (or delegate).

Role: Point of contact for communicating with external agencies at the incident site

Responsibilities:

- Establish and maintain a point of contact and interact with representatives from assisting and external agencies.
- Provide information from external agencies and organizations to the Incident Commander.
- Maintain a written record of all activities for this position.

2.4.4.4.4 Operations Lead

Assigned: Region / STO Field Supervisor (or delegate)

Role: Coordinate tactical resources and oversee the functions of the Field Responders and Contractors

Responsibilities:

- Direct and coordinate all tactical operations ensuring the safety of all field personnel at the incident site.
- Determine resource requirements for tactical operations at the incident site.

- Assist the Incident Commander in developing action plans and activities for make safe and repair to restore service.
- Maintain written record of all activities for this position.
- Request (or release) resources through the Incident Commander.
- Communicate the situation and resource status at the incident site with the Incident Commander.

2.4.4.4.5 Planning Lead

Assigned: Region / STO Field Supervisor (or delegate)

Role: Coordinate planning functions at the incident site

Responsibilities:

- Collect, evaluate and display information pertaining to the incident.
- Assist the Incident Commander in developing action plans and activities for make safe and repair to restore service.
- Maintain status for all equipment and personnel assigned at the incident site.
- Collect written records of all incident documentation completed at the site.
- Communicate updates to the Incident Commander.

2.4.4.4.6 Logistics Lead

Assigned: Region / STO Field Supervisor (or delegate)

Role: Coordinate equipment and supplies required for the ICP

Responsibilities:

- Track and record all ICP staff and field responders including start and finish times.
- Coordinate all services and support needs at the incident site.
- Acquire the Emergency Service / Customer Address Listing for significant outages. Sort the report to identify priority customers and to efficiently dispatch the turn-offs and turn-ons.
- Track the completed turn-offs and turn-ons on a Master Emergency Service / Customer Address listing.
- Ensure the final lists of can't get in / access are provided to Dispatch so that the appropriate work orders can be created.
- Maintain written records of all incident documentation completed at the site.
- Communicate updates to the Incident Commander.

2.4.4.4.7 Field Responders

Assigned: Field - Responders

Role: Provide operational response to incident situation

Responsibilities:

- Make safe.
- Report to Dispatch / Control Room the status of the following items:
  - Arrival time
  - If natural gas is involved / incident details
  - If the gas is off
  - Extent of personal property damage
  - If there is media coverage
  - Assistance required – resources, welder, and backhoe operator, etc.
- Liaise with First Responders (i.e., fire, police, EMS) and provide relevant details and expertise regarding natural gas infrastructure and response actions.
- Sign in with the Incident Commander (delegate) upon arrival at the Incident Command Post.
- Respond to direction from the Incident Commander (or delegate) and interact with response personnel to end the incident.
- Maintain clear, concise records, and record all discrepancies.

2.4.4.4.8 Contractors

Assigned: Contractor

Role: Provide operational assistance to incident situation

Responsibilities:

- Sign in with the Logistics Lead upon arrival at the Incident Command Post.
- Report to Operations Lead for work requirements.
- Maintain clear, concise records recording all discrepancies.

2.4.4.4.9 External First Responder – Police

Assigned: Police

Responsibilities:

- Provide perimeter control, crowd and traffic control.
- Assist with evacuation.
- Assist with supervised entry.
- Search, and when required, notify the Coroner of fatalities.
- Lead criminal investigation.
- Liaise with Enbridge personnel to discuss current status information and when required, establish a unified command.

2.4.4.4.10 External First Responder – Fire

Assigned: Fire

Responsibilities:

- Provide fire suppression and rescue.
- Provide building ventilation.
- Assign hot, warm and cold zones.
- Provide building codes and fire safety plans.
- Deal with hazardous materials, chemical, biological, radiological and nuclear.
- Liaise with Enbridge personnel to discuss current status information, and when required, establish a unified command.

2.4.4.4.11 External First Responder – Emergency Medical Services (EMS)

Assigned: EMS

Responsibilities:

- Provide triage, treatment and transportation.

2.5 ICS Forms

There are several forms that can be used to support an ICP or EOC. It is up to the discretion of the EOC Director to determine what forms should be used. The ICS forms available are as follows:

- Incident Action Plan (required if an EOC is activated)
- Position Log
- Status Report
- Situation Report
- Resource Request
- Incident Briefing (only used at the ICP Level)

NOTE: *ICS Forms can be found in the Emergency Management Program section of the GDS Document library*

2.6 Training

Role-specific training requirements are in included in the Emergency Management Program Manual (MP-02) as part of the GDS Integrated Management System.

2.7 References

- Emergency Management Program (MP-02)
- Incident Command System Forms (available in the GDS Document Library)

Section 3 – Incident Response

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disclosure could impair the security of GDS's pipeline system, buildings or structures.

Redacted. This sub-section contains the names and titles of GDS employees. It is protected from publication under Clause 1(a) of Order MO-006-2016 because it discloses information about identifiable individuals.

3. Incident Response

3.1 Gas Distribution & Storage (GDS) Dispatch

GDS Dispatch operates 24/7/365 and can be reached by the public, should there be a natural gas emergency or leak, by dialing 1-866-763-5427.

3.2 Dispatch Response Matrix

Table 3-1 represents the minimum response requirements in the event of an emergency.

Table 3-1: Dispatch Response Matrix

Description	* Primary Responder	** Secondary Responder	Stations Tech	Operations Supervisor	Operations Manager	Damage Prevention Inspector	Dispatch Supervisor / Team Lead
Damaged Customer Meter Setup							
Blowing gas	Y	N	N	Y	N	N	N
Gas not blowing	Y	N	N	Y	N	N	N
Fire	Y	N	N	Y	Y	N	N
Damaged Regulation Station *(distribution, gate, production, transmission)*							
Blowing gas	Y	N	Y	Y	N	N	N
Gas not blowing	Y	N	Y	Y	N	N	N
Fire	Y	N	Y	Y	Y	N	N
Hit Main, Service, or Farm Tap							
Blowing gas – damages that include: • Reports of blowing gas • Reports of pinched-off plastic mains or services • Reports of pulled steel mains or services	Y	Y	N	Y	N	Y	N
Gas not blowing – reports of damaged coating requiring wraps or damaged tracer wires	Y	Y	N	Y	N	N	N
Fire	Y	Y	N	Y	Y	Y	Y
Leak or Odour							
Inside	Y	N	N	N	N	N	N

Description	* Primary Responder	** Secondary Responder	Stations Tech	Operations Supervisor	Operations Manager	Damage Prevention Inspector	Dispatch Supervisor / Team Lead
Inside – reported damage of house piping in a residence or commercial building	Y	N	N	Y	N	N	N
Outside	Y	N	N	N	N	N	N
5-10 odour calls in an area	Y	N	N	Y	N	N	Y
More than 10 odour calls in an area	Y	Y	N	Y	Y	N	Y
Carbon Monoxide							
Fire department requests assistance	Y	N	N	N	N	N	N
Persons requiring medical attention/injuries confirmed by Emergency personnel	Y	N	N	Y	N	N	N
Explosion							
Explosion	Y	Y	N	Y	Y	N	Y
Fire							
Fire at customer premises	Y	N	N	N	N	N	N
Winter Watch							
Iced-over regulator (impacting pressure)	Y	N	N	Y	N	N	N
Buried meter	Y	N	N	N	N	N	N
High/Low Pressure							
Report of ‘Low’ or ‘No Pressure’ at a ***single*** premises	Y	N	N	N	N	N	N
Report of ‘Low’ or ‘No Pressure’ in a pipeline system affecting ***more than 1*** premises in the same area	Y	N	N	Y	N	N	N
Report of excess pressure at a ***single*** premises	Y	N	N	N	N	N	N
Report of excess pressure in a pipeline system affecting ***more than 1*** premises in the same area	Y	N	Y	Y	Y	N	N
Natural Disasters Affecting Enbridge Natural Gas System							
Flooding, forest fires, or tornados, etc., impacting mains or services	Y	Y	N	Y	Y	N	Y

Description	* Primary Responder	** Secondary Responder	Stations Tech	Operations Supervisor	Operations Manager	Damage Prevention Inspector	Dispatch Supervisor / Team Lead
Employee Injury or Accident							
Requiring health care or vehicle accident	N	N	N	Y	Y	N	N
Emergency Provider Assistance							
Call involving fire department, police, other first responding agency, or Technical Standards & Safety Authority (TSSA) requiring immediate assistance and not covered by any other emergency description	N	N	N	Y	N	N	N
Evacuations							
Evacuation impacting school, public building, large commercial building, or 10 or more houses	Y	N	N	Y	N	N	N
Other							
Report of protestors/activists at a company station or facility	N	N	N	Y	Y	N	Y

NOTES:

** Primary responder is USR in Northern region and Lakeside in all other regions.*

*** Secondary responders are internal Field Reps (USR / Gas Tech).*

3.2.1 On-Call Supervisor Notification

Upon investigation of an incident, the primary responder (or delegate) must ensure the On-Call Supervisor has been notified when any of the scenarios shown in **Table 3-2** exist.

NOTE: *This should be done as soon as possible and prior to the primary responder leaving the site.*

Table 3-2: On-Call Supervisor Notifications

Scenario	Details
Carbon Monoxide	• Equipment serviced in the last six months by a service provider. • An abnormal safety condition exists which may be the result of a product defect or installation error. • Equipment failure in a rental property, where the occupant is not responsible for the maintenance of the equipment. • CO-related injury because of problems with the equipment.
Fire or Explosion	• An injury or fatality occurs because of the fire or explosion. • Natural gas or a gas appliance is directly involved or suspected as the cause of the fire or explosion. • The meter or service is damaged by the fire or explosion, or gas supply cannot be shut off at the meter. • The primary responder needs a physical assist, or the fire department requests the primary responder to investigate.
Media on site	Any reports of media on site.
Protestors at a Company site	Protestors at a Company station or facility.

3.2.2 On-Call Supervisor Response

Upon notification of any of the scenarios shown in **Table 3-3**, the On-Call Supervisor must respond on site.

Table 3-3: On-Call Supervisor Response

Scenario	Details
Death or Injury	Death or serious injury where natural gas is suspected as the cause.
Damage	Significant damage to Company or personal property or a significant negative impact on the local environment where natural gas is suspected as the cause.
External Agency Request	TSSA, Fire Marshall or other investigating agencies are on site requesting an Enbridge representative.
Media on site	Media on site requesting a statement.
Protestors at a Company site	Protestors confirmed to be at a Company station or facility.

3.3 Emergency Levels

Gas Distribution & Storage (GDS) routinely responds to emergency events as described in the Ontario Energy Board (OEB) Gas Distribution Access Rule (GDAR). These events are usually short duration, low impact events with well defined operational procedures and notification requirements that do not require elevated actions. These events are typical of what employees on site have been trained to deal with under normal operation procedures.

Emergency Levels listed in **Table 3-4** apply to elevated events, allowing for a scalable response to support the frontline response teams. The complexity of the event dictates the structure required to provide effective organization, support and execution.

Table 3-4: Emergency Levels

Emergency Levels	Description
Alert Level	• An incident has been identified which represents a potential crisis for GDS; can be managed locally with no Emergency Operations Centre (EOC) activation. • The situation warrants a heightened level of preparedness and response locally to prepare and/or respond to potential consequences. • Actions may be taken to mitigate the threat, disseminate information and personnel, and other resources may be placed on standby. • An ICP may be established if needed but is not required.
Level 1 - Limited	• A crisis has occurred that has the potential for negative consequences. • The incident may require strategic support, oversight, and involvement of select members of the EOC. • The activation will include selected team members based upon the specific event and would be led by the Operations/STO Manager. • An ICP may be established. • The crisis leader may be informed as needed.
Level 2 - Severe	• A crisis has occurred that has the potential for negative consequences. • The incident requires elevated strategic support. • The activation will include a full activation of the EOC. The Regional or On-Call Director will assume the role of EOC Director, and the Operations Manager will assume the role of the Operations Section Chief. • Business Continuity Plans may be activated by the Business Function owner to ensure the continuity of operations.

Emergency Levels	Description
Level 3 - Complex	• A crisis has occurred that has negative consequences. • The full support of the EOC is required to ensure a comprehensive response. A Director-led EOC is activated. • Senior strategic decision-making is required to protect the business and provide proper support and assistance to the affected business functions and communities. • The Crisis Leader will activate the IST. • Business Continuity Plans will be activated by the Business Function owners to ensure continuity of operations for each function disrupted.

3.3.1 Alert Level

Alert Level requires no immediate activation of the Incident Command Post (ICP), EOC or Incident Support Team (IST).

3.3.1.1 Conditions

The conditions to determine Alert Level include but are not limited to:

- Fire or explosion (including those involving equipment/appliances) where natural gas is suspected as the cause, or the resulting fire caused leakage or damage to the meter set.
- A loss of service to 60 customers or more; or an evacuation of 10 or more houses, any large complex, school, or public building.
- More than 20 odour calls received in one area.
- Carbon monoxide exposure due to hydrocarbon fuel appliances where:
  - Work was performed on the equipment by a service provider in the past six months
  - Equipment failure in a rental property where the occupant is not responsible for the maintenance of the equipment
  - An abnormal condition due to product defect or installation error
  - CO-related injury because of problems with the gas-fired equipment
- Minor flooding in areas served by natural gas where service has not been interrupted but flood waters are expected to rise.
- An iced-over regulator, where the house piping was over-pressurized by more than 2 psig.
- Widespread communication system or control system failure (STO / Gas Control) providing insufficient data to maintain system integrity.
- Local media involvement.

- External regulatory agencies arriving at an incident site (i.e., Ministry of Labour, Immigration, Training and Skills Development [MLITSD] and TSSA, etc.).
- Community Emergency Response Services that have been called by GDS to assist with the response (i.e., fire department, ambulance, police).
- A spill or major spill of product other than natural gas requiring mandatory notification.
- Gas quality alert isolated to a single region.
- Notification of a gas interruption to in-franchise, interruptible contract customers.

3.3.1.2 Actions

The actions to be taken for Alert Level include:

- Notify On-Call Manager who:
  - May activate the ICP if required (staffing levels will be incident dependent).
  - Will notify external agencies, as required.
  - Will notify Public Information Officer (PIO), if required.
  - Will notify the EOC Advisor On-Call, if required.
  - Will activate Gas Control Emergency Team, if required (Gas Control incidents only).

3.3.2 Level 1 - Limited Emergency

Limited Emergency Level may require activation of the ICP and a partial activation of the EOC.

3.3.2.1 Conditions

The conditions to determine a Level 1 - Limited Emergency include but are not limited to:

- Loss of a GDS gas facility which could significantly reduce the Company's ability to respond to normal workload.
- Communication system failure of a Call Centre or Emergency Call Handling for an extended period that significantly impacts field response times or activities in a Region.
- Localized flooding that may interrupt service and waters that are expected to rise.
- Extreme cold weather or threat to a gate station operation.
- Customer outages exceeding 500 customers in heating season, 1,000 customers in the summer or impacts to contract/industrial customers.
- Major fire or explosion due to acts of nature, etc., (e.g., lightning strike).
- Local/Regional media involvement because of an incident.

- High/Low odourant occurrence or gas quality alert impacting a region or resulting in a significant number of emergency reports to the Company and/or first responders.
- Emergency Shutdown of a compressor plant affecting system operations which cannot be reasonably reset or restarted.
- Short-term mainline compressor outage with potential of a system delivery impact.
- A spill or major spill of product other than natural gas requiring regulatory notification and internal and external resources for cleanup and monitoring.
- Company property damage > $10,000 < $50,000.

3.3.2.2 Actions

The actions to be taken for Level 1 - Limited Emergency include:

- Perform all actions listed under **Alert** level.
- Notify the On-Call Manager who will:
  - Activate the ICP (staffing levels will be incident dependent) as required
  - Activate a Manager-led EOC and establish communications with the Incident Commander (staffing levels will be incident dependent).
  - Notify the Crisis Leader if required.

3.3.3 Level 2 - Severe Emergency

Severe Emergency Level requires activation of the ICP and a fully staffed EOC.

3.3.3.1 Conditions

The conditions to determine Severe Emergency Level include but are not limited to:

- A critical injury to employees or the public because of GDS.
- Severe weather events with the potential to cause extensive damage that require monitoring and mitigation strategies and may result in the natural gas service interruption in a localized area, for a community or a large number of customers.
- Communication system failure of a Call Centre or Emergency Call Handling for an extended period that significantly impacts field response times or activities across more than one Region.
- A bomb threat involving Company property.
- Any peaceful or intrusive protest at a GDS facility.
- Widespread media interest because of an incident.
- A major fire or explosion due to acts of vandalism or where Enbridge assets or Enbridge activities may be involved.

- Loss of a GDS facility which significantly reduces the Company's ability to respond to normal workload or the activation of a Business Continuity Plan (BCP).
- When resources from another Region or non-Company resources (excluding Extended Alliance [EA] partners) are required to respond to an incident because all local resources have been deployed.
- Damage, leakage, or potential loss of pipelines designated as vital including any pipeline identified as a Transmission Integrity Management Program (TIMP) pipeline (such as pipelines operating above 30% specified minimum yield strength (SMYS), Canada Energy Regulator (CER) assets, and pipelines operated by STO).
- When pressure in a transmission or distribution system has exceeded its maximum operating pressure (MOP) by 10% or greater for any duration.
- High or low odourant occurrence or a quality alert affecting more than one Region.

3.3.3.2 Actions

The actions to be taken for Level 2 - Severe Emergency Level include:

- Perform all actions listed under **Alert** and Level 1 - **Limited** levels.
- Notify the On-Call Manage who will:
  - Establish Communications with the Incident Commander
  - Activate the ICP (staffing levels will be incident dependent) as required
  - Notify the On-Call or Regional Director
  - Notify the EOC Advisor on call
- The On-Call or Regional Director will activate the EOC including, at minimum, the EOC Director, EOC Advisor, Operations and Planning Section Chiefs, Legal and PIO staff. Additional staff and technical specialists will be added as needed.
- Notify the Crisis Leader as required.
- Crisis Leader will notify the Crisis Management Team as required.

3.3.4 Level 3 - Complex Emergency

Level 3 - Complex Emergency requires activation of the ICP, a Director-led EOC and IST.

3.3.4.1 Conditions

The conditions to determine Level 3 - Complex Emergency includes but are not limited to:

- Any incident that will require a reallocation of gas supply, i.e., Eastern Canadian Mutual Assistance Plan (ECMAP) or Trafalgar System Shortfall Allocation Procedure (TSSAP) or activation of load-shed procedures.
- Any confirmed and credible hostile action, suspect event, or threat against a GDS facility or a community which GDS serves.

- Multiple critical injuries or fatalities.
- Damage to the GDS reputation resulting from an incident.
- Any incident causing potential financial impacts of $1 million or greater.
- An unplanned, long-term compressor or transmission pipe outage resulting in system delivery impacts.
- Loss of storage or compression resulting in system delivery impacts.
- A high level of damage to public or the environment because of an incident involving Company operations.

3.3.4.2 Actions

The actions to be taken for a Level 3 - Complex Emergency include:

- Perform all actions listed under **Alert**, Level 1 - **Limited** and Level 2 - **Severe** levels.
- Activate a Full EOC (Director-led).
- Notify the IST Crisis Leader.
- Activate the IST.
- Crisis Leader notifies the CMT as required.
- EOC Director ensures that Business Continuity Plan Function owners are situated within the EOC structure.

3.4 Team Activation

3.4.1 Alert Level

The Field Responder escalates the incident to the On-Call Supervisor who evaluates the situation to determine if activation of the ICP required. The On-Call Supervisor notifies the On-Call Manager for internal and external communications. Business function disruptions may warrant continual monitoring and local response to ensure continuity of operations is achieved.

3.4.2 Level 1 - Limited Emergency

The On-Call Manager will act as the EOC Director and will notify the EOC Section Chiefs of an incident and activate the EOC. The EOC Director will establish communications with the Incident Commander. The EOC Director may escalate to a Level 2 - Severe Emergency after discussions with the Region / STO Director. Business functions that are disrupted may elevate the matter to their leadership teams and refer to Business Continuity Plan actions.

3.4.3 Level 2 - Severe Emergency

The On-Call Manager will escalate the incident to the regional or On-Call Director. The EOC Director will notify the EOC Advisor and EOC Section Chiefs of an incident and activate the EOC. The EOC Operations Section Chief will establish communications with the Incident Commander. The EOC Director will notify the Crisis Leader (IST). Business functions impacted will activate Business Continuity Plans and the plan lead and/or function owner will participate in the EOC structure.

3.4.4 Level 3 - Complex Emergency

The EOC Director will notify the Crisis Leader (IST) of an incident. The Crisis Leader will notify the Executive VP and President of GDS. A full EOC activation will take place. The Crisis Leader will activate the IST. Business functions impacted will activate Business Continuity Plans and the business function owner / plan owner will participate in the EOC structure to ensure continuity of operations is achieved.

3.4.5 Deactivation

The EOC and ICP will remain activated until the incident has been addressed and the business recovery actions become routine. The decision to de-escalate the incident is the accountability of the EOC Director and the Incident Commander. Factors to be considered in making the decision to deactivate include but are not limited to:

- Affected area has been isolated (gas not blowing).
- Repairs have been completed and recovery is underway.
- Resources provided by neighbouring regions are no longer required.
- Source of the odour has been determined (not natural gas) or source of the odour has been determined (natural gas) and the area has been made safe (may include onsite monitoring).
- Supply of gas to the premises/building has been shut off or affected gas appliances have been shut off.

3.4.5.1 Debrief

Upon deactivation of an EOC, the EOC Director will determine if a debrief meeting will be required to discuss any significant incidents. The purpose of the debrief meeting will be to provide responders the opportunity to share their feedback on the successes (things we did well), challenges (issues that were difficult but were overcome), and gaps (potential action items) that occurred. More information can be found in the MP-02 Program manual (Section 5.3 – After Action Reports).

3.5 Incident Types

The questions in **Table 3-5** will assist On-Call leadership roles in gathering information to ensure the appropriate response for different incident types.

Table 3-5: Incident Type Questions

Incident Type
Carbon Monoxide
• Are there injuries? Has anyone been sent to hospital, admitted, or released? • What appliances are involved? • Has gas been turned off? If yes, where – at the appliance, valve, or meter?
Damaged Meter Set (or first stage cut/farm tap)
• How was the damage caused – vehicle, vandalism, etc.? • Did the damage cause a gas release? • Is the damage isolated? If yes, how?
Fire or Explosion
• Is natural gas involved? • Is the Fire Marshall involved? • What is the extent of the damage? • Is there damage to Company property or equipment – meter, station, pipeline, facilities? • Are there injuries? Has anyone been sent to hospital, admitted or released? • Will bar-holing, soil purging, or leak survey be required? • Have gas odour levels been taken?
Environmental Spill
• Is natural gas involved? • Is the type of substance known? • What are the impacts to the natural environment? (e.g., land, water, air, wildlife) • What amount was spilled? • Did the spill occur on Company property? Has it spread off the property? • Has the spill been contained? • Are there injuries? Has anyone been sent to hospital, admitted, or released?
Flooding
• Is there damage to Company property or equipment – meter, station, pipeline, facilities? • Are customer appliances affected? • How many customers are affected and type (e.g., residential, commercial, hospital, etc.)? • What is the approximate depth of flooding? • Is it known when the flood waters will peak? • Is the duration of the flooding known?

Incident Type
Gas Leak
• Is the leak inside or outside – above or belowground? • Are there any evacuations? If yes, how many? • Are there any frost conditions? • Is bar-holing or soil purging required? • Have manholes or other structures been checked for gas? • Is a gas analysis required? • Is the leak on a pipeline operating at >30 SMYS? If yes, contact Pipeline Engineering immediately.
Iced Regulator - Overpressure / Under-Pressure
• What is the estimated pressure in the house line? • Is there damage to Company property or equipment – meter or regulator? • Is the regulator and/or meter still intact (still frozen)? • Has the regulator and/or meter been removed? If yes, by whom? • How was the problem detected? • Has the problem been corrected? If yes, how? • Have any infractions been written?
Relief Valve Blowing or System Overpressure
• Is the system MOP exceeding 10% or greater for any duration? If yes, contact Pipeline Engineering immediately for direction. • What equipment malfunctioned? • What caused the equipment to malfunction? • What was the peak pressure? Has the pressure returned to normal? • How long did the relief valve blow? • How was the problem detected?
Line Break
• What are the pipe details - size, pressure, material? • Are any priority or large customers affected? • Who caused the damage - person or company? • Were locates provided? Are they accurate? • Has the damaged area been isolated? If yes, how - valves or pinched off? • Is the damaged pipeline operating at >30 SMYS? If yes, has Pipeline Engineering been contacted immediately for direction?

Incident Type
Lightning Strike
• Is there damage to Company property or equipment – meter, station, pipeline, facilities? • If a pipeline damage, what are the details – pipe size, material, pressure? • Have manholes or other structures been checked for gas? • Has a leak survey been completed along the service and main? • Has the damage affected the tracer wire or insulation (or plastic)? • Has above-ground piping been investigated for possible arc burns?
Odour Call
• Is natural gas involved? • What is the cause of the known odour? • Is the odour a leak? If yes, is the leak upstream or downstream of the meter? • Is the odour inside or outside? • What is the wind direction and what is downwind of the odour that may be affected? • Have gas samples been taken?

Table 3-6: Incident Type Questions (Gas Control)

Incident Type
Interruption
• What Regions are affected? • What is the cause of the interruption? • Have any large or priority customers been affected? • Is the duration known?
System Pressure Problem
• What regions are affected? • What is the cause of the pressure problem? • Have any large or priority customers been affected? • Is the duration known?
Hydrate Alert
• What regions are affected? • What is the cause? • Is the moisture content known? • Is there a need to bypass filters? • Is the duration known?

3.6 Gas Outage

3.6.1 Customer Curtailment

When there is an incident or gas outage due to impairment of GDS's system that threatens the ability to supply its customers with gas, there are three levels of escalating severity for customer curtailment as described by the following terms:

Term	Definition
interruptible load	A planned or unplanned event that occurs before a force majeure is being considered, with notification to affected customers to curtail usage of any interruptible contract volumes.
load-shed	(Voluntary curtailment of firm load) is a planned event or unplanned event that occurs before force majeure declaration occurs, with cooperation by the affected control customer to voluntarily reduce usage of their firm contract volumes.
force majeure	Instructing customers to curtail / turn off their gas, due to an inability to deliver their firm contracted gas supply.

3.6.2 Gas Supply Failure

When there is an outage over a wide area, it is important to determine the boundary of the outage carefully to ensure that all customers who are out of gas have been identified. Once this is determined, ensure the following:

1. Generate an Emergency Service / Customer Address Listing.
2. Use load-shed, emergency, or other valves to isolate and shut down the affected system.
3. Obtain sufficient resources to shut off meter stops of affected customers.
4. Reactivate and purge the mains.
5. Resume service to affected customers.

3.6.3 Minimize Curtailment

When there is a major reduction in gas supply that will affect GDS in-franchise or ex-franchise customers, the Incident Support Team and the Crisis Management Team will consider the following:

- Minimize damage to property.
- Maintain service to the maximum number of customers.

The tool used to determine where curtailment is required, and which customers should curtail their gas is called **load-shed**.

Before force majeure is enacted, GDS will attempt to obtain emergency supplies from other interconnecting pipelines, Canadian and/or American sources when possible.

3.6.4 Curtailment Policy

In a major gas supply emergency, GDS will proactively minimize impacts to all communities by providing priority system supply to critical community infrastructure.

The planned approach to prioritizing classes for curtailment in emergencies is:

- All Interruptible customers
- All large-volume, firm customers over 1,500,000 m^3/year less customers whose facilities should be avoided because curtailment would cause permanent damage
- All large-volume, firm, industrial customers less than 1,500,000 m^3/year
- Commercial warehouses, government buildings, and offices
- Commercial retail, retail malls, and shopping centres
- Miscellaneous commercial except commercial schools, universities, colleges, hospitals, hotels, and lodging
- Industrial avoids
- Commercial schools, universities, colleges, hospitals, hotels, and lodging
- Apartments and apartment avoids

Prior to curtailment, the following is an example of questions that can be asked when the request is being made:

- Is gas being used at the time of the request?
- Is the facility used as an emergency facility to house people, etc., during an emergency? If yes, they should not be asked to fully curtail or at all.
- Can they accommodate a partial curtailment (if not a full one)?
- Any special circumstances?

NOTE: *For roles and responsibilities in an interruption or force majeure, refer to Gas Control Manual, 2 Roles and Responsibilities.*

3.6.5 Curtailment Allocation Policy

If GDS's Storage and Transmission (S&T) assets are impaired, S&T customers will be curtailed proportionally according to the contracts. Supply to GDS's in-franchise customers downstream of the impairment will also be curtailed proportionately in accordance with the S&T contracts.

3.7 Force Majeure Declaration

3.7.1 Force Majeure Declaration – Gas Supply-Initiated

In a major gas emergency and once the following are confirmed:

- All interruptible loads are off.

- Any voluntary downturn in firm usage is exhausted.
- No additional emergency supplies via interconnecting pipelines can be obtained.

And therefore, curtailment is the only way to maintain all or a portion of GDS's transmission and distribution facilities and the decision to shed load via force majeure is made by the IST Crisis Leader. Once the decision to declare force majeure is made, use the following list (in order of priority) as a guideline to shed load on the system:

- A request for all classes of customers to reduce space heating demand, and identify unused demand requirements
- Firm / Contract / Industrial Loads
  - Provided that there will not be significant damage to plant operations or equipment (beyond solely commercial considerations)
- Residential / Commercial / Industrial load-shedding areas, with considerations given to minimize impacts to:
  - Major care and detention facilities (e.g., hospitals, nursing homes, prisons)
  - Major community gathering places (e.g., schools, recreational halls, churches)
  - Number of customers that will be impacted
  - Isolated communities or a single large community

3.7.2 Force Majeure Declaration – Gas Delivery-Initiated

In the event of a gas outage resulting from a pipeline or station incident affecting in-franchise contract customers, the decision to declare force majeure is made by the IST Crisis Leader.

Declarations of force majeure will require consideration of all applicable facts as well as the legal terms of all contracts.

The ability to declare force majeure may be limited in certain circumstances such as where:

- The force majeure was caused by the negligence of the party claiming force majeure.
- The party claiming force majeure failed to make all reasonable efforts (not including litigation) if such remedy would require litigation) to remedy the force majeure.
- The force majeure was caused by lack of funds.
- The party claiming force majeure did not give notice required, as soon as reasonably possible, after the force majeure occurred.

NOTE: *For specific guidance, contact the Legal Department.*

3.8 Responding to a Gas Outage

3.8.1 Meter Turn-Offs

3.8.1.1 Calculate Meter Turn-Offs

When calculating the total time required to turn off customer meters, consideration should be taken for the time required to complete the repair. Once the repair time has been determined, the total number of field responders and the time required for meter turn-offs can be determined. It is important to note that 15 meters per hour can be turned off by one field responder if there is access to the meter. In areas where access may be difficult, the number of meters that can be turned off will be lower.

Loss of heat is also a consideration as heat loss equals 55,000 BTUH over 900 square feet. The rate of cooling in a typical house (i.e., single storey with a basement) is indicated in the Rate of Cooling Curve diagram (see **Figure 3-1**).

When coordinating meter turn-offs and turn-ons, the Emergency Service / Customer Service Address listing should be used. Planning or Dispatch will run the listing for Toronto, GTA East, GTA West, and Eastern Regions; and Drafting will run the listing for Southwest, Southeast, and Northern Regions.

Table 3-7 describes how to calculate the requirements for meter turn-offs using the example of 1,200 affected customers and 8 available field responders.

Table 3-7: Calculating Meter Turn-Offs

Requirement	Calculation	Example
Person-hours for shutdown	Divide number of customers by 15 (since 15 meters can be turned off in an hour)	1,200 / 15 = 80 hours per field responder
Limited number of hours	Divide shutdown person hours by time to make repairs (e.g., 3 hours to repair)	80 / 3 = 26.6 hours per field responder
Limited number of resources	Divide shutdown person hours by available responders (e.g., 8 field responders available)	80 / 8 = 10 hours per field responder

Figure 3-1: Rate of Cooling Curve

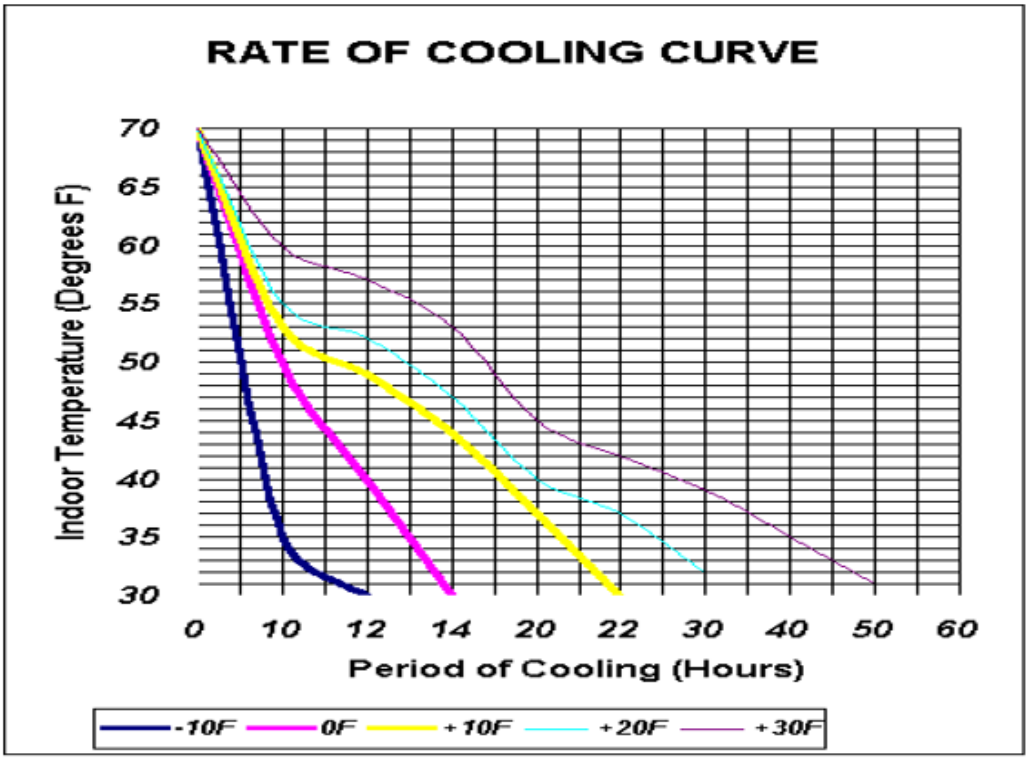

Table 3-8: Temperature Conversion

Degrees Fahrenheit	70	65	60	55	50	45	40	35	30
Degrees Celsius	21	18	16	13	10	7	4	2	-1

3.8.1.2 Assigning Meter Turn-Offs

Meter turn-offs should be assigned in a logical sequential order with priority customers first. Before turning off large customers such as restaurants, hotels, or manufacturing facilities, etc., contact should be made with the customer to advise the gas will be turned off. These customers should be identified during turn-offs so that they take priority during turn-ons.

Once the turn-offs are completed, the Emergency Service / Customer Address listing should be returned to the ICP Operations Lead who will coordinate restoring service and turn-ons.

3.8.2 Meter Turn-Ons

3.8.2.1 Calculate Meter Turn-Ons

When calculating the total time required to turn on a customer's gas service, consideration should be taken for the size of the outage, the number of resources available, the time of day and weather conditions.

Turn-ons cannot begin until all meters have been shut off because there may be standing pilots and/or failed pilot safeties in customers' homes. To control this risk, all meters must be shut off before any meters are turned back on.

Important

Gas cannot be reintroduced into the distribution system until it is certain all meters have been turned off. *The assumption can be used that one field responder can turn on and light up five meters per hour.*

Table 3-9 describes how to determine the requirements for meter turn-ons, using the example of 1,200 affected customers and 8 available field responders.

Table 3-9: Meter Turn-On Calculations

Requirement	Calculation	Example
Person-hours for turn-on and light-up	Divide number of customers by 5 (e.g., since 5 meters can be turned on and relit in an hour)	1,200 / 5 = 240 hours
Staffing levels (dependent on the rating of cooling curve)	Divide turn-on person hours by available time (e.g., 4 hours based on cooling rate)	240 / 4 = 60 field responders
Limited number of resources	Divide turn-on person hours by available field responders (e.g., 8 field responders available)	240 / 8 = 30 hours

3.8.2.2 Relight Responsibilities

Table 3-10: Relight Responsibilities

Title	Task
Gas Tech I	• Relight any size and class of customer • Additional customers with specialized equipment
Gas Tech II Gas Tech III Gas Utility Tech II	• Relight customer's gas under 400,000 BTUH
Record of Training	• Dwelling unit appliance relights • Under 400,000 BTUH

3.8.2.3 Assigning Meter Turn-Ons

Meter turn-ons should not be completed for premises without electrical power. In situations where electricity and natural gas supply are both affected (e.g., tornado or flooding, etc.), coordination of turn-ons will need to be arranged with the local hydro utility.

When completing turn-ons, if the meter has been locked off, it must not be turned on and the details must be noted on the Emergency Service / Customer Address Listing and the

Field Supervisor advised. Alternatively, if the meter is already turned on, the house and appliances must be checked as the customer may have turned on the meter themselves.

It is important to ensure infractions found are tagged and documented, and the completed turn-on list is returned to the Field Supervisor. Meters that are inaccessible or confirmed as Can't Get In (see **Section 3.8.3** should be noted, and Dispatch and the Field Supervisor notified.

3.8.3 Can't Get In

In the event of a system failure where access to a home/premises is required for make-safe purposes, every attempt should be made to gain access that includes trying all doors, checking with neighbours, and asking Dispatch to call the customer and check the meter and service history.

When access to a premises cannot be gained after making every attempt and continual attempts, the premises is confirmed as a **Can't Get In (CGI)** location by the Field Supervisor. A tag or letter should be left to advise the customer to contact the Contact Centre / Dispatch.

3.9 Fire and Explosions

The fire department is responsible for public safety at a premises and will direct operations to ensure all life safety aspects are addressed until a GDS field responder is on site. When responding to a fire or explosion, the guidelines are as follows:

3.9.1 Building Fire or Explosion

1. Shut off the gas supply to the building.
2. Evacuate the building and the surrounding area.
3. Check all openings in the area for gas indications and vent accordingly if required.
4. Investigate the surrounding buildings for gas leaks.
5. Perform bar-hole testing or flame ionization survey to detect gas near the buildings.
6. Coordinate third-party leak survey if required.
7. Test for odourant levels.

3.9.2 Major Pipeline Fire or Explosion

1. Determine the exact location of the emergency.
2. Develop and execute the isolation process.
3. Develop and execute a plan to supply gas to the maximum number of customers possible.
4. If excavating, call for locates.

3.10 Major Pipeline Break Near Railway Tracks

- If determined by the Field Supervisor, restrict traffic in the area of the disruption and ensure contact has been made with CN Rail / CP Rail.

3.11 Water in Distribution System

1. Isolate the affected area.
2. Assess damage to the network and make safe at premises.
3. Pump out water, monitor and pump drips.
4. Replace meters and regulators and inspect/repair region stations.
5. Perform a leak survey of the area in low-pressure networks.
6. Arrange HVAC dealer to clear supply lines.
7. Arrange for replacement of automated gas valve train controls and igniters.
8. Perform dew point monitoring of network.

3.12 Gas Quality

Redacted. This section contains GDS contact information. It is protected from publication under Clause 1(a) of Order MO-006-2016 because its disclosure could impair the security of GDS's pipeline system, buildings, or structures.

3.13 Spills

Redacted. This sub-section contains contact information to be used in the case of an emergency. It is protected from publication under Clause 1(a) of Order MO-006-2016 because there is a real and substantial risk that its disclosure could impair the security of GDS's pipeline system, buildings or structures.

3.14 Flooding

- When flooding is imminent, ensure a relationship is established with the local authorities and municipalities having jurisdiction in the Region.

3.14.1 General Safety

Warning

For personal safety, comply with these general safety warnings.

1. **Do not drive** into a flooded area where there is fast-moving water or where admittance is restricted by the local municipal authority having jurisdiction.
2. **Do not walk** into a flooded area where there is fast-moving water, or the water level is 15 cm deep and rising.

a. If it appears the meter set may become covered with flood water, shut off the meter.

b. If field responders are unable to enter the flooded area to shut meters off, develop an isolation plan.

3. **Do not enter** a flooded area of a building or a premises where it appears the structural integrity has been compromised.
4. **Do not approach** appliances that have water pooled around them.
5. **Do not touch** cables, cords, or equipment that may have been in contact with water.

3.14.2 Enter a Premises that has been Flooded

Warning

Do not enter *a premises until all electricity has been restored by the local utility and it has been determined safe to enter.*

1. If a strong sewage odour is present and the gas cannot be shut off from the outside, ensure all biohazard personal protective equipment (PPE) is worn before entering a building.
2. If entering a previously flooded premises, advise Dispatch.
3. Touch as few surfaces as possible. If required to kneel, do so on a large plastic garbage bag.

3.14.3 Exit a Premises that has been Flooded

1. Carefully remove biohazard PPE and ensure PPE does not come in contact with bare skin or hands.
2. Put all PPE in a biohazard bag and place in a safe storage location.

   a. Label the contents and contact the Region Safety Advisor for disposal.
3. Wipe down all tools using antibacterial wipes.
4. Clean hands with antibacterial wipes before entering vehicle.

3.14.4 Work on the Pipeline System after a Flood

1. Assess any damage to the system.
2. Replace meters and regulators. If it is suspected that they have been submerged under water and damaged, report the damage.
3. If the meter is shut off and an “A” infraction is issued due to flooded appliances, **do not lock off** a meter. This will allow the customer to call an HVAC contractor to clear the “A” tag and turn the gas back on.
4. If a meter is shut-off and an “A” infraction has been issued due to the meter and regulator being submerged in water, lock off the meter with a **do not tamper/touch**

tag until a rebuild can be completed. This prevents the HVAC contractor from turning the gas back on before GDS has replaced the meter and regulator.

5. If water has entered the pipeline system, isolate the affected area:
   a. Use a Pipeline Inspection Gauge (PIG) on the system or use a hydrovac if required.
   b. If required, inject slugs of alcohol to dry out the pipeline.
   c. Once the water has been removed, purge and return system to service.
6. Inspect stations and repair if required.
7. Perform a leak survey of the affected pipe.

3.14.5 Advise Customers

After a customer premises has been flooded, customers should be advised to:

- Contact an approved HVAC contractor to inspect any appliance that has come in contact with water to determine if the controls need to be replaced. The contractor will also be able to check the chimney liner to ensure it is clear and will drain any water that may have entered the system.
- Remove standing water, mud, or any debris from rooms from all areas including the basement where field responders may need to enter.
- Remove any chemicals and cleaning agents that may have spilled.
- Ensure electricity to premises has been restored.

3.15 Tornado or High Winds

1. Ensure all employees are accounted for.
2. Ensure confirmation is received from local authorities that the affected area is safe for re-entry to inspect for any possible damage.
3. If safe to enter, assess if the affected storm path requires a leak survey to be performed or if visual damage assessment is sufficient.
4. If storm damage results in delays in completing assessments, consider isolating broader areas.
5. Assess the damage to all above-ground structures, valve sites or company buildings.
   a. Document results as required.
6. Instruct field employees not to enter buildings that have been identified as or appear to be structurally unsafe.
7. If gas flow has not been interrupted, reactivate any odourant tanks that may have been shut in.
8. Obtain guidance from the municipal authorities concerning any possible hazardous materials that may be present at the damage sites.

a. Ensure proper PPE, such as masks, goggles, gloves, and hazardous suits are available as required.

9. Coordinate main and service reactivation with the other utilities, ensuring electrical service has been restored.
10. If flood conditions also exist, follow the flood response guidelines in **Section 3.14**.

3.16 Forest Fires

Most forest fires are created by lightning and the spread of the fire is largely influenced by wind direction and topography. The Ministry of Natural Resources and Forestry (MNRF) will provide direction regarding the path of the fire. The MNRF maintains a website that provides forest fire information: www.ontario.ca/page/forest-fire-management

3.16.1 Pre-Forest Fire Measures

1. Alert employees of the possible risk and remove them from the affected area if required.
2. Identify isolation areas that can be utilized to protect Company assets as well as protect the public and the responders.
3. Engage the MNRF representative for status updates regarding fire progress toward GDS facilities and service territories.
4. If required, isolate the potentially impacted area.
5. If stations are equipped with odourant injection systems and if time permits, ensure the tank is shut in.

3.16.2 Post-Forest Fire Measures

1. Ensure all employees are accounted for.
2. Confirm with local authorities and the MNRF the affected area is safe for re-entry to inspect for possible damage.
3. If safe to enter, assess the pipeline and station facilities in the area for damage; document as required.
4. Determine if a leak survey is required.
5. When safe to do so, reactivate odourant tanks.
6. If fire damage is suspected at a station or valve nest, an engineering assessment is required prior to activation.
7. Coordinate main and service reactivation with the other utilities ensuring electrical service has been restored.
8. Instruct field employees not to enter buildings that have been identified or appear to be structurally unsafe.

9. Replace all meters, regulators, and plastic risers in areas suspected of being subjected to the heat of the forest fire.
10. Issue infractions as needed for affected appliances/premises.

3.17 Building Evacuation

When a fire alarm sounds or an evacuation decision is made, evacuate the affected building immediately and completely. Floor plans indicating the exits and fire extinguishers are posted throughout the GDS facilities.

3.17.1 Evacuation

Warning

- ***Do not delay*** *evacuation to gather personal belongings or finish work in progress.*
- ***Do not use*** *elevators as a means of exit. They may become inoperative during such evacuations.*
- ***Do not smoke*** *during an evacuation.*
- ***Do not re-enter*** *a building until a local authority has given the order to return.*

In the event of an evacuation, occupants must ensure they do the following:

1. Move calmly and quietly to the nearest exit or stairway to exit.
2. Exit through a stairway by descending except from belowground level.
   a. Escort any visitors, customers, or contractors in the area out of the building.
   b. Walk quickly and do not run.
   c. Exercise caution on stairs and at entry points where additional evacuees may be entering.
   d. Follow the closest exit path out of the building and proceed to the assigned assembly area.
3. Close doors which are located conveniently to the evacuation path, but do not take extra time to perform this task.
4. Upon exiting the building, proceed directly to assembly areas. Employees must not leave their assembly areas without approval from management.
5. Report to the assembly area to the designated person for the employee head count.
6. Report the names of any visitors, customers, or contractors escorted out of the building for accountability. In the event special assistance is required, it is the responsibility of the employee pre-emergency to notify the Fire Captain. The Fire Captain will then make the appropriate arrangements prior to any emergency.

3.18 External Communication and Media Relations

Public Affairs and Communications will provide the communications response service to the organization, which can include public, media, employee, and customer communications.

During a crisis, communicating quickly and accurately provides the greatest opportunity to establish control of the communications around an issue to:

- Protect the brand
- Enhance service restoration efforts by delivering important information to customers
- Provide timely and accurate information to stakeholders, including media, customers, key accounts, employees, government, regulators, about our ongoing response
- Decrease call volumes to the Call Centres

Prompt, factual, and co-operative responses ensure the public and other stakeholders know that Enbridge Gas is aware and responding, while fostering good public awareness and understanding of our operations.

The Enbridge Gas Crisis Communications Team (CCT) is a team of Incident Command System (ICS) and media-trained utility-based employees who provide communications support for utility incidents. If an EOC is activated, the CCT Lead will assume the role of the Public Information Officer (PIO) in the EOC and participate in all EOC-related activities.

The CCT Lead/PIO will activate the Crisis Communications Plan, which includes various roles, accountabilities, key messages, templates, tools, and tactics, to be mobilized and leveraged based on the scale of the response and severity of the incident.

The CCT Lead/PIO will gather information, develop a communication response appropriate to the situation, obtain appropriate approvals, and if needed, mobilize other CCT personnel and resources as applicable to support implementation.

The CCT Lead/PIO has a dedicated notification line, and the Lead is on call 24/7/365.

3.18.1 Company Spokespersons

Our Designated Company Spokespersons policy identifies the best spokesperson to speak to media on various issues.

Table 3-11: Company Spokesperson

Issue	Company Spokesperson
Corporate, Company-wide	• External Communications & Media Relations Lead, on behalf of the President, CEO, and senior management. • Management spokespersons from specific areas are designated in consultation with the appropriate Regional Director.
Region Operations	• Regional Director or Manager may delegate responsibility to Field Supervisor (or delegate) or other media-trained spokespersons, as required.

The CCT Lead/PIO will work with members of the media and the Company spokesperson to arrange media interviews and assist with the response to any media requests. If a media request comes to the designated spokesperson, they should take down the media information and refer the request to the CCT Lead/PIO, so they can prepare to respond in a timely manner.

Designated Company Spokespersons must have received company-approved media training before speaking on behalf of the organization. Exceptions will be approved by the External Communication & Media Relations Lead and appropriate Director.

It is assumed that the Designated Company Spokesperson will speak only on issues in which they have expertise. Questions beyond the spokesperson's areas of expertise should be referred to the External Communication & Media Relations Lead for follow-up.

3.18.2 Media Relations

Information for release to the traditional media or social media is prepared and disseminated through appropriate channels by the CCT Lead and/or team. All messages must be approved by the appropriate party and Legal Department, depending on the nature of the issue before release.

The CCT Lead will consult with the spokesperson and assist in message development, or additional information, as needed by the designated spokesperson for interviews with the media. The CCT Lead will also recommend proactive media activities based on the incident and severity.

3.19 Public Evacuation Zones

3.19.1 Service and Main Breaks

In the event of a damage or pipeline failure, the responding GDS personnel will ensure that the public is moved back from the source of the leaking gas in accordance with the accompanying tables provided:

- **Table 3-12**: Full Pipe Break
- **Table 3-13**: 3.75 cm (1.5 in.) Hole
- **Table 3-14**: 5 x 8.75 cm (2 x 3.5 in.) Bucket Tooth Hole
- **Table 3-15**: Pipelines Operating above 30% SMYS

This evacuation is necessary and the steps below are enforced to ensure that the public is safe and to provide room for field responders and Company personnel to set up, work and organize without interference from the public.

1. Initiate checks for all buildings in the vicinity and evacuate when the concentration of gas within the building atmosphere is 1% (10,000 ppm, 25% LEL) or greater.
2. If it is necessary to evacuate multi-family residential units, apartment buildings, large commercial buildings, or institutional buildings, immediately contact 911 for assistance and immediately establish relationship with municipal authorities.

3. If the escaping gas is ignited, find out if any members of the public are within the Public Evacuation Distances given in **Table 3-12**, **Table 3-13**, **Table 3-14** and **Table 3-15**.

   a. If members of the public within the Public Evacuation Distances are protected by terrain or shelter, use caution before evacuating them as they can be exposed to bodily injury when they leave the protective shelter. When feasible, consult with the fire department before evacuating such persons.

   b. If members of the public within the Public Evacuation Distances are not protected by terrain or shelter, support evacuation efforts immediately in collaboration with the jurisdiction having authority (i.e., first responder agencies).

   NOTE: *For pipelines operating above 30%, see* ***Table 3-15****.*

It should be noted that these distances are calculated assuming a full rupture or break. First responders (e.g., firefighters) may need to enter the evacuation zone for purposes such as controlling secondary fires or for the rescue of persons within the zone.

The distances may be reduced as the gas fueling the fire is reduced by isolation valving or pressure reduction.

If the gas has not been ignited, first responders entering the zones must exercise extreme caution. The magnitude and intensity of any subsequent fire cannot be assumed due to varying site conditions such as humidity, wind direction, sheltering structures and landscape.

Term	Definition
public evacuation distance	The radius from which a circle can be drawn. Within this circle, persons without protective equipment would be subject to bodily harm if the gas ignited.
piloted ignition distance	The distance from the ignited gas escape point to where a theoretical wooden structure would ignite due to a secondary flame.
spontaneous ignition distance	The distance from the ignited gas escape point to where a theoretical wooden structure would ignite without a secondary flame.

Table 3-12: Full Pipe Break

Pipe Material	NPS	Op. Pressure (psi)	Description of Hole Size	Public Evacuation Distance (m)	Dispersion Distance at 50% LEL (m)	Height Measured at 50% LEL (m)
PE	0.50	60	Full Break	10	1	1
PE	2.00	60	Full Break	30	2	2
PE	6.00	60	Full Break	60	6	5
Steel	0.75	500	Full Break	30	2	4
Steel	2.00	500	Full Break	60	4	9

Table 3-13: 3.75 cm (1.5 in.) Hole

Pipe Material	NPS	Op. Pressure (psi)	Description of Hole Size (cm)	Public Evacuation Distance (m)	Dispersion Distance at 50% LEL (m)	Height Measured at 50% LEL (m)
Steel	12	60	3.75	15	2	5
Steel	12	500	3.75	30	4	12

Table 3-14: 5 x 8.75 cm (2 x 3.5 in.) Bucket Tooth Hole

Pipe Material	NPS	Op. Pressure (psi)	Description of Hole Size (cm)	Public Evacuation Distance (m)	Dispersion Distance at 50% LEL (m)	Height Measured at 50% LEL (m)
Steel	12	60	3.75	15	2	5
Steel	12	500	3.75	30	4	12

NOTES:

1. *Dispersion distances are calculated for worst-case weather conditions.*
2. *50% LEL methane in air.*

Table 3-15: Pipelines Operating above 30% SMYS

Pipe Material	NPS	Op. Pressure (psi)	Description of Hole Size	Public Evacuation Distance (m)	Piloted Ignition Distance (m)	Spontaneous Ignition Distance (m)
Steel	6	500	Full Rupture	100	34	21
Steel	8	500	Full Rupture	130	44	27
Steel	12	531	Full Rupture	300	75	43
Steel	16	500	Full Rupture	300	77	42
Steel	20	500	Full Rupture	350	92	50
Steel	24	300	Full Rupture	350	83	44
Steel	24	500	Full Rupture	450	107	56
Steel	24	975	Full Rupture	650	143	51
Steel	26	275	Full Rupture	350	86	45
Steel	26	500	Full Rupture	450	116	61
Steel	30	275	Full Rupture	400	100	52
Steel	30	500	Full Rupture	550	134	70
Steel	36	500	Full Rupture	650	161	84
Steel	42	936	Full Rupture	720	410	290

3.20 Emergency Warehouse

3.20.1 Purpose

The purpose of emergency inventory is to have pipe and fittings set aside in regional warehouses in order to make safe any emergency situations that may occur. Pipe lengths and transition pieces will be required to sufficiently replace one joint of any pipe in GDS's distribution system (all pipe to be pretested). Materials will be maintained and stored in the warehouse locations listed in **Table 3-16**.

3.20.2 Inventory Control

The physical control of the Emergency Inventory is the responsibility of the Operations Managers (or delegate) in the unstaffed warehouses, and the Warehouse Team Leads in the staffed warehouses.

3.20.3 Locations

Materials are maintained and stored in staffed and unstaffed warehouses. The staffed warehouses have warehouse personnel who select the materials required for an emergency and ship to the emergency site. Unstaffed warehouses do not have warehouse personnel and the On-Call Manager/Supervisor (or delegate) is responsible for selecting and shipping the material to the emergency site.

Table 3-16: Warehouse Locations

Warehouse	Staffed or Unstaffed	Emergency Materials
London	Staffed	Generally sized NPS 2 through NPS 12, for Southwest, Southeast, Northern Regions (P104/A001)
Dawn	Staffed	Sized NPS 16 and above for all Ontario (P107/Z001)
Technology & Operations Centre (TOC)	Staffed	For Toronto, GTA East, GTA West Regions (located in Zone ER in the TOC warehouse)
Ottawa	Staffed	For Eastern Region including Gazifère
Belleville	Unstaffed	For Eastern Ontario (P302/Z078) ***NOTE:*** *Emergency pipe is located in the Kingston Yard.*
Sudbury	Unstaffed	For Northeastern Ontario (P301/Z032)
Thunder Bay	Unstaffed	For Northwestern Ontario (P300/Z002)

3.20.4 Key Roles

Dispatch / Emergency Call Handling: Responsible for handling the emergency call and contacting the On-Call Manager / Supervisor (or delegate) and the appropriate warehouse personnel.

On-Call Manager: Responsible for authorizing the removal of the emergency materials from any of the Emergency Warehouses. For unstaffed warehouse, this role is responsible for the physical control of the emergency inventory.

Warehouse Personnel: Responsible for getting the requested emergency materials from the Emergency Warehouse and arranging to have materials shipped to the Emergency; and to ensure any materials being returned to the Emergency Warehouse for inventory are in useable condition.

Materials Management & Logistics Manager: Accountable to ensure that emergency materials are stored, maintained, and counted once per year. They are also accountable to verify the quality and integrity of all materials in the Emergency Warehouse annually. The Warehouse Team Leads along with District Engineers and Pipeline Engineering will assist as required.

Pipeline Engineering and Regional Engineer: Supports the Emergency Inventory Warehouse Process.

Procurement: Responsible for purchasing the Emergency materials as requested by warehouse personnel.

Warehouse Team Leads / Analyst: Supports the Emergency Inventory Warehouse Process.

3.20.5 Request Emergency Material (Dawn and London)

The following describes the accountabilities when requesting emergency material from the staffed warehouses in Dawn and London.

3.20.5.1 Manager/Supervisor

1. Request emergency material by contacting the Warehouse Team Lead or delegate (call tree available to dispatchers).
    a. Provide the following information:
        - Location of Emergency Warehouse that will receive the material request
        - Material number
        - Size and description
        - Quantity
        - Location for delivery or pickup details
        - Contact name, cell number, and relevant details

Redacted. This sub-section contains contact information to be used in the case of an emergency. It is protected from publication under Clause 1(a) of Order MO-006-2016 because there is a real and substantial risk that its disclosure could impair the security of GDS's pipeline system, buildings or structures.

3.20.5.2 Warehouse Personnel

1. Issue and pick the materials from the warehouse and charge to one of the internal order (I/O) numbers listed in **Table 3-17**.

Table 3-17: Warehouse I/O Numbers

Emergency Warehouse	I/O Number
London	319343
Dawn	319345
Belleville	319343
Sudbury	319343
Thunder Bay	319343

NOTE: *The I/O numbers are temporary until a Project number or I/O number is created for the emergency. In the event the material being requested is quarantined, the warehouse personnel will advise the On-Call Manager (or delegate) who will confirm approval for use from the On-Call Engineer.*

2. Enter the address of the emergency and the requestor's name where it indicates Material Slip number.
3. Arrange for delivery of the materials to the requested warehouse or emergency site.

   NOTE: *The warehouse will always coordinate delivery of the materials unless the requesting Manager indicates otherwise.*

4. Contact the Manager/Supervisor (or delegate) to advise the material is en route.

3.20.6 Request Emergency Material (TOC)

The following describes the accountabilities when requesting emergency material from the Training & Operations Centre (TOC) warehouse.

3.20.6.1 Manager / Supervisor

1. Request emergency material by contacting Dispatch.
   a. Provide the following information:
      - Material number
      - Size and description
      - Quantity
      - Location for delivery or pickup details
      - Contact name, cell number, and relevant details
2. Send request via email to Warehouse Team Lead and Stockkeeper or complete form at warehouse.

   NOTES:

   1. *For after-hours emergencies, the On-Call Manager/Supervisor will contact Dispatch to contact the On-Call TOC warehouse personnel.*
   2. *For NPS 16 and above, Dispatch will receive notification from the On-Call Manager/Supervisor that access to TD Williamson (1-877-873-*

8777) is required to obtain emergency materials. The TD Williamson after-hours answering service will contact the appropriate individual.

3.20.6.2 Warehouse Personnel

1. Receive notification that access to the warehouse is required to obtain materials from the Emergency Rack.
2. Issue and pick the materials located in Zone Emergency Rack and charge out.

3.20.7 Request Emergency Material (Ottawa)

The following describes the accountabilities when accessing emergency material from the Ottawa warehouse.

3.20.7.1 Manager / Supervisor (On-Call Duty Supervisor/Manager)

1. Enter the warehouse (via swipe badge) to access/remove the emergency stock.
2. Send stock information via email to Warehouse Team Lead and Stockkeeper of the items taken.

   Provide the following information:

   - Material number
   - Size and description
   - Quantity
   - Location for delivery or pickup details
   - Contact name, cell number, and relevant details

3.20.7.2 Warehouse Personnel

Receive notification that materials were taken from the warehouse and replenish / charge out stock accordingly.

3.20.8 Request Emergency Material (Belleville, Sudbury and Thunder Bay)

The following describes the accountabilities when requesting emergency material from the unstaffed warehouses in Belleville, Sudbury, and Thunder Bay.

3.20.8.1 Manager/Supervisor

1. Request emergency material.
   a. Provide the following information:
      - Location of Emergency Warehouse that will receive the material request
      - Material number
      - Size and description

- Quantity
- Location for delivery or pickup details
- Contact name, cell number, and relevant details

2. Send request via email to Warehouse Team Lead and Operations Manager or On-Call Manager for applicable Emergency Material location.
3. Arrange pickup or delivery of materials from the emergency stock to the site.

3.20.9 Alternate Contacts

Redacted. This sub-section contains the names and titles of GDS employees. It is protected from publication under Clause 1(a) of Order MO-006-2016 because it discloses information about identifiable individuals.

3.20.10 Replenish Emergency Materials

3.20.10.1 Warehouse Personnel

Warehouse personnel will contact the requesting Manager/Supervisor to determine if any of the materials will be returned to the Emergency Warehouse.

3.20.10.2 Pipeline Engineering

The warehouse will email Pipeline Engineering and Procurement if materials are being returned to the Emergency Warehouse and what materials are to be ordered. The materials will be ordered if the warehouse does not receive any notice from either party.

3.20.11 Returns

3.20.11.1 Warehouse Personnel

Materials not used in the emergency or materials that were used but are no longer required must be returned to the warehouse and arrangements made to have the material transferred back to the Emergency Warehouse.

3.20.11.2 Pipeline Engineering

All material returned to the Emergency Warehouse must be inspected by the Regional Engineer or Pipeline Engineering.

The warehouse will contact the appropriate departments to have the used material restored to good working condition. Expenses incurred in refurbishing will be charged to the Emergency Project/IO Number.

Return of materials should be done as soon as possible after the emergency is contained so that materials ordered for replacement can be cancelled.

The account number of the job must be indicated on the return paperwork so that refurbishing costs can be charged accordingly.

3.20.12 Emergency Inventory Process

Each Emergency Warehouse has an Emergency Inventory process that contains the following:

- Process for getting emergency materials out of the warehouse as well as stock replenishment
- Listing of materials in the Emergency Warehouse
- Annual count sheets verified, signed, and dated by all count participants

3.20.13 General Guidelines

- The On-Call Manager must approve any Emergency Warehouse orders.
- All inventory held in the Emergency Warehouses will be counted at least once per year. Employees familiar with the materials (e.g., Pipeline Engineering, Operations Manager, and Regional Engineer) will verify the requirements and the warehouse personnel will coordinate the inventory checks.
- During the quality check, if the emergency material requires replacing, a request will be made to the warehouse to order the appropriate material.
- Approved-for-use material will be transferred from the Emergency Warehouse to the main warehouse. Material deemed to be obsolete will be disposed of immediately to ensure that it does not become part of our plant.
- In the event that a Quarantine Notice is sent out that affects material in the Emergency Warehouse, the Warehouse Team Lead (or delegate) will notify the Engineer involved to advise that, in the event of an emergency, the Engineer will receive a call for approval to use or to provide a substitute material.
    - The warehouse will attach a quarantine card to the part and leave it on the Emergency Warehouse shelf. On the card, the name and phone number of the Quarantining Engineer will be added.
- Each pipe transition piece will be tagged at each end indicating the respective matching wall thickness.

3.20.14 Emergency Material List

For material available in the Emergency Warehouses, see these tables:

- **Table 3-18**: Emergency Material List for London Warehouse
- **Table 3-19**: Emergency Material List for Belleville Warehouse
- **Table 3-20**: Emergency Material List for Sudbury Warehouse
- **Table 3-21**: Emergency Material List for Thunder Bay Warehouse
- **Table 3-22**: Emergency Material List for Pipe Yard
- **Table 3-23**: Emergency Material List for TOC and Ottawa

Table 3-18: Emergency Material List for London Warehouse

Material	Material Description	Material	Material Description
102127	SLEEVE,REPAIR,SPLIT,2 IN,1000 PSIG WP	115925	TEE,PIPE,2 IN,STR,WE X COMP,3.9 MM,CS
102187	SLEEVE,REPAIR,SPLIT,4 IN,STD	115937	TEE,PIPE,3 IN,STR,WE X COMP,5.5 MM,CS
102224	SLEEVE,REPAIR,CLAMP, SPLIT,6 IN,STL,STD	115946	TEE,PIPE,4 IN,STR,WE X WE,6 MM,GR 241,CS
102256	SLEEVE,REPAIR,CLAMP, SPLIT,8 IN,CS	116024	TEE,PIPE,STR,6 IN,WE X WE,7.1 MM,GR 290
102288	SLEEVE,REPAIR,SPLIT,10 IN,1000 PSIG WP	116046	TEE,PIPE,8 IN,STR,WE X COMP,8.2 MM,CS
102327	SLEEVE,REPAIR,CLAMP, SPLIT,12 IN,STL,STD	116073	TEE,PIPE,10 IN,STR,WE X COMP,9.3 MM,CS
107599	BAG,STOPPING,C, GAS,2 IN,POLYESTER	116091	TEE,PIPE,12 IN,STR,WE X COMP,9.5 MM,CS
107606	BAG,STOPPING,C, GAS,3 IN,POLYESTER	117947	COUPLING,STYLE 38 AG,10 IN X 10 3/4 IN
107615	BAG,STOPPING,C, GAS,4 IN,POLYESTER	117956	COUPLING,STYLE 38 AG,12 IN,CS,7 CTR
107625	BAG,STOPPING,6 IN,POLYESTER	118012	COUPLING,STYLE 38 AG,10 IN,CS,7 CTR
108298	CAP,PIPE,6 IN,BW,7.1 MM,GR 290,CAT I	118613	SLEEVE,REPAIR,CLAMP, SPLIT,3 IN,STL,STD
108355	CAP,PIPE,12 IN,BW,12.7 MM,GR 290,CAT I	118810	CLAMP,PIPE REPAIR,2 IN,STL
108373	FASTENER,STUDS,5/8 IN,4 1/2 IN,ALLOY STL	118818	CLAMP,PIPE REPAIR,3 IN,STL
108465	CAP,PIPE,2 IN,BW,3.9 MM,GR 241,CAT I	118826	CLAMP,PIPE REPAIR,NARROW ECONOMY,4 IN
108473	FASTENER,STUDS,3/4 IN,5 IN,ALLOY STL,B7	118835	CLAMP,PIPE REPAIR,NARROW ECONOMY,6 IN
108510	CAP,PIPE,4 IN,BW,6 MM,GR 241,CAT I	118842	CLAMP,PIPE REPAIR,NARROW ECONOMY,8 IN
108551	CAP,PIPE,8 IN,BW,8.2 MM,GR 290,CAT I	118847	CLAMP,PIPE REPAIR,NARROW ECONOMY,10 IN
108553	FASTENER,STUDS,7/8 IN,6 IN,ALLOY STL,B7	118871	CLAMP,PIPE REPAIR,ECONOMY,4 IN,STL
108569	CAP,PIPE,10 IN,BW,9.3 MM,GR 290,CAT I	118879	CLAMP,PIPE REPAIR,ECONOMY,6 IN,STL
108617	FASTENER,STUDS,1 IN,7 IN,ALLOY STL,B7,2	118885	CLAMP,PIPE REPAIR,ECONOMY,8 IN,STL
108653	FASTENER,STUDS,1 1/8 IN,7 1/2 IN,B7,A193	118893	CLAMP,PIPE REPAIR,ECONOMY,10 IN,STL

Material	Material Description	Material	Material Description
108684	FASTENER,STUDS,1 1/4 IN,9 IN,ALLOY STL,2	118901	CLAMP,PIPE REPAIR,ECONOMY,12 IN,STL
109355	ELB,CS,BW,2,3.9 MM,45,LONG,CSA Z245.11,2	119376	SLEEVE,REPAIR,STYLE 220,8 IN
109402	ELB,CS,BW,4,6 MM,45,LONG,CSA Z245.11,241	119380	SLEEVE,REPAIR,STYLE 220,10 IN
109410	ELB,CS,BW,4,4.8 MM,90,LONG,CSA Z245.11,2	119391	SLEEVE,REPAIR,STYLE 220,12 IN
109419	ELB,CS,BW,6,7.1 MM,45,LONG,CSA Z245.11,2	119534	CLAMP,PIPE REPAIR,STYLE 96,6 IN
109447	ELB,CS,BW,8,12.7 MM,45,LONG,CSA Z245.11	119542	CLAMP,PIPE REPAIR,STYLE 96,8 IN
109485	ELBOW,CS,BW,6,7.1 MM,90,LG,CSA Z245.11,2	119550	CLAMP,PIPE REPAIR,STYLE 96,10 IN
109509	ELBOW,CS,BW,10,9.3 MM,45,LG,CSA Z245.11	119557	CLAMP,PIPE REPAIR,STYLE 96,12 IN
109525	ELBOW,CS,BW,12,12.7 MM,45,LG,CSA Z245.11	120411	COUPLING,TRANSITION,6 IN X 6 IN,STL/PE
110014	ELB,CS,BW,2,3.9 MM,90,LONG,CSA Z245.11,2	120457	COUPLING,TRANSITION,2 IN X 2 IN,STL/PE
110178	ELBOW,CS,BW,8,8.2 MM,90,LG,CSA Z245.11,2	120467	COUPLING,TRANSITION,3 IN X 3 IN,STL/PE
110244	ELBOW,CS,BW,10,9.3 MM,90,LG,CSA Z245.11	120487	COUPLING,TRANSITION,4 IN X 4 IN,STL/PE
110265	ELBOW,CS,BW,12,12.7 MM,90,290,CAT I	121574	NIPPLE,PURGE,SAVE-A-VLV,1 IN,WE X THD
111432	REDUCER,PIPE,10 IN,8 IN,WE,WE,CONC,CS	121582	NIPPLE,PURGE,SAVE-A-VLV,2 IN,WE X THD
112067	FLANGE,WELDNECK,6 IN,RF,PN100,7.1 MM,CS	121926	FITTING,STOPTAP,2 IN,CL600,WE,STD,CS
112177	FLANGE,WELDNECK,2 IN,RF,PN100,3.9 MM,CS	122085	FTG,STOP/TAP,BTTM-OUT,10 IN,CL400,WE,STD
112256	FLANGE,WELDNECK,4 IN,RF,PN100,6 MM,CS,WE	122093	FITTING,STOPTAP,BTTM-OUT,12 IN,CL400,WE
112373	FLANGE,WELDNECK,10 IN,RF,PN100,9.3 MM,CS	128903	GASKET,FLG,2 IN,RW,PN100,RAISED,CS
112477	FLANGE,WELDNECK,8 IN,RF,PN100,8.2 MM,CS	128904	GASKET,FLG,4 IN,RW,PN100,RAISED,CS
112508	FLANGE,WELDNECK,12 IN,RF,PN100,9.5 MM,CS	128905	GASKET,FLG,6 IN,RW,PN100,RAISED,CS
112917	FLANGE,BLIND,4 IN,PN100,RF,CS,GR 248	128906	GASKET,FLG,8 IN,RW,PN100,RAISED,CS
113304	FLANGE,BLIND,12 IN,PN100,RF,CS,GR 248	128907	GASKET,FLG,10 IN,RW,PN100,RAISED,CS

Material	Material Description	Material	Material Description
113712	FLANGE,BLIND,2 IN,PN100,RF,CS,GR 248	128908	GASKET,FLG,12 IN,RW,PN100,RAISED,CS
113719	FLANGE,BLIND,3 IN,PN100,RF,CS,GR 248	130892	CAP,PIPE,3 IN,BW,4.8 MM,CAT: I
113727	FLANGE,BLIND,12 IN,PN100,RF,CS,GR 248	130893	ELB,CS,BW,3,4.8 MM,45,10.405 KPA,241,CAT
113761	FLANGE,BLIND,6 IN,PN100,RF,CS,GR 248	130894	ELB,CS,BW,3,4.8 MM,90,10.405 KPA,241,CAT
113767	FLANGE,BLIND,8 IN,PN100,RF,CS,GR 248	130899	FLANGE,WELDNECK,3 IN,RF,PN100,4.8 MM,CS
113777	FLANGE,BLIND,10 IN,PN100,RF,CS,GR 248	130903	REDUCER,PIPE,3 IN,2 IN,WE,WE,CONC,CS
114295	REDUCER,PIPE,2 IN,1 IN,WE,WE,CONC,CS	131507	GASKET,SW,3 IN,PN100,STYLE RW, RF,CS,CS
114459	REDUCER, PIPE,4 IN,3 IN,WE,WE,CONC,CS,6	131835	FASTENER,STUDS,1 1/4 IN,8 1/2 IN,B7,A193
114491	REDUCER,PIPE,6 IN,4 IN,WE,WE,CONC,CS	135364	FTG,STOP/TAP,8 IN,PN100,STD,CS,SPECIAL F
114614	REDUCER,PIPE,12 IN,10 IN,WE,WE,CONC,CS	136213	NIPPLE,PURGE,FLAT, THD-O-RING,2 IN,STL
114779	REDUCER,PIPE,8 IN,6 IN,WE,WE,CONC,CS	136508	FITTING,STOPTAP,BTTM-OUT,4 IN,CL400,WE
115232	SADDLE,PIPE,3 IN,2 IN,STL	136509	FITTING,STOPTAP,BTTM-OUT,6 IN,CL400,WE
115256	SADDLE,PIPE,4 IN,2 IN,9.5 MM,STL,REINF	136510	FITTING,STOPTAP,BTTM-OUT,8 IN,CL400,WE
115281	SADDLE,PIPE,6 IN,2 IN,12.7 MM,STL,REINF	137612	FITTING,STOPTAP,BTTM-OUT,4 INX 3 IN,CS
115305	SADDLE,PIPE,8 IN,2 IN,STL	138853	BAG,STOPPING,D, GAS,8 IN
115327	SADDLE,PIPE,10 IN,2 IN,STL	138854	BAG,STOPPING,D, GAS,10 IN
115341	SADDLE,PIPE,12 IN,2 IN,STL,REINF	138855	BAG,STOPPING,12 IN
115428	SADDLE,PIPE,4 IN,3 IN,STL	139099	NIPPLE,PURGE,FLAT, THD-O-RING,3 IN,CS
115452	SADDLE,PIPE,6 IN,3 IN,STL	139637	FITTING,STOPTAP,BTTM-OUT,6 IN,CL400,CS
115474	SADDLE,PIPE,8 IN,3 IN,STL	139638	FITTING,STOPTAP,BTTM-OUT,8 IN,CL400,CS
115501	SADDLE,PIPE,10 IN,3 IN,STL		

Table 3-19: Emergency Material List for Belleville Warehouse

Material	Material Description	Material	Material Description
102127	SLEEVE,REPAIR,SPLIT,2 IN,1000 PSIG WP	115341	SADDLE,PIPE,12 IN,2 IN,STL,REINF
102187	SLEEVE,REPAIR,SPLIT,4 IN,STD	115428	SADDLE,PIPE,4 IN,3 IN,STL
102224	SLEEVE,REPAIR,CLAMP, SPLIT,6 IN,STL,STD	115452	SADDLE,PIPE,6 IN,3 IN,STL
102256	SLEEVE,REPAIR,CLAMP, SPLIT,8 IN,CS	115474	SADDLE,PIPE,8 IN,3 IN,STL
102288	SLEEVE,REPAIR,SPLIT,10 IN,1000 PSIG WP	115501	SADDLE,PIPE,10 IN,3 IN,STL
102327	SLEEVE,REPAIR,CLAMP, SPLIT,12 IN,STL,STD	115925	TEE,PIPE,2 IN,STR,WE X COMP,3.9 MM,CS
107599	BAG,STOPPING,C, GAS,2 IN,POLYESTER	115937	TEE,PIPE,3 IN,STR,WE X COMP,5.5 MM,CS
107606	BAG,STOPPING,C, GAS,3 IN,POLYESTER	115946	TEE,PIPE,4 IN,STR,WE X WE,6 MM,GR 241,CS
107615	BAG,STOPPING,C, GAS,4 IN,POLYESTER	116024	TEE,PIPE,STR,6 IN,WE X WE,7.1 MM,GR 290
107625	BAG,STOPPING,6 IN,POLYESTER	116046	TEE,PIPE,8 IN,STR,WE X COMP,8.2 MM,CS
108298	CAP,PIPE,6 IN,BW,7.1 MM,GR 290,CAT I	116073	TEE,PIPE,10 IN,STR,WE X COMP,9.3 MM,CS
108355	CAP,PIPE,12 IN,BW,12.7 MM,GR 290,CAT I	116091	TEE,PIPE,12 IN,STR,WE X COMP,9.5 MM,CS
108373	FASTENER,STUDS,5/8 IN,4 1/2 IN,ALLOY STL	118613	SLEEVE,REPAIR,CLAMP, SPLIT,3 IN,STL,STD
108465	CAP,PIPE,2 IN,BW,3.9 MM,GR 241,CAT I	118810	CLAMP,PIPE REPAIR,2 IN,STL
108473	FASTENER,STUDS,3/4 IN,5 IN,ALLOY STL,B7	118818	CLAMP,PIPE REPAIR,3 IN,STL
108510	CAP,PIPE,4 IN,BW,6 MM,GR 241,CAT I	118826	CLAMP,PIPE REPAIR,NARROW ECONOMY,4 IN
108551	CAP,PIPE,8 IN,BW,8.2 MM,GR 290,CAT I	118835	CLAMP,PIPE REPAIR,NARROW ECONOMY,6 IN
108553	FASTENER,STUDS,7/8 IN,6 IN,ALLOY STL,B7	118842	CLAMP,PIPE REPAIR,NARROW ECONOMY,8 IN
108569	CAP,PIPE,10 IN,BW,9.3 MM,GR 290,CAT I	118847	CLAMP,PIPE REPAIR,NARROW ECONOMY,10 IN
108617	FASTENER,STUDS,1 IN,7 IN,ALLOY STL,B7,2	118871	CLAMP,PIPE REPAIR,ECONOMY,4 IN,STL
108653	FASTENER,STUDS,1 1/8 IN,7 1/2 IN,B7,A193	118879	CLAMP,PIPE REPAIR,ECONOMY,6 IN,STL

Material	Material Description	Material	Material Description
108684	FASTENER,STUDS,1 1/4 IN,9 IN,ALLOY STL,2	118885	CLAMP,PIPE REPAIR,ECONOMY,8 IN,STL
109355	ELB,CS,BW,2,3.9 MM,45,LONG,CSA Z245.11,2	118893	CLAMP,PIPE REPAIR,ECONOMY,10 IN,STL
109402	ELB,CS,BW,4,6 MM,45,LONG,CSA Z245.11,241	118901	CLAMP,PIPE REPAIR,ECONOMY,12 IN,STL
109410	ELB,CS,BW,4,4.8 MM,90,LONG,CSA Z245.11,2	119376	SLEEVE,REPAIR,STYLE 220,8 IN
109419	ELB,CS,BW,6,7.1 MM,45,LONG,CSA Z245.11,2	119380	SLEEVE,REPAIR,STYLE 220,10 IN
109447	ELB,CS,BW,8,12.7 MM,45,LONG,CSA Z245.11	119391	SLEEVE,REPAIR,STYLE 220,12 IN
109485	ELBOW,CS,BW,6,7.1 MM,90,LG,CSA Z245.11,2	120411	COUPLING,TRANSITION,6 IN X 6 IN,STL/PE
109509	ELBOW,CS,BW,10,9.3 MM,45,LG,CSA Z245.11	120457	COUPLING,TRANSITION,2 IN X 2 IN,STL/PE
109525	ELBOW,CS,BW,12,12.7 MM,45,LG,CSA Z245.11	120467	COUPLING,TRANSITION,3 IN X 3 IN,STL/PE
110014	ELB,CS,BW,2,3.9 MM,90,LONG,CSA Z245.11,2	120487	COUPLING,TRANSITION,4 IN X 4 IN,STL/PE
110178	ELBOW,CS,BW,8,8.2 MM,90,LG,CSA Z245.11,2	121574	NIPPLE,PURGE,SAVE-A-VLV,1 IN,WE X THD
110244	ELBOW,CS,BW,10,9.3 MM,90,LG,CSA Z245.11	121582	NIPPLE,PURGE,SAVE-A-VLV,2 IN,WE X THD
110265	ELBOW,CS,BW,12,12.7 MM,90,290,CAT I	121926	FITTING,STOPTAP,2 IN,CL600,WE,STD,CS
111432	REDUCER,PIPE,10 IN,8 IN,WE,WE,CONC,CS	128903	GASKET,FLG,2 IN,RW,PN100,RAISED,CS
112067	FLANGE,WELDNECK,6 IN,RF,PN100,7.1 MM,CS	128904	GASKET,FLG,4 IN,RW,PN100,RAISED,CS
112177	FLANGE,WELDNECK,2 IN,RF,PN100,3.9 MM,CS	128905	GASKET,FLG,6 IN,RW,PN100,RAISED,CS
112256	FLANGE,WELDNECK,4 IN,RF,PN100,6 MM,CS,WE	128906	GASKET,FLG,8 IN,RW,PN100,RAISED,CS
112373	FLANGE,WELDNECK,10 IN,RF,PN100,9.3 MM,CS	128907	GASKET,FLG,10 IN,RW,PN100,RAISED,CS
112477	FLANGE,WELDNECK,8 IN,RF,PN100,8.2 MM,CS	128908	GASKET,FLG,12 IN,RW,PN100,RAISED,CS
112508	FLANGE,WELDNECK,12 IN,RF,PN100,9.5 MM,CS	130892	CAP,PIPE,3 IN,BW,4.8 MM,CAT: I
112917	FLANGE,BLIND,4 IN,PN100,RF,CS,GR 248	130893	ELB,CS,BW,3,4.8 MM,45,10.405 KPA,241,CAT
113712	FLANGE,BLIND,2 IN,PN100,RF,CS,GR 248	130894	ELB,CS,BW,3,4.8 MM,90,10.405 KPA,241,CAT

Material	Material Description	Material	Material Description
113719	FLANGE,BLIND,3 IN,PN100,RF,CS,GR 248	130899	FLANGE,WELDNECK,3 IN,RF,PN100,4.8 MM,CS
113727	FLANGE,BLIND,12 IN,PN100,RF,CS,GR 248	130903	REDUCER,PIPE,3 IN,2 IN,WE,WE,CONC,CS
113761	FLANGE,BLIND,6 IN,PN100,RF,CS,GR 248	131507	GASKET,SW,3 IN,PN100,STYLE RW, RF,CS,CS
113767	FLANGE,BLIND,8 IN,PN100,RF,CS,GR 248	131835	FASTENER,STUDS,1 1/4 IN,8 1/2 IN,B7,A193
113777	FLANGE,BLIND,10 IN,PN100,RF,CS,GR 248	136213	NIPPLE,PURGE,FLAT, THD-O-RING,2 IN,STL
114295	REDUCER,PIPE,2 IN,1 IN,WE,WE,CONC,CS	137632	FITTING,STOPTAP,4 INX 3 INX 4 IN,CL600
114459	REDUCER, PIPE,4 IN,3 IN,WE,WE,CONC,CS,6	138853	BAG,STOPPING,D, GAS,8 IN
114491	REDUCER,PIPE,6 IN,4 IN,WE,WE,CONC,CS	138854	BAG,STOPPING,D, GAS,10 IN
114614	REDUCER,PIPE,12 IN,10 IN,WE,WE,CONC,CS	138855	BAG,STOPPING,12 IN
114779	REDUCER,PIPE,8 IN,6 IN,WE,WE,CONC,CS	139099	NIPPLE,PURGE,FLAT, THD-O-RING,3 IN,CS
115232	SADDLE,PIPE,3 IN,2 IN,STL		
115256	SADDLE,PIPE,4 IN,2 IN,9.5 MM,STL,REINF		
115281	SADDLE,PIPE,6 IN,2 IN,12.7 MM,STL,REINF		
115305	SADDLE,PIPE,8 IN,2 IN,STL		
115327	SADDLE,PIPE,10 IN,2 IN,STL		

Table 3-20: Emergency Material List for Sudbury Warehouse

Material	Material Description	Material	Material Description
102127	SLEEVE,REPAIR,SPLIT,2 IN,1000 PSIG WP	115474	SADDLE,PIPE,8 IN,3 IN,STL
102187	SLEEVE,REPAIR,SPLIT,4 IN,STD	115501	SADDLE,PIPE,10 IN,3 IN,STL
102224	SLEEVE,REPAIR,CLAMP, SPLIT,6 IN,STL,STD	115925	TEE,PIPE,2 IN,STR,WE X COMP,3.9 MM,CS
102256	SLEEVE,REPAIR,CLAMP, SPLIT,8 IN,CS	115937	TEE,PIPE,3 IN,STR,WE X COMP,5.5 MM,CS

Material	Material Description	Material	Material Description
102288	SLEEVE,REPAIR,SPLIT,10 IN,1000 PSIG WP	115946	TEE,PIPE,4 IN,STR,WE X WE,6 MM,GR 241,CS
102327	SLEEVE,REPAIR,CLAMP, SPLIT,12 IN,STL,STD	116024	TEE,PIPE,STR,6 IN,WE X WE,7.1 MM,GR 290
107599	BAG,STOPPING,C, GAS,2 IN,POLYESTER	116046	TEE,PIPE,8 IN,STR,WE X COMP,8.2 MM,CS
107606	BAG,STOPPING,C, GAS,3 IN,POLYESTER	116073	TEE,PIPE,10 IN,STR,WE X COMP,9.3 MM,CS
107615	BAG,STOPPING,C, GAS,4 IN,POLYESTER	116091	TEE,PIPE,12 IN,STR,WE X COMP,9.5 MM,CS
107625	BAG,STOPPING,6 IN,POLYESTER	118613	SLEEVE,REPAIR,CLAMP, SPLIT,3 IN,STL,STD
108298	CAP,PIPE,6 IN,BW,7.1 MM,GR 290,CAT I	118810	CLAMP,PIPE REPAIR,2 IN,STL
108355	CAP,PIPE,12 IN,BW,12.7 MM,GR 290,CAT I	118818	CLAMP,PIPE REPAIR,3 IN,STL
108373	FASTENER,STUDS,5/8 IN,4 1/2 IN,ALLOY STL	118826	CLAMP,PIPE REPAIR,NARROW ECONOMY,4 IN
108465	CAP,PIPE,2 IN,BW,3.9 MM,GR 241,CAT I	118835	CLAMP,PIPE REPAIR,NARROW ECONOMY,6 IN
108473	FASTENER,STUDS,3/4 IN,5 IN,ALLOY STL,B7	118842	CLAMP,PIPE REPAIR,NARROW ECONOMY,8 IN
108510	CAP,PIPE,4 IN,BW,6 MM,GR 241,CAT I	118847	CLAMP,PIPE REPAIR,NARROW ECONOMY,10 IN
108551	CAP,PIPE,8 IN,BW,8.2 MM,GR 290,CAT I	118871	CLAMP,PIPE REPAIR,ECONOMY,4 IN,STL
108553	FASTENER,STUDS,7/8 IN,6 IN,ALLOY STL,B7	118879	CLAMP,PIPE REPAIR,ECONOMY,6 IN,STL
108569	CAP,PIPE,10 IN,BW,9.3 MM,GR 290,CAT I	118885	CLAMP,PIPE REPAIR,ECONOMY,8 IN,STL
108617	FASTENER,STUDS,1 IN,7 IN,ALLOY STL,B7,2	118893	CLAMP,PIPE REPAIR,ECONOMY,10 IN,STL
108653	FASTENER,STUDS,1 1/8 IN,7 1/2 IN,B7,A193	118901	CLAMP,PIPE REPAIR,ECONOMY,12 IN,STL
108684	FASTENER,STUDS,1 1/4 IN,9 IN,ALLOY STL,2	119376	SLEEVE,REPAIR,STYLE 220,8 IN
109355	ELB,CS,BW,2,3.9 MM,45,LONG,CSA Z245.11,2	119380	SLEEVE,REPAIR,STYLE 220,10 IN
109402	ELB,CS,BW,4,6 MM,45,LONG,CSA Z245.11,241	119391	SLEEVE,REPAIR,STYLE 220,12 IN
109410	ELB,CS,BW,4,4.8 MM,90,LONG,CSA Z245.11,2	120411	COUPLING,TRANSITION,6 IN X 6 IN,STL/PE
109419	ELB,CS,BW,6,7.1 MM,45,LONG,CSA Z245.11,2	120457	COUPLING,TRANSITION,2 IN X 2 IN,STL/PE

Material	Material Description	Material	Material Description
109447	ELB,CS,BW,8,12.7 MM,45,LONG,CSA Z245.11	120467	COUPLING,TRANSITION,3 IN X 3 IN,STL/PE
109485	ELBOW,CS,BW,6,7.1 MM,90,LG,CSA Z245.11,2	120487	COUPLING,TRANSITION,4 IN X 4 IN,STL/PE
109509	ELBOW,CS,BW,10,9.3 MM,45,LG,CSA Z245.11	121574	NIPPLE,PURGE,SAVE-A-VLV,1 IN,WE X THD
109525	ELBOW,CS,BW,12,12.7 MM,45,LG,CSA Z245.11	121582	NIPPLE,PURGE,SAVE-A-VLV,2 IN,WE X THD
110014	ELB,CS,BW,2,3.9 MM,90,LONG,CSA Z245.11,2	121926	FITTING,STOPTAP,2 IN,CL600,WE,STD,CS
110178	ELBOW,CS,BW,8,8.2 MM,90,LG,CSA Z245.11,2	122085	FTG,STOP/TAP,BTTM-OUT,10 IN,CL400,WE,STD
110244	ELBOW,CS,BW,10,9.3 MM,90,LG,CSA Z245.11	122093	FITTING,STOPTAP,BTTM-OUT,12 IN,CL400,WE
110265	ELBOW,CS,BW,12,12.7 MM,90,290,CAT I	128903	GASKET,FLG,2 IN,RW,PN100,RAISED,CS
111432	REDUCER,PIPE,10 IN,8 IN,WE,WE,CONC,CS	128904	GASKET,FLG,4 IN,RW,PN100,RAISED,CS
112067	FLANGE,WELDNECK,6 IN,RF,PN100,7.1 MM,CS	128905	GASKET,FLG,6 IN,RW,PN100,RAISED,CS
112177	FLANGE,WELDNECK,2 IN,RF,PN100,3.9 MM,CS	128906	GASKET,FLG,8 IN,RW,PN100,RAISED,CS
112256	FLANGE,WELDNECK,4 IN,RF,PN100,6 MM,CS,WE	128907	GASKET,FLG,10 IN,RW,PN100,RAISED,CS
112373	FLANGE,WELDNECK,10 IN,RF,PN100,9.3 MM,CS	128908	GASKET,FLG,12 IN,RW,PN100,RAISED,CS
112477	FLANGE,WELDNECK,8 IN,RF,PN100,8.2 MM,CS	130892	CAP,PIPE,3 IN,BW,4.8 MM,CAT: I
112508	FLANGE,WELDNECK,12 IN,RF,PN100,9.5 MM,CS	130893	ELB,CS,BW,3,4.8 MM,45,10.405 KPA,241,CAT
112917	FLANGE,BLIND,4 IN,PN100,RF,CS,GR 248	130894	ELB,CS,BW,3,4.8 MM,90,10.405 KPA,241,CAT
113712	FLANGE,BLIND,2 IN,PN100,RF,CS,GR 248	130899	FLANGE,WELDNECK,3 IN,RF,PN100,4.8 MM,CS
113719	FLANGE,BLIND,3 IN,PN100,RF,CS,GR 248	130903	REDUCER,PIPE,3 IN,2 IN,WE,WE,CONC,CS
113727	FLANGE,BLIND,12 IN,PN100,RF,CS,GR 248	131507	GASKET,SW,3 IN,PN100,STYLE RW, RF,CS,CS
113761	FLANGE,BLIND,6 IN,PN100,RF,CS,GR 248	131835	FASTENER,STUDS,1 1/4 IN,8 1/2 IN,B7,A193
113767	FLANGE,BLIND,8 IN,PN100,RF,CS,GR 248	136213	NIPPLE,PURGE,FLAT, THD-O-RING,2 IN,STL
113777	FLANGE,BLIND,10 IN,PN100,RF,CS,GR 248	136508	FITTING,STOPTAP,BTTM-OUT,4 IN,CL400,WE

Material	Material Description	Material	Material Description
114295	REDUCER,PIPE,2 IN,1 IN,WE,WE,CONC,CS	137211	PIPE,CS,2,3.9 MM,290,CAT I
114459	REDUCER, PIPE,4 IN,3 IN,WE,WE,CONC,CS,6	137212	PIPE,CS,3,4.8 MM,290,CAT I
114491	REDUCER,PIPE,6 IN,4 IN,WE,WE,CONC,CS	137213	PIPE,CS,4,4.8 MM,290,CAT I
114614	REDUCER,PIPE,12 IN,10 IN,WE,WE,CONC,CS	137215	PIPE,CS,8,8.2 MM,290,CAT I
114779	REDUCER,PIPE,8 IN,6 IN,WE,WE,CONC,CS	137216	PIPE,CS,10,9.3 MM,290,CAT I
115232	SADDLE,PIPE,3 IN,2 IN,STL	137217	PIPE,CS,12,9.5 MM,290,CAT I
115256	SADDLE,PIPE,4 IN,2 IN,9.5 MM,STL,REINF	137632	FITTING,STOPTAP,4 INX 3 INX 4 IN,CL600
115281	SADDLE,PIPE,6 IN,2 IN,12.7 MM,STL,REINF	138853	BAG,STOPPING,D, GAS,8 IN
115305	SADDLE,PIPE,8 IN,2 IN,STL	138854	BAG,STOPPING,D, GAS,10 IN
115327	SADDLE,PIPE,10 IN,2 IN,STL	138855	BAG,STOPPING,12 IN
115341	SADDLE,PIPE,12 IN,2 IN,STL,REINF	139099	NIPPLE,PURGE,FLAT, THD-O-RING,3 IN,CS
115428	SADDLE,PIPE,4 IN,3 IN,STL	139637	FITTING,STOPTAP,BTTM-OUT,6 IN,CL400,CS
115452	SADDLE,PIPE,6 IN,3 IN,STL	139638	FITTING,STOPTAP,BTTM-OUT,8 IN,CL400,CS

Table 3-21: Emergency Material List for Thunder Bay Warehouse*

Material	Material Description	Material	Material Description
101817	FASTENER,STUDS,1 1/4 IN,8 1/4 IN,B7	115428	SADDLE,PIPE,4 IN,3 IN,STL
102127	SLEEVE,REPAIR,SPLIT,2 IN,1000 PSIG WP	115452	SADDLE,PIPE,6 IN,3 IN,STL
102187	SLEEVE,REPAIR,SPLIT,4 IN,STD	115474	SADDLE,PIPE,8 IN,3 IN,STL
102224	SLEEVE,REPAIR,CLAMP, SPLIT,6 IN,STL,STD	115501	SADDLE,PIPE,10 IN,3 IN,STL
102256	SLEEVE,REPAIR,CLAMP, SPLIT,8 IN,CS	115925	TEE,PIPE,2 IN,STR,WE X COMP,3.9 MM,CS
102288	SLEEVE,REPAIR,SPLIT,10 IN,1000 PSIG WP	115937	TEE,PIPE,3 IN,STR,WE X COMP,5.5 MM,CS
102327	SLEEVE,REPAIR,CLAMP, SPLIT,12 IN,STL,STD	115946	TEE,PIPE,4 IN,STR,WE X WE,6 MM,GR 241,CS

Material	Material Description	Material	Material Description
103954	PIPE,CS,12,9.5 MM,Z245.1,290,YJ,CAT I	116024	TEE,PIPE,STR,6 IN,WE X WE,7.1 MM,GR 290
107599	BAG,STOPPING,C, GAS,2 IN,POLYESTER	116046	TEE,PIPE,8 IN,STR,WE X COMP,8.2 MM,CS
107606	BAG,STOPPING,C, GAS,3 IN,POLYESTER	116073	TEE,PIPE,10 IN,STR,WE X COMP,9.3 MM,CS
107615	BAG,STOPPING,C, GAS,4 IN,POLYESTER	116091	TEE,PIPE,12 IN,STR,WE X COMP,9.5 MM,CS
107625	BAG,STOPPING,6 IN,POLYESTER	118613	SLEEVE,REPAIR,CLAMP, SPLIT,3 IN,STL,STD
108298	CAP,PIPE,6 IN,BW,7.1 MM,GR 290,CAT I	118810	CLAMP,PIPE REPAIR,2 IN,STL
108355	CAP,PIPE,12 IN,BW,12.7 MM,GR 290,CAT I	118818	CLAMP,PIPE REPAIR,3 IN,STL
108373	FASTENER,STUDS,5/8 IN,4 1/2 IN,ALLOY STL	118826	CLAMP,PIPE REPAIR,NARROW ECONOMY,4 IN
108465	CAP,PIPE,2 IN,BW,3.9 MM,GR 241,CAT I	118835	CLAMP,PIPE REPAIR,NARROW ECONOMY,6 IN
108473	FASTENER,STUDS,3/4 IN,5 IN,ALLOY STL,B7	118842	CLAMP,PIPE REPAIR,NARROW ECONOMY,8 IN
108510	CAP,PIPE,4 IN,BW,6 MM,GR 241,CAT I	118847	CLAMP,PIPE REPAIR,NARROW ECONOMY,10 IN
108551	CAP,PIPE,8 IN,BW,8.2 MM,GR 290,CAT I	118871	CLAMP,PIPE REPAIR,ECONOMY,4 IN,STL
108553	FASTENER,STUDS,7/8 IN,6 IN,ALLOY STL,B7	118879	CLAMP,PIPE REPAIR,ECONOMY,6 IN,STL
108569	CAP,PIPE,10 IN,BW,9.3 MM,GR 290,CAT I	118885	CLAMP,PIPE REPAIR,ECONOMY,8 IN,STL
108576	CAP,PIPE,12 IN,BW,9.5 MM,GR 241,CAT I	118893	CLAMP,PIPE REPAIR,ECONOMY,10 IN,STL
108617	FASTENER,STUDS,1 IN,7 IN,ALLOY STL,B7,2	118901	CLAMP,PIPE REPAIR,ECONOMY,12 IN,STL
108653	FASTENER,STUDS,1 1/8 IN,7 1/2 IN,B7,A193	119376	SLEEVE,REPAIR,STYLE 220,8 IN
108684	FASTENER,STUDS,1 1/4 IN,9 IN,ALLOY STL,2	119380	SLEEVE,REPAIR,STYLE 220,10 IN
109355	ELB,CS,BW,2,3.9 MM,45,LONG,CSA Z245.11,2	119391	SLEEVE,REPAIR,STYLE 220,12 IN
109402	ELB,CS,BW,4,6 MM,45,LONG,CSA Z245.11,241	120411	COUPLING,TRANSITION,6 IN X 6 IN,STL/PE
109410	ELB,CS,BW,4,4.8 MM,90,LONG,CSA Z245.11,2	120457	COUPLING,TRANSITION,2 IN X 2 IN,STL/PE
109419	ELB,CS,BW,6,7.1 MM,45,LONG,CSA Z245.11,2	120467	COUPLING,TRANSITION,3 IN X 3 IN,STL/PE
109447	ELB,CS,BW,8,12.7 MM,45,LONG,CSA Z245.11	120487	COUPLING,TRANSITION,4 IN X 4 IN,STL/PE
109485	ELBOW,CS,BW,6,7.1 MM,90,LG,CSA Z245.11,2	121574	NIPPLE,PURGE,SAVE-A-VLV,1 IN,WE X THD

Material	Material Description	Material	Material Description
109509	ELBOW,CS,BW,10,9.3 MM,45,LG,CSA Z245.11	121582	NIPPLE,PURGE,SAVE-A-VLV,2 IN,WE X THD
109525	ELBOW,CS,BW,12,12.7 MM,45,LG,CSA Z245.11	121926	FITTING,STOPTAP,2 IN,CL600,WE,STD,CS
110014	ELB,CS,BW,2,3.9 MM,90,LONG,CSA Z245.11,2	122085	FTG,STOP/TAP,BTTM-OUT,10 IN,CL400,WE,STD
110178	ELBOW,CS,BW,8,8.2 MM,90,LG,CSA Z245.11,2	122093	FITTING,STOPTAP,BTTM-OUT,12 IN,CL400,WE
110244	ELBOW,CS,BW,10,9.3 MM,90,LG,CSA Z245.11	128903	GASKET,FLG,2 IN,RW,PN100,RAISED,CS
110265	ELBOW,CS,BW,12,12.7 MM,90,290,CAT I	128904	GASKET,FLG,4 IN,RW,PN100,RAISED,CS
111432	REDUCER,PIPE,10 IN,8 IN,WE,WE,CONC,CS	128905	GASKET,FLG,6 IN,RW,PN100,RAISED,CS
112067	FLANGE,WELDNECK,6 IN,RF,PN100,7.1 MM,CS	128906	GASKET,FLG,8 IN,RW,PN100,RAISED,CS
112177	FLANGE,WELDNECK,2 IN,RF,PN100,3.9 MM,CS	128907	GASKET,FLG,10 IN,RW,PN100,RAISED,CS
112256	FLANGE,WELDNECK,4 IN,RF,PN100,6 MM,CS,WE	128908	GASKET,FLG,12 IN,RW,PN100,RAISED,CS
112373	FLANGE,WELDNECK,10 IN,RF,PN100,9.3 MM,CS	130892	CAP,PIPE,3 IN,BW,4.8 MM,CAT: I
112477	FLANGE,WELDNECK,8 IN,RF,PN100,8.2 MM,CS	130893	ELB,CS,BW,3,4.8 MM,45,10.405 KPA,241,CAT
112508	FLANGE,WELDNECK,12 IN,RF,PN100,9.5 MM,CS	130894	ELB,CS,BW,3,4.8 MM,90,10.405 KPA,241,CAT
112917	FLANGE,BLIND,4 IN,PN100,RF,CS,GR 248	130899	FLANGE,WELDNECK,3 IN,RF,PN100,4.8 MM,CS
113712	FLANGE,BLIND,2 IN,PN100,RF,CS,GR 248	130903	REDUCER,PIPE,3 IN,2 IN,WE,WE,CONC,CS
113719	FLANGE,BLIND,3 IN,PN100,RF,CS,GR 248	131507	GASKET,SW,3 IN,PN100,STYLE RW, RF,CS,CS
113727	FLANGE,BLIND,12 IN,PN100,RF,CS,GR 248	136213	NIPPLE,PURGE,FLAT, THD-O-RING,2 IN,STL
113761	FLANGE,BLIND,6 IN,PN100,RF,CS,GR 248	136508	FITTING,STOPTAP,BTTM-OUT,4 IN,CL400,WE
113767	FLANGE,BLIND,8 IN,PN100,RF,CS,GR 248	137211	PIPE,CS,2,3.9 MM,290,CAT I
113777	FLANGE,BLIND,10 IN,PN100,RF,CS,GR 248	137212	PIPE,CS,3,4.8 MM,290,CAT I
114295	REDUCER,PIPE,2 IN,1 IN,WE,WE,CONC,CS	137213	PIPE,CS,4,4.8 MM,290,CAT I
114459	REDUCER, PIPE,4 IN,3 IN,WE,WE,CONC,CS,6	137214	PIPE,CS,6,7.1 MM,290,CAT I

Material	Material Description	Material	Material Description
114491	REDUCER,PIPE,6 IN,4 IN,WE,WE,CONC,CS	137215	PIPE,CS,8,8.2 MM,290,CAT I
114614	REDUCER,PIPE,12 IN,10 IN,WE,WE,CONC,CS	137216	PIPE,CS,10,9.3 MM,290,CAT I
114779	REDUCER,PIPE,8 IN,6 IN,WE,WE,CONC,CS	137632	FITTING,STOPTAP,4 INX 3 INX 4 IN,CL600
115232	SADDLE,PIPE,3 IN,2 IN,STL	138853	BAG,STOPPING,D, GAS,8 IN
115256	SADDLE,PIPE,4 IN,2 IN,9.5 MM,STL,REINF	138854	BAG,STOPPING,D, GAS,10 IN
115281	SADDLE,PIPE,6 IN,2 IN,12.7 MM,STL,REINF	138855	BAG,STOPPING,12 IN
115305	SADDLE,PIPE,8 IN,2 IN,STL	139099	NIPPLE,PURGE,FLAT, THD-O-RING,3 IN,CS
115327	SADDLE,PIPE,10 IN,2 IN,STL	139637	FITTING,STOPTAP,BTTM-OUT,6 IN,CL400,CS
115341	SADDLE,PIPE,12 IN,2 IN,STL,REINF	139638	FITTING,STOPTAP,BTTM-OUT,8 IN,CL400,CS

NOTE: **Emergency Pipe for London and Belleville/Kingston Region pressure tested to (1.5x) 6895 kPa MOP (test records available).*

Table 3-22: Emergency Material List for Pipe Yard

Material	Material Description
148091	PIPE,STL,STL,2 IN,3.9 MM,290,LIQUID EPOX
148092	PIPE,STL,STL,3 IN,4.8 MM,290,LIQUID EPOX
148093	PIPE,STL,STL,4 IN,4.8 MM,290,LIQUID EPOX
148094	PIPE,STL,STL,6 IN,7.1 MM,290,LIQUID EPOX
148095	PIPE,STL,STL,8 IN,8.2 MM,290,LIQUID EPOX
148096	PIPE,STL,STL,10 IN,9.3 MM,290,LIQUID EPO
148097	PIPE,STL,STL,12 IN,9.5 MM,290,LIQUID EPO

Table 3-23: Emergency Material List for TOC and Ottawa

Item	Item Type	NPS Size	Material Type	Manufacturer	ANSI Class	MOP (KPA)	Length (MM)	W.T. (MM)	Additional Description	Qty To Stock	Qty On Hand	Location
Mueller Clamps												
CSU1913300	CLAMP	2	STEEL	MUELLER		690	150		FULL SEAL - SINGLE	2	2	BE.01.L2
CSU1913366	CLAMP	2	STEEL	MUELLER		690	300		FULL SEAL - SINGLE	2	2	BE.02.L2
CSU1913402	CLAMP	2	STEEL	MUELLER		690	460		FULL SEAL - SINGLE	2	3	BE.02.L2
CSU1913866	CLAMP	4	STEEL	MUELLER		690	300		FULL SEAL - SINGLE	2	2	BE.02.L2
CSU1913968	CLAMP	4	STEEL	MUELLER		690	460		FULL SEAL - SINGLE	2	4	BE.02.L2
CSU1924727	CLAMP	4	STEEL	MUELLER		690	300		FULL SEAL - SINGLE	2	4	BE.02.L2
CSU1914449	CLAMP	6	STEEL	MUELLER		690	610		FULL SEAL - SINGLE	2	3	BE.02.L2
CSU1924807	CLAMP	6	STEEL	MUELLER		690	300		FULL SEAL - SINGLE	2	2	BE.03.L2
CSU1914381	CLAMP	6	STEEL	MUELLER			405		FULL SEAL - SINGLE	2	3	BE.03.L2
CSU1914905	CLAMP	8	STEEL	MUELLER		690	460		FULL SEAL - SINGLE	2	3	BE.03.L2
CSU1914949	CLAMP	8	STEEL	MUELLER		690	610		FULL SEAL - SINGLE	2	4	BE.03.L2
CSU1924829	CLAMP	8	STEEL	MUELLER		690	300		FULL SEAL - SINGLE	2	3	BE.03.L2
CSU1915908	CLAMP	12	STEEL	MUELLER		690	460		FULL SEAL - SINGLE	2	2	BE.04.L2

Item	Item Type	NPS Size	Material Type	Manufacturer	ANSI Class	MOP (KPA)	Length (MM)	W.T. (MM)	Additional Description	Qty To Stock	Qty On Hand	Location
Mueller Clamps (continued)												
CSU1924896	CLAMP	12	STEEL	MUELLER		690	610		FULL SEAL - SINGLE	2	2	BE.04.L2
CSU1916445	CLAMP	16	STEEL	MUELLER		690	610		FULL SEAL - SINGLE	2	2	BE.04.L2/ 04.L3
CSU1916960	CLAMP	20	STEEL	MUELLER		690	460		FULL SEAL - SINGLE	2	2	BE.01.L3
CSU1917426	CLAMP	24	STEEL	MUELLER		690	460		FULL SEAL - DOUBLE - XTRA-RANGE	2	1	BE.02.L3
CSU1917948	CLAMP	26	STEEL	MUELLER		690	610		FULL SEAL - SINGLE	2	2	BE.02.L3
CSU1918009	CLAMP	30	STEEL	MUELLER		690	610		FULL SEAL - SINGLE	2	2	BE.03.L3
NS Item	CLAMP	10	EPOXY	SMITH-BLAIR		HP			SB HIGH PRESSURE REPAIR CLAMP	1	1	BE.04.L2
7 -11 Style Couplings												
CSU1994269	COUPLING	4	CI/PE	DRESSER					STYLE 7-11, Cast Iron x Polyethylene Coupling 4"x4	"2	2	BE.14.L2
CSU1994281	COUPLING	6	CI/PE	DRESSER					STYLE 7-11, Cast Iron x Polyethylene Coupling 6"x6	"2	2	BE.14.L2

Item	Item Type	NPS Size	Material Type	Manufacturer	ANSI Class	MOP (KPA)	Length (MM)	W.T. (MM)	Additional Description	Qty To Stock	Qty On Hand	Location
ElectroFused Couplings												
CSU1830060	PE coupling	1.25	"PE	INNOGAZ					11/4" Coupling PE Innogaz High Density Electrofusion PE4710 CSA B137.4.1	2	2	BE.14.L2
CSU1830075	PE coupling	2	"PE	INNOGAZ					2" Coupling PE Innogaz High Density Electrofusion PE4710 CSA B137.4.1	2	2	BE.14.L2
CSU1815141	PE coupling	3	PE	INNOGAZ					3" Coupling PE Innogaz Medium Density Electrofusion PE2406 CSA B137.4.1	2	2	BE.14.L2
CSU1830100	PE coupling	4	PE	FRIALEN					4" Coupling PE Frialen High Density Electrofusion PE4710 CSA B137.4.1	2	2	BE.14.L2
CSU1815163	PE coupling	6	PE	INNOGAZ					6" Coupling PE Innogaz Medium Density Electrofusion PE2406 CSA B137.4.1	2	2	BE.14.L2
CSU1835010	PE coupling	8	PE	FRIALEN					8" Coupling PE Frialen High Density Electrofusion PE4710 CSA B137.4.1	2	2	BE.14.L2

Item	Item Type	NPS Size	Material Type	Manufacturer	ANSI Class	MOP (KPA)	Length (MM)	W.T. (MM)	Additional Description	Qty To Stock	Qty On Hand	Location
Dresser - Steel and CI												
CSU1945080	COUPLING	1	STEEL	DRESSER					STYLE 90 - Pipe to Pipe Insulated restraining coupling 1.315"OD	2	4	BE.13.L2
CSU1945104	COUPLING	1 1/4	STEEL	DRESSER					STYLE 90 - Pipe to Pipe Insulated restraining coupling 1.660"OD	2	4	BE.13.L2
CSU1945148	COUPLING	2	STEEL	DRESSER					STYLE 90 - Pipe to Pipe Insulated restraining coupling 2.375"OD	2	4	BE.13.L2
CSU1953226	COUPLING	4	STEEL	DRESSER					STYLE 31 - Line End Cap, 4"-ID & 4.5"OD	2	2	BE.13.L2
CSU1953248	COUPLING	6	STEEL	DRESSER					STYLE 31 - Line End Cap, 6”ID 6.625”OD	2	2	BE.13.L2
CSU1953260	COUPLING	8	STEEL	DRESSER					STYLE 31 - Line End Cap, 8”ID 8.625”OD	2	4	BE.13.L2
CSU1947188	COUPLING	3	STEEL	DRESSER					STYLE 38 - Steel pipe to pipe coupling	2	2	BE.13.L2
CSU1947224	COUPLING	4	STEEL	DRESSER					STYLE 38 - Steel pipe to pipe coupling	2	4	BE.13.L2

Item	Item Type	NPS Size	Material Type	Manufacturer	ANSI Class	MOP (KPA)	Length (MM)	W.T. (MM)	Additional Description	Qty To Stock	Qty On Hand	Location
Dresser - Steel and CI (continued)												
CSU1947304	COUPLING	6	STEEL	DRESSER					STYLE 38 - Steel pipe to pipe coupling	2	2	BE.13.L2
CSU1947326	COUPLING	8	STEEL	DRESSER					STYLE 38 - Steel pipe to pipe coupling	2	2	BE.13.L2
CSU1947360	COUPLING	12	STEEL	DRESSER					STYLE 38 - Steel pipe to pipe coupling	2	2	BE.12.L2
CSU1947382	COUPLING	16	STEEL	DRESSER					STYLE 38 - Steel pipe to pipe coupling	2	5	BE.12.L2/ 12.L1
CSU1947428	COUPLING	20	STEEL	DRESSER					STYLE 38 - Steel pipe to pipe coupling	2	2	BE.14.L1
CSU1947440	COUPLING	24	STEEL	DRESSER					STYLE 38 - Steel pipe to pipe coupling	2	3	BE.12.L1/ 13.L1
CSU1947462	COUPLING	26	STEEL	DRESSER					STYLE 38 - Steel pipe to pipe coupling	2	5	BE.14.L1/ 13.L1
CSU1947484	COUPLING	30	STEEL	DRESSER					STYLE 38 - Steel pipe to pipe coupling	2	2	BE.13.L1
CSU1948181	COUPLING	3	CI/ST	DRESSER					STYLE 39-62- Cast Iron to Steel Pipe Insulated	2	2	BE.12.L2
CSU1948227	COUPLING	4	CI/ST	DRESSER					STYLE 39-62- Cast Iron to Steel Pipe Insulated	2	2	BE.12.L2
CSU1948307	COUPLING	6	CI/ST	DRESSER					STYLE 39-62- Cast Iron to Steel Pipe Insulated	2	2	BE.12.L2

Item	Item Type	NPS Size	Material Type	Manufacturer	ANSI Class	MOP (KPA)	Length (MM)	W.T. (MM)	Additional Description	Qty To Stock	Qty On Hand	Location
Dresser - Steel and CI (continued)												
CSU1948329	COUPLING	8	CI/ST	DRESSER					STYLE 39-62-Cast Iron to Steel Pipe Insulated	2	2	BE.12.L2
CSU1946867	COUPLING	12	CI/ST	DRESSER					STYLE 39-62-Cast Iron to Steel Pipe Insulated	2	2	BE.12.L2
Dresser - Reinforcement Sleeves (Pumpkin styles 110 and 220)												
CSU1979222	SLEEVE	4	STEEL	DRESSER			110.5	7.9	STYLE 110 - WELDED - ANSI B16.9 - GRADE 344 MPa	2	2	BE.05.L2
CSU1979225	SLEEVE	4	STEEL	DRESSER			1219.2	7.9	STYLE 110 - WELDED - ANSI B16.9 - GRADE 344 MPa	2	2	BE.05.L1
CSU1979302	SLEEVE	6	STEEL	DRESSER			152.4	9.5	STYLE 110 - WELDED - ANSI B16.9 - GRADE 344 MPa	2	2	BE.05.L2
CSU1979305	SLEEVE	6	STEEL	DRESSER			1219.2	9.5	STYLE 110 - WELDED - ANSI B16.9 - GRADE 344 MPa	2	2	BE.05.L1
CSU1979324	SLEEVE	8	STEEL	DRESSER			152.4	9.5	STYLE 110 - WELDED - ANSI B16.9 - GRADE 344 MPa	2	2	BE.05.L2
CSU1979370	SLEEVE	8	STEEL	DRESSER			914.4	9.5	STYLE 110 - WELDED - ANSI B16.9 - GRADE 344 MPa	2	2	BE.06.L1
CSU1979368	SLEEVE	12	STEEL	DRESSER			304.8	9.5	STYLE 110 - WELDED - ANSI B16.9	1	1	BE.05.L2

Item	Item Type	NPS Size	Material Type	Manufacturer	ANSI Class	MOP (KPA)	Length (MM)	W.T. (MM)	Additional Description	Qty To Stock	Qty On Hand	Location
Dresser - Reinforcement Sleeves (Pumpkin styles 110 and 220) (continued)												
CSU1979400	SLEEVE	12	STEEL	DRESSER			1219.2	9.5	STYLE 110 - WELDED - ANSI B16.9 - GRADE 344 MPa	2	3	BE.06.L1
CSU1980229	SLEEVE	4	STEEL	DRESSER			514.4	7.9	STYLE 220 - WELDED - ANSI B16.9 - GRADE 344 MPa	2	3	BE.06.L2
CSU1980309	SLEEVE	6	STEEL	DRESSER			552.5	9.5	STYLE 220 - WELDED - ANSI B16.9 - GRADE 344 MPa	2	4	BE.06.L2
CSU1980321	SLEEVE	8	STEEL	DRESSER			552.5	9.5	STYLE 220 - WELDED - ANSI B16.9 - GRADE 344 MPa	2	4	BE.06.L2
CSU1994601	SLEEVE	10	STEEL	DRESSER			552.5		STYLE 220 - WELDED - ANSI B16.9 - GRADE 344 MPa	1	1	BE.06.L2
CSU1980365	SLEEVE	12	STEEL	DRESSER			552.5		STYLE 220 - WELDED - ANSI B16.9 - GRADE 344 MPa	2	4	BE.07.L2/ BE.05.L2
CSU1994598	SLEEVE	16	STEEL	DRESSER			552.5	12.7	STYLE 220 - WELDED - ANSI B16.9 - GRADE 344 MPa	2	4	BE.07.L2
CSU1980423	SLEEVE	20	STEEL	DRESSER					STYLE 220 - WELDED - OBSOLETE	2	4	BE.07.L2/ 07.L5/07. L1
CSU1994645	SLEEVE	24	STEEL	DRESSER			552.5	19.1	STYLE 220 - WELDED - ANSI B16.9 - GRADE 344 MPa	2	4	BE.02.L1/ BE.07.L1

Item	Item Type	NPS Size	Material Type	Manufacturer	ANSI Class	MOP (KPA)	Length (MM)	W.T. (MM)	Additional Description	Qty To Stock	Qty On Hand	Location
Dresser - Reinforcement Sleeves (Pumpkin styles 110 and 220) (continued)												
CSU1994634	SLEEVE	26	STEEL	DRESSER			552.5	15.9	STYLE 220 - WELDED - ANSI B16.9 - GRADE 414 MPa	2	2	BE.03.L1
CSU1994623	SLEEVE	30	STEEL	DRESSER			552.5	19.1	STYLE 220 - WELDED - ANSI B16.9 - GRADE 414 MPa	2	2	BE.04.L1/ BE.0.3L1
NS Item	SLEEVE	36	STEEL	DRESSER			552.5	19.1	STYLE 220 - WELDED - ANSI B16.9 - GRADE 414 MPa	2	2	BE.07.L4
Dresser - Reinforcement Sleeves stored at MainLiner												
CSU1995540	SLEEVE	36	STEEL	DRESSER					STYLE 115 - WELDED ASMT A572 GR60	1	1	MainLiner
CSU1995545	SLEEVE	42	STEEL	DRESSER					STYLE 115 - WELDED ASMT A572 GR60	1	1	MainLiner
Plidco Sleeves												
CSU1980638	SLEEVE	4	STEEL	PLIDCO		6900	18		"FULL SEAL - SPLIT	1	3	BE.05.L2/ BE.05.L3
CSU1980640	SLEEVE	4	STEEL	PLIDCO		6900	24		"FULL SEAL - SPLIT	1	2	BE.05.L3
CSU1980649	SLEEVE	6	STEEL	PLIDCO		6900	18		"FULL SEAL - SPLIT	1	1	BE.06.L3
CSU1980651	SLEEVE	6	STEEL	PLIDCO		6900	24		"FULL SEAL - SPLIT	1	1	BE.06.L3
CSU1980650	SLEEVE	8	STEEL	PLIDCO		6900	18		"FULL SEAL - SPLIT	1	4	BE.06.L3

Item	Item Type	NPS Size	Material Type	Manufacturer	ANSI Class	MOP (KPA)	Length (MM)	W.T. (MM)	Additional Description	Qty To Stock	Qty On Hand	Location
Plidco Sleeves (continued)												
CSU1994441	SLEEVE	8	STEEL	PLIDCO		6900	24		"FULL SEAL - SPLIT	1	1	BE.05.L4
CSU1980661	SLEEVE	12	STEEL	PLIDCO		6900	18		"FULL SEAL - SPLIT (both 12" fittings are good)	1	4	BE.06.L4/ BE.04.L3
CSU1980662	SLEEVE	12	STEEL	PLIDCO		6900	24		"FULL SEAL - SPLIT	1	1	BE.05.L5
CSU1980809	SLEEVE	16	STEEL	PLIDCO		6900	24		"FULL SEAL - SPLIT (good condition)	1	1	BE.06.L5
CSU1980901	SLEEVE	20	STEEL	PLIDCO		6900	24		"FULL SEAL - SPLIT	1	2	BE.06.L5/ BE.07.L5
NS Item	SLEEVE	30	STEEL	PLIDCO			24		SPLIT - with Silicone packing and steel Girderrings		1	BE.04.L1
TDW Fittings												
CSU2005143	SHORTSTOPP	2	STEEL	TDW	150					2	2	BE.11.L2
CSU2005187	SHORTSTOPP	3	STEEL	TDW	150					2	2	BE.11.L2
CSU2005223	SHORTSTOPP	4	STEEL	TDW	150					2	2	BE.11.L2
CSU2005303	SHORTSTOPP	6	STEEL	TDW	150					2	2	BE.11.L2
CSU2005325	SHORTSTOPP	8	STEEL	TDW	150					2	2	BE.11.L2

Item	Item Type	NPS Size	Material Type	Manufacturer	ANSI Class	MOP (KPA)	Length (MM)	W.T. (MM)	Additional Description	Qty To Stock	Qty On Hand	Location
TDW Fittings (continued)												
CSU2005347	SHORTSTOPP	12	STEEL	TDW	150					2	2	BE.11.L2
CSU2005415	SPLIT TEE	2	STEEL	TDW	300				Full encirclement split tee (Shortstopp style)	2	2	BE.11.L2
CSU2005425	SPLIT TEE	4	STEEL	TDW	300				Full encirclement split tee (Shortstopp style)	2	2	BE.10.L2
CSU2005435	SPLIT TEE	6	STEEL	TDW	300				Full encirclement split tee (Shortstopp style)	2	4	BE.10.L2/ 1 0.L4
CSU2005445	SPLIT TEE	8	STEEL	TDW	300				Full encirclement split tee (Shortstopp style)	2	6	BE.10.L3/ 10.L4
CSU2005455	SPLIT TEE	12	STEEL	TDW	300				Full encirclement split tee (Shortstopp style)	2	2	BE.10.L1
TDW Fittings - 150 Class Tees												
CSU1175140	TEE	2	STEEL	TDW	150			3.9	SCARFED - THREE-WAY - ANSI B16.25	2	2	BE.11.L2
CSU1175184	TEE	3	STEEL	TDW	150			5.5	SCARFED - THREE-WAY - ANSI B16.25	2	2	BE.11.L2
CSU1175231	TEE	4	STEEL	TDW	150			6	SCARFED - THREE-WAY - ANSI B16.25	2	2	BE.11.L2
CSU1175344	TEE	6	STEEL	TDW	150			7.1	SCARFED - THREE-WAY - TAPER BORED TO W.T. 4.8 MM	2	2	BE.11.L2

Item	Item Type	NPS Size	Material Type	Manufacturer	ANSI Class	MOP (KPA)	Length (MM)	W.T. (MM)	Additional Description	Qty To Stock	Qty On Hand	Location
TDW Fittings - 150 Class Tees (continued)												
CSU1175866	TEE	8	STEEL	TDW	150			8.2	SCARFED - 3WT - ANSI B16.25 - TAPER BORED W.T.4.8	2	2	BE.11.L1
CSU1175888	TEE	12	STEEL	TDW	150			9.5	SCARFED - 3WT - ANSI B16.25 - TAPER BORED W.T.6.4	2	2	BE.11.L1
TDW Fittings - 300 Class Tees												
CSU1187250	TEE	2	STEEL	TDW	300D				SPHERICAL - THREE-WAY	2	4	BE.11.L2
CSU2005425	TEE	4	STEEL	TDW	300D				SPHERICAL - THREE-WAY	2	2	BE.10.L2
CSU1176461	TEE	6	STEEL	TDW	300D				SPHERICAL - THREE-WAY - #06-7378-0000-00	2	2	BE.10.L2
CSU1176585	TEE	8	STEEL	TDW	300D				SPHERICAL - THREE-WAY - #06-7379-0000-00	2	2	BE.10.L4
CSU1176596	TEE	12	STEEL	TDW	300D				SPHERICAL - THREE-WAY - #26-1142-0000-01	2	2	BE.10.L1
TDW Fittings - 600 Series												
CSU2006100	TEE	4	STEEL	TDW	600/ 300				SPLIT TEE - 29% SMYS (600 SERIES)	2	2	BE.09.L2

Item	Item Type	NPS Size	Material Type	Manufacturer	ANSI Class	MOP (KPA)	Length (MM)	W.T. (MM)	Additional Description	Qty To Stock	Qty On Hand	Location
TDW Fittings - 600 Series (continued)												
CSU1176405	TEE	4	STEEL	TDW	600/ 300				SPHERICAL - THREE-WAY – SMYS (600 SERIES)	2	2	BE.09.L2
CSU2006110	TEE	6	STEEL	TDW	600/ 300				SPLIT TEE - 29% SMYS (600 SERIES)	2	2	BE.09.L2
CSU1176601	TEE	6	STEEL	TDW	600/ 300				SPHERICAL - THREE-WAY – SMYS (600 SERIES)	2	2	BE.09.L2
CSU2006120	TEE	8	STEEL	TDW	600/ 300				SPLIT TEE - 29% SMYS (600 SERIES)	2	2	BE.09.L3
CSU1176610	TEE	8	STEEL	TDW	600/ 300				SPHERICAL - THREE-WAY – SMYS (600 SERIES)	2	2	BE.09.L3
CSU2006130	TEE	12	STEEL	TDW	600/ 300				SPLIT TEE - 29% SMYS (600 SERIES)	2	2	BE.08.L1
CSU1176615	TEE	12	STEEL	TDW	600/ 300				SPHERICAL - THREE-WAY – SMYS (600 SERIES)	2	2	BE.09.L1
TDW Fittings - Stopples												
CSU2008379	STOPPLE	16	STEEL	TDW	600				Stopple – size on size	2	2	TDW
CSU1180014	Spherical 3WT	16	STEEL	TDW	600				Spherical 3WT - size on size with 16" outlet	2	3	TDW
	STOPPLE	20	STEEL	TDW	600				Stopple – size on size	4	4	TDW

Item	Item Type	NPS Size	Material Type	Manufacturer	ANSI Class	MOP (KPA)	Length (MM)	W.T. (MM)	Additional Description	Qty To Stock	Qty On Hand	Location
TDW Fittings – Stopples (continued)												
	STOPPLE	24	STEEL	TDW	600				Stopple – size on size	4	4	TDW
	STOPPLE	26	STEEL	TDW	600				Stopple – size on size	4	4	TDW
CSU2008600	STOPPLE	30	STEEL	TDW	600				Stopple – size on size	4	4	TDW
	STOPPLE	36	STEEL	TDW	600				Stopple – size on size	4	4	TDW
TDW Fittings - Completion Plugs												
CSU2010000	PLUG	4		TDW	150				COMPLETION PLUG	2	4	BE.08.L3
CSU2010005	PLUG	4		TDW	300				COMPLETION PLUG	2	2	BE.08.L3
CSU2010010	PLUG	6		TDW	150				COMPLETION PLUG	2	2	BE.08.L3
CSU2010015	PLUG	6		TDW	300				COMPLETION PLUG	2	2	BE.08.L3
CSU2010020	PLUG	8		TDW	150				COMPLETION PLUG	2	2	BE.08.L3
CSU2010025	PLUG	8		TDW	300				COMPLETION PLUG	2	2	BE.08.L3
CSU2010030	PLUG	12		TDW	150				COMPLETION PLUG	2	2	BE.08.L3
CSU2010035	PLUG	12		TDW	300				COMPLETION PLUG	2	2	BE.08.L3
Non-stock	Alcohol pots									3	3	BE.09.L5

3.21 References

3.21.1 Manuals

- Emergency Warehouse Process Manual
- Gas Control Manual, 2 Roles and Responsibilities
- Gas Control Manual, 7 Gas Quality
- GDS Spill Response Procedure

3.21.2 Forms

- Event / Near Miss Form
- Stock Request Form

3.21.3 Other

- ECA Team Site
- Environment Team Site
- GDS Horizontal Directional Drilling Contingency Plan Guide

Section 4 – Incident Recovery and Investigation

Table of Contents

4. Incident Recovery and Investigation

4.1 Recovery

4.1.1 Communication

Public Affairs and Communications provides the communication response service to the organization, which can include public, media, employee, and customer communications.

NOTE: *See* ***Section 3.16 - External Communication and Media Relations****.*

4.1.2 Cleanup

Post-incident recovery activities should be initiated as soon as practical under the direction of the EOC Director or Incident Commander. Depending on the incident, there may be circumstances where it is necessary to wait until the site is released by the appropriate agency. Recovery operations include:

- Inspections and investigations
- Repair of damaged structures
- Restoration of services such as power, heat, and communications
- Clearing of access routes
- Restoration of damaged units to production
- Remediation

4.1.3 Employee and Family Assistance

Employees affected by an incident may experience delayed or long-term reactions. The Employee and Family Assistance Program provided to Gas Distribution and Storage (GDS) employees by Homewood Health offers counselling.

- For first time appointments and counselling, employees should go to the Employee and Family Assistance Program (EFAP):

  Redacted. This sub-section contains contact information to be used in the case of emergency such as contact information and phone numbers. It is protected from publication under Clause 1(a) of Order MO-006-2016 because it discloses information about identifiable individuals.

  - On ELink
  - Online through Homewood Health - Employee & Family Assistance Programs, or
  - By phone.

- For immediate support, contact the Health Services Team.
- For questions, contact MyHR.

4.1.4 Business Continuity

The Business Continuity process ensures GDS continues to provide its critical business support services during an interruption and restores any affected services in a planned and organized manner.

The Business Continuity Plan (BCP) describes how functions perform integrated business continuity planning in coordination with other interdependent functions. The core plan outlines the strategic approach to continue operations during an event or disruption. This section may contain single or multiple functions based on the dependencies and how they are integrated into one another. The core plan is supplemented by individual process-level documents for each function included in the BCP.

In the event of the Business Continuity activation, the Emergency Level will be declared as Level 2 - Severe or Level 3 - Complex, requiring activation of the EOC and potentially the Incident Support Team (IST).

Upon activation of the EOC, the Emergency Management Advisor on call will contact the BCP owner to activate the specific plans, as required.

4.1.5 CGA Mutual Assistance Agreement

The purpose of the Canadian Gas Association (CGA) Mutual Assistance Agreement is to provide a ready mechanism for Canadian natural gas industry companies to assist each other during emergencies.

The assistance can include personnel support, equipment, and consumable supplies, or other services. The Agreement is available for assistance in all types of emergencies including those caused by natural disasters, equipment failures or wilful damage. The Agreement is intended to improve the timeliness and/or effectiveness of response to emergency events by clarifying the terms, conditions, and availability of mutual assistance in advance of potential emergencies.

The CGA Mutual Assistance Agreement and the Mutual Assistance Agreement with Energy Fundamentals Group (Rainy River, ON) are available by contacting Emergency Management. In addition, GDS is a participant of the American Gas Association (AGA) and Northeast Gas Association (NGA) Mutual Assistance Agreements.

4.2 Investigations

4.2.1 Litigation

The Legal Officer On-Call (Legal & Claims) is responsible for the overall administration of the Company’s operations litigation incident files.

Incidents which involve GDS and/or its employees or contractors may result in legal action. For any incident or event where the possibility of a claim will be made or there is the potential for regulatory action, the Legal Officer On-Call (Legal & Claims) must be notified and the complete files, reports and all information promptly forwarded.

The Legal Officer On-Call (Legal & Claims) will communicate with and forward reports and further information to the counsel.

All outside investigative reports are commissioned at the request of counsel to assist counsel in providing advice to the Company or in defence of the Company and will be forwarded directly to the Legal Officer On-Call (Legal & Claims).

The Legal Officer On-Call (Legal & Claims) will ensure the necessary follow-up for incidents are undertaken and completed to assist counsel in providing advice to the Company and for preparation of a defence. Liaison between the Company, its legal counsel investigators, the Manager, Emergency Management, and field operating personnel for operations-related incidents is the responsibility of the Legal Officer On-Call (Legal & Claims).

It is the Legal Officer On-Call's (Legal & Claims) or designee's responsibility to determine when extra investigative assistance is required. If such assistance is required, it is provided in consultation with the Legal Department, the Legal Officer On-Call (Legal & Claims) or the designee who will determine whether additional legal service or other specialized services are required.

4.2.2 Solicitor / Client Privilege

In certain instances, the investigation that is conducted following an incident may be required to be completed under solicitor/client privilege. If this is the case, it will be identified as such by the Legal Officer On-Call (Legal & Claims) through the Event / Near Miss process.

4.2.3 Event / Near Miss Process

All work-related incidents of which an employee becomes aware of must be reported to a People Leader, or in the case of a contractor, an Enbridge representative as soon as possible. People, Environmental, and Operational/Property incidents must be reported to Incident Investigations (via online submission) within 48 hours for review using the Event / Near Miss Form.

The electronic Event / Near Miss Form provides employees with a communication tool to report an event, condition, or an action, which resulted in (Incident) or had the potential to cause (Near Miss) a personal injury, occupational illness, property damage, motor vehicle incident, or business interruption. It also covers planned releases, Lifesaving Rules, or environmental condition.

The Event / Near Miss Form, once submitted online, is automatically sent electronically to Incident Investigations. Upon receipt of the form, the Emergency Management Manager and, where appropriate, the Legal Officer On-Call (Legal & Claims), will assess the needs and assign the appropriate investigative resources. This may include Company investigators or supervisors who possess specialized resources retained by our legal counsel and Company technical gas system skills.

The Incident Investigations Department has specialized training in the gathering of data required to complete a comprehensive Root Cause Analysis (within 30 days of an incident) using a tool called the Systematic Causal Analysis Tool (SCAT) that is built into Encompass software. The SCAT process quantifies the potential consequence, in addition to the actual consequences resulting from an incident / near miss.

All incidents are assigned a consequence severity rating for actual consequence, as well as potential consequence using a defined Enbridge Enterprise Matrix. This enables prioritizing of resources in accordance with risk, helps to set priorities for investigation resources/timing, and the level of urgency needed around timelines for implementing corrective actions and/or preventative measures.

An Incident Investigation Advisor will be assigned to work with the employees involved to gather details which enable them to complete a Prevention Barrier Analysis. This requires calls and meetings at all stages with the potential stakeholders.

The investigation identifies:

- Immediate Causes (substandard acts and or conditions)
- Basic Causes (personal or job factors)
- Control Areas for Improvement Actions (changes to management systems)

Approved corrective/preventative action recommendations from Incident Investigations will be assigned an owner and documented in Encompass during the process. The results from the incident investigation will be under an internal controlled circulation for the individuals assigned with action items (with the exception of learnings).

The results from an incident investigation are restricted, and only shared with key stakeholders (with the exception of learnings). Internal and external email communications concerning an investigation must also be controlled and restricted.

4.2.4 Gathering Incident Details

The purpose of gathering incident details is to assist counsel in the defence of the Company. All reported information must be factually comprehensive and include a chronology of events:

- When the incident occurred
- Where the incident occurred
- Who was involved
- What happened - what was seen, heard, or physically done
- What procedures were being used

4.2.5 Gathering and Preserving Evidence

Care must be exercised to ensure that all evidence is preserved in its original state. Where loss or damage to GDS property or loss of revenue has occurred, evidence cannot be disturbed until permission has been received from the government agencies involved.

If an incident is being investigated by an outside agency, no person shall interfere with or disturb any property, wreckage, article, or item at the scene or connected with the scene except in the interest of public safety, continuity of service or preservation of property until such time as an inspector has given permission to do so. Investigative agencies may include:

- Technical Standards & Safety Authority (TSSA)

- Ministry of Labour, Immigration, Training and Skills Development (MLITSD)
- Ministry of Environment, Conservation and Parks (MECP)
- Fire Marshall
- Police

Ensure the following when preserving evidence:

- **Do not withhold** evidence or factual information from the authorities.
- **Do not remove, alter, or disturb** physical evidence without authorization from the investigating authority.
- **Do not express personal opinions** to investigating authorities or to anyone other than the senior investigating company authority, and then only in circumstances where such conversation is completely confidential. Be particularly cautious when using cellular phones or radio communications.
- Record the following information on the appropriate Company forms:
  - Name and address of any witnesses
  - Name and authority requesting removal of evidence, date removed, time, location, and description of the object
  - Any tests carried out at the request of the investigating authority and note any changes or alteration to the physical evidence

4.2.6 Removal of Evidence

If removal of evidence is required, photograph the object in place before and after removal, and attach a tag and securely fasten it to the object that identifies the location of the incident. Notify the Legal Officer On-Call (Legal & Claims) with the pertinent details.

4.2.7 Tips on Sketching

- Sketch the scene as it was found upon your arrival.
- Ask and make note of anything that was moved prior to arrival.
- Note and map the positions of workers, witnesses, tools and equipment, machinery, and vehicles. The following tips are useful when drawing a sketch:
  - Place the important information in the centre of the sketch and draw the rest around it (do not be concerned about artistic perfection).
  - Take measurements and provide scale where appropriate.
  - Use direction arrows.
  - Attempt to draw each item relative to its location to other items as best you can.
  - Label items and individuals correctly.
  - Cross-reference the sketch with pictures that are taken or the sketches of witnesses (be sure to reconcile any differences).

4.2.8 Tips on Taking Photographs

The amount of evidence and relevant documentation will vary depending on the scope and nature of the incident. Photographs and sketches can prove to be invaluable for investigations. Both should be captured either during or immediately following the incident and provided to the Incident Investigator as soon as possible.

The following are useful techniques when taking photographs at incident scenes:

- Start by photographing the general area and then move to the specific scene of the incident.
- Take photos from the location and perspective of workers and witnesses.
- Include measurements and a reference scale where applicable.
- Create a photo log which includes when the photo was taken (date and time of day), by whom, location, lighting conditions, what the photo contains, and identifying the photo number on a sketch of the incident scene.
- Cross-reference the photos with the location of physical evidence and relevant notes.

Table 4-1: Photo and Sketch Requirements

Type	Photo Requirements	Sketch Requirements
Customer Premises	**For photos of the incident (take in progress, if possible):** • Exterior - all sides, proximity to adjacent buildings • Appliances, equipment (whether involved or not) • Other possible sources of ignition - tanks, and debris, etc. • Detailed photos of damage	• Layout of premises • Location of equipment and appliances • Layout of internal piping • Location of mains, services, and meter • Bar hole survey points
Hit Line: **Mains, Services, Stations**	• Close-up photos of damage in place with reference scale (e.g., tape measure) • Field locates in area of hit (if applicable) • Proximity to buildings, traveled portions of road allowance • Equipment causing damage (in place where possible)	• Location of mains, services, valves, and meter (do not include position of valves) • Bar hole survey points • Proximity to buildings, traveled portion of road allowance • Topographical features, as well as wind and weather conditions
Employee Injury, Vehicle Accidents	• All contributing factors, road conditions, visual inhibitors, weather conditions, lighting, and other work conditions, etc. • Detailed photos of damage, both company and private property	• Accident scene sketches, position of vehicles, skid marks, obstacles • Include time of day, weather conditions, contributing factors, details, and estimates of damage, investigating officers and details of all parties involved

4.3 References

- Employee and Family Assistance Program on ELink
- Event / Near Miss Form
- Homewood Health – Employee & Family Assistance Programs

Section 5 – Notification and Contact Information – Internal

Redacted. This section contains internal contact information to be used in the case of an emergency such as employee names, contact information, phone numbers and Emergency Operations Centre locations. It is protected from publication under Clause 1(a) of Order MO-006-2016 because it discloses information about identifiable individuals and there is a real and substantial risk that its disclosure could impair the security of GDS's pipeline system, buildings, or structures.

Section 6 – Notification and Contact Information – External

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6. Notification and Contact Information – External

6.1 Requirement to Notify External Agencies

External agencies having legislation and regulations affecting emergency preparedness, response or recovery require notification for specific incident types. The following section outlines the external agency notifications required for various incident types. Copies of relevant legislation and regulations are on file with the Legal Department.

6.1.1 Spills Action Centre

The Spills Action Centre (SAC) must be contacted as soon as time allows during the early stages of a spill. For SAC contact information, see Error! Reference source not found..

NOTE: *Use 60 minutes from the onset of the incident as a guideline.*

The SAC line enables notification to the Technical Standards & Safety Authority (TSSA) and the Ministry of the Environment, Conservation and Parks (MECP). Spills of solids, liquids and/or gases (including natural gas) must be reported to the SAC when an adverse effect occurs or has the potential to occur.

NOTE: *For additional detail, refer to the GDS Spill Response Procedure.*

6.1.2 Technical Standards & Safety Authority

Reporting incidents involving hydrocarbon fuels or their utilization equipment to TSSA is done through the SAC. The SAC can be reached 24 hours a day, 7 days per week. Reporting an incident to SAC meets the regulatory requirement of reporting to TSSA.

The Regulations further require that no person shall interfere with or disturb any wreckage, article, or thing at the scene of an occurrence that is connected with it (except in the interest of public safety) until such time as an inspector has given permission to do so. If there is an immediate need to disturb any article at an incident site, advise the SAC Operator that contact with the TSSA Fuels Safety Program On-Call is required.

Contact the SAC regarding an incident involving natural gas according to **Table 6-1**.

Table 6-1: TSSA Notification Criteria

Type	Description
Carbon Monoxide *A report of a CO detector is not sufficient reason to report a CO incident, and reporting is only required where a hydrocarbon fuel appliance may have been involved.*	Where exposure has occurred due to a malfunction by a hydrocarbon fuel appliance under the following conditions: • Work was performed on the equipment in the past six months by a service provider, • Equipment failure in a rental occupancy where someone other than the occupant has responsibility for the maintenance of the equipment, • An abnormal condition, which may represent a product defect or installation-related error found during investigation of a possible CO exposure, • CO-related injury has occurred as a result of problems with the equipment. ***NOTE:*** *First responders will often send people to the hospital as a precaution. For an incident to be reportable, first confirm with the responder that there are symptoms of CO exposure.*
Damages	• All pipeline damages resulting in a natural gas release. This includes: • Plant damages to gas mains • Plant damages to services with or without an excess flow valve (EFV) installed • Damages to first stage cuts or meter sets (risers, regulators or meters) • Damages to stations
Evacuations	Any evacuation of a house, a school, a care centre, a public building or any large complex.
Fires or Explosions	Where: • Natural gas is suspected as the cause. • Natural gas or a gas appliance is directly involved in the fire or explosion. • The resulting fire has caused leakage at the meter set or piping. • An injury or fatality occurs as a result of the fire or explosion.
Iced-Over Regulator	Resulting in an overpressure of the house piping by more than 2 psi.
Injuries	A pipeline incident resulting in a critical injury.
Media	Any media coverage or potential coverage of a pipeline or natural gas-related incident.

6.1.3 Canada Energy Regulator / Transportation Safety Board

Where an event meets any of the definitions, companies are required to notify the **Transportation Safety Board (TSB) Reporting Hotline** at **819-997-7887**. Subsequently, the Company is required to input the details required by both the TSB (go to TSB Regulations) and the Canada Energy Regulator (CER) Online Event Reporting System (OERS) at: https://apps.cer-rec.gc.ca/ers

The phone notification and the input of information into OERS are **required to occur as soon as possible and no later than three hours of the incident** being discovered. The goal of the initial phone notification is to allow the relevant agencies to mobilize a response to an incident, if required.

NOTE: *OERS will automatically determine whether the event meets the definition of an "Incident that Harms People or the Environment"; however, the Company will be responsible for specifically indicating whether the incident meets the definitions of "rupture" and "toxic plume."*

For all other events that do not meet any of the definitions in this section, companies are not required to phone the TSB Reporting Hotline but must report the event as soon as possible and no later than 24 hours after the event was discovered.

The Operations/STO Manager is accountable to ensure notifications are completed. Distribution Protection, the Transmission Integrity Management Program (TIMP) Engineer and the Pipeline Engineer will provide immediate and ongoing support to the Operations/STO Manager with respect to the OERS filing. The Company's initial notification satisfies the Preliminary Incident Report (PIR) requirements. A final Detailed Incident Report (DIR) must be submitted within 12 weeks of reporting an incident.

Refer to the GDS CER Reporting for Damages Process.

6.1.3.1 CER (OPR) Definition of an Incident

From the CER Onshore Pipeline Regulations (OPR), an "incident" means an occurrence that results in:

- the death of or serious injury to a person;
- a significant adverse effect on the environment;
- an unintended fire or explosion;
- an unintended or uncontained release of low vapour pressure (LVP) hydrocarbons in excess of 1.5 m^3;
- an unintended or uncontrolled release of gas or high vapour pressure (HVP) hydrocarbons;
- the operation of a pipeline beyond its design limits as determined under CSA Z662 or CSA Z276 or any operating limits imposed by the Regulator.

NOTE: *The OPR definition includes the operation for any amount of time of a pipeline beyond the criteria for which the pipeline was designed and/or the operation of the pipeline beyond criteria imposed by the CER to mitigate a condition on the pipeline. GDS TIMP and Pipeline Engineering must be*

contacted to support the Region, ICP, or EOC based on Section 52 of the OPR.

6.1.3.2 CER Immediately Reportable Events

The CER further defines “immediately reportable events” as the occurrence of one or more of the following:

- an Incident that harms people or the environment:
- a death;
- a serious Injury (as defined in the Onshore Pipeline Regulations or the Transportation Safety Board Regulations);
- an unintended or uncontrolled LVP hydrocarbon release in excess of 1.5 m^3 that leaves company property or occurs on or off the right-of-way;
- an unintended or uncontrolled sweet natural gas or HVP release > 30,000 m^3;
- any unintended or uncontrolled release of sour natural gas or hydrogen sulfide;
- a significant adverse effect on the environment;
- a rupture:
  - An instantaneous release that immediately impacts the operation of a pipeline segment such that the pressure of the segment cannot be maintained.
- a toxic plume:
  - a band of service fluid or other contaminant (e.g., hydrogen sulfide or smoke) resulting from an incident that causes people, including employees, to take protective measures (e.g., muster, shelter in place, or evacuation).

6.1.3.3 Reporting Multiple Incident Types to CER

It is possible that a single occurrence may result in multiple incident types. If multiple incident types occur as a result of a single occurrence, the following incident types are to be reported under a single incident report.

- A pipeline rupture (occurrence) where there is a release of gas (incident type) and an explosion (incident type);
- An incident (occurrence) that causes a death (incident type), a serious injury (incident type) and a fire (incident type);
- An operational malfunction (occurrence) that causes an overpressure (incident type) and a release of product (incident type); or
- An operational malfunction (occurrence) that causes several concurrent or immediately consecutive overpressures (incident types).

In cases where an incident has occurred and a second incident occurs during the response to the initial incident (e.g., fire occurs during the cleanup of a spill), the second incident is considered distinct and should be reported separately.

NOTE: *The CER Guidelines describe how to calculate the rate of release and volumes. GDS TIMP and Pipeline Engineering will complete these calculations to support the ICP and EOC.*

6.1.3.4 Role of Canada Energy Regulator

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. Anytime 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 be taken to protect employees, the public and the environment.

The CER will verify that the regulated company conducts adequate and appropriate cleanup and remediation of any environmental effects caused by the incident, and/or as the lead regulatory agency will:

- Monitor, observe and assess 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
- Investigate the event, either in cooperation with the Transportation Safety Board (TSB) of Canada, under the *Canada Labour Code*, or as per the *Canadian Energy Regulator Act* or *Canada Oil and Gas Operations Act* (whichever is applicable).
- Inspect the pipeline or facility.
- Examine the integrity of the pipeline or facility.
- Require appropriate repair methods are being used.
- Require appropriate environmental remediation of contaminated areas is conducted.
- Coordinate stakeholder and Indigenous community feedback regarding environmental cleanup and remediation.
- Confirm that a company is following its Emergency Procedures Manuals' commitments, plans, procedures, and CER regulations and identifies noncompliances.
- Initiate enforcement actions as required.
- Approve the restart of the pipeline.

6.1.3.5 Role of Transportation Safety Board

The TSB of Canada's 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.
- Reporting publicly on investigations and on the findings in relation thereto.

6.1.4 Ministry of Energy

In the event that a natural gas supply emergency causes actual or potential loss which significantly impacts Ontario's energy systems and its economy, the provincial or federal government may need to be involved. The decision to contact the Ministry of Energy (ENERGY) will be made by the IST Crisis Leader, and contact will be made by the Public Affairs Director or delegate.

All emergency notifications are to be made to: EnergyNaturalGasNotifications@ontario.ca Notifications to this email address will be directed to the Minister's staff, Deputy Minister, Assistant Deputy Minister, Senior Managers, Communications Staff and Emergency Management Unit Staff.

The ENERGY is to be notified of a major gas supply outage when:

- There are substantial negative impacts on the health, safety, welfare and property of Ontario (e.g., during cold winter weather).
- A major portion of the entire natural gas distribution system is down.
- There is, or a potential exists for, a severe long-term natural gas supply outage.
- The emergency is expected to be sustained for a period of time.

The Ministry's notification hierarchy is as follows:

Table 6-2: Ministry of Energy Notification Criteria

	Level of Supply Interruption	Ministry Notification
1	**Local** Gas Supply Interruption	• At the discretion of the Director, External Affairs
2	**Medium** Scale Gas Supply Interruption	• Notification of the Ministry should occur, who would then alert Emergency Management Ontario (EMO) accordingly. • Such emergencies may require a coordinated response from others in the sector. • Exploration of options in averting an emergency situation may be considered.

	Level of Supply Interruption	Ministry Notification
3	**Major** Gas Supply Interruption	• The Ministry must be notified and supplied with adequate information for appropriate decision-making by the Ministry in conjunction with EMO / Provincial Emergency Operations Centre (PEOC). • Occurs when the magnitude, duration, and frequency of the gas supply interruption could result in widespread health and safety concerns.

The following information will be requested by the ENERGY upon notification of a potential or actual energy supply interruption:

- What is the cause of the impending or actual energy supply interruption?
- What is the location of the gas supply interruption (which municipality and market participant are affected)?
- How many customers are affected?
- What is the restoration timetable?
- Is there potential for the incident to become a major energy supply shortage emergency?
- Has the Emergency Operations Centre (EOC) of the affected energy stakeholders been placed on standby or activated?
- Is there a communication plan with customers and media?
- Who will be the designated communications spokesperson?
- Is provincial assistance required/anticipated?
- Who is the primary contact and what is their phone number?

6.1.5 Ministry of Natural Resources and Forestry

Notify the Ministry of Natural Resources and Forestry (MNRF) any time there is an uncontrolled release of product or waste from a wellhead.

6.1.6 Ministry of Labour, Immigration, Training and Skills Development (Ontario)

For a critical injury or death, the Region / STO Director (or delegate) will contact Health & Safety. Health & Safety will contact the Ministry of Labour, Immigration, Training and Skills Development (MLITSD) immediately, and provide a detailed report within 48 hours.

6.1.7 Municipal / Government Officials

In the event of a significant incident, local municipal representatives and government officials may be contacted by the EOC Director to demonstrate that GDS is concerned for the safety of the public. Spills of solids, liquids and/or gases (including natural gas) must

be reported to the local and/or regional municipality when an adverse effect occurs or has the potential to occur.

6.1.8 Environment and Climate Change Canada

Environment and Climate Change Canada (ECCC) must be notified of incidents that meet certain criteria. Notification requirements are outlined in the GDS Spill Response Procedure (refer to Table 8.1: External Notification Requirements – Verbal Reports and Table 8.2: External Notification Requirements – Written Reports).

This may include but is not limited to:

- the release of a toxic substance, the likelihood of such a release,
- the occurrence of an environmental emergency, and/or
- the deposit of a deleterious substance into waters frequented by fish.

NOTE: *Additional details on the written report requirements can be found in the GDS Environmental Emergency Reporting - Environmental Advisor procedure.*

6.2 Other Agencies

Other external agencies having legislation and regulations affecting emergency preparedness, response, or recovery in GDS operations are listed below:

- Ontario Energy Board (OEB)
- Local authorities
- Ministry of the Environment, Conservation and Parks (MECP)
- Canadian Standards Authority (CSA)
- Canadian Gas Association (CGA)
- Agencies identified in the GDS Spill Response Procedure

6.3 Public Notification

The automated public notification process provides a notice to customers affected by distribution emergencies.

This process provides an early notification of multiple service disruptions to customers affected by distribution emergencies such as main breaks or flooded mains, etc., and in turn, reduces the number of customer inquiries made to the contact/call centres.

6.3.1 Incoming Voice Response and Predictive Dialer / Disruption Notification

The Incoming Voice Response and the Predictive Dialer / Disruption Notification systems are available to proactively notify customers of an incident that has a community impact.

Standard scripts or specific messages are developed to notify the affected community. The use of these communication tools and the scripting will be decided based on the scale of the event. If an EOC is activated, based on the complexity of the event, the EOC Director or Operations Manager will decide on the use of the communication tools and will adjust the scripting as needed in consultation with the Public Information Officer.

The predictive dialer is generally used in circumstances where 25 or more customers have lost service. The Emergency On-Call Planner or Drafter-Estimator determines the affected customers and initiates the report using the Customer Listing Tool or the Emergency Services Address Listing (ESAL). Dispatch Supervisor/On-Call manages the notification process and a summary of the notification call results is available to the EOC Director or Operations Manager or Incident Commander if requested.

6.4 External Contact Information

Redacted. This sub-section contains emergency services contact numbers. It is protected from publication under Clause 1(a) of Order MO-006-2016 because there is a real and substantial risk that its disclosure could impair the security of GDS's pipeline system, buildings or structures.

6.5 References

- Canada Energy Regulator Online Event Reporting System
- Environment and Climate Change Canada's (ECCC's) Single Window Information Management (SWIM) System
- GDS CER Reporting for Damages Process
- GDS Environmental Emergency Reporting – Environmental Advisor
- GDS Spill Response Procedure
- Transportation Safety Board Regulations

Section 7 – Security

Redacted. This section contains the Enbridge Operation Security Response Plan. It is protected from publication under Clause 1(a) of Order MO-006-2016 because there is a real and substantial risk that its disclosure could impair the security of GDS's pipeline system, buildings or structures.

Section 8 - Affiliates and Operating Agreements

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8. Affiliates and Operating Agreements

8.1 Statement of Application

Gas Distribution and Storage (GDS) provides emergency operations and maintenance services to the Canadian pipeline portions of the following entities:

- St Clair Pipelines L.P. (Affiliate)
- Market Hub Partners Canada L.P.
  - St. Clair Pool (Affiliate)
  - Corey Pool (Affiliate)
- Sarnia Airport Storage Pool L.P. (Affiliate)
- Niagara Gas Transmission Limited and 2193914 Canada Limited Pipeline (Affiliate)
- Vector Pipeline (Operating Agreement)
- Power-to-Gas (PtG) Facility (Affiliate)

8.2 Emergency Response

The Gas Distribution and Storage Emergency Response Plan will be applied in accordance with the service agreements.

8.3 St. Clair Pipelines L.P.

8.3.1 Contact Information

Redacted. This sub-section contains the names and titles of GDS employees responsible for this affiliate organization. It is protected from publication under Clause 1(a) of Order MO-006-2016 because it discloses information about identifiable individuals.

8.3.2 Facilities

St. Clair Pipelines L.P., is the owner of Bluewater Pipeline System and St. Clair River Crossing.

8.3.3 Notification

The Business Development Manager will be notified of any incident regarding St. Clair Pipelines L.P., that escalates to a Level 1 (Limited), Level 2 (Severe), or Level 3 (Complex) Emergency level.

8.3.4 Response Organization

The Business Development Manager will be available to support the Emergency Operations Centre (EOC) as required. Where the Incident Support Team (IST) is activated, President, St. Clair Pipelines Management Inc., will be included.

8.3.5 Roles and Responsibilities

- The GDS Emergency Response team is responsible for contacting all appropriate regulatory agencies on behalf of St. Clair Pipelines L.P., during an emergency.
- Manager, Business Development is responsible for participating in the EOC during an emergency.
- President, St. Clair Pipelines Management Inc., is responsible for communicating with the Incident Support Team Crisis Leader during an emergency.
- St. Clair Pipelines L.P., will participate in post-incident investigations as required.

8.4 Market Hub Partners Canada L.P.

8.4.1 Contact Information

Redacted. This sub-section contains the names and titles of GDS employees responsible for this affiliate organization. It is protected from publication under Clause 1(a) of Order MO-006-2016 because it discloses information about identifiable individuals.

8.4.2 Facilities

Market Hub Partners Canada L.P., includes wholly-owned facilities and facilities owned through interests in partnerships. Market Hub Partners Canada L.P., is the owner of St. Clair Pool and the Corey Pool.

8.4.3 Notification

Manager, Business Development will be notified of any incident regarding St. Clair Pool or Corey Pool facilities that escalates to a Level 1 (Limited), Level 2 (Severe), or Level 3 (Complex) Emergency level.

8.4.4 Response Organization

Manager, Business Development will be available to support the EOC as required. Where the Incident Support Team is activated, President, Market Hub Partners Management Inc., will be included.

8.4.5 Roles and Responsibilities

- The GDS Emergency Response team is responsible for contacting all appropriate regulatory agencies on behalf of St. Clair Pool and Corey Pool during an emergency.
- Manager, Business Development is responsible for participating in the EOC during an emergency.
- President, Market Hub Partners Management Inc., is responsible for communicating with the Incident Support Team Crisis Leader during an emergency.
- Market Hub representatives will participate in post-incident investigations as required.

8.5 Sarnia Airport Storage Pool L.P.

8.5.1 Contact Information

Redacted. This sub-section contains the names and titles of GDS employees responsible for this affiliate organization. It is protected from publication under Clause 1(a) of Order MO-006-2016 because it discloses information about identifiable individuals.

8.5.2 Facilities

Sarnia Airport Storage Pool L.P., is a partnership between Market Hub Partners Management Inc., and Alta Gas Limited. Market Hub Partners Canada L.P., owns an interest in Sarnia Airport Pool (Sarnia Airport Storage Pool L.P.).

8.5.3 Notification

Manager, Business Development will be notified of any incident regarding Sarnia Airport Storage Pool L.P., facilities that escalates to a Level 1 (Limited), Level 2 (Severe), or Level 3 (Complex) Emergency level.

8.5.4 Response Organization

Manager, Business Development will be available to support the EOC as required. Where the Incident Support Team is activated, the President, Sarnia Airport Storage Pool Management Inc., will be included.

8.5.5 Roles and Responsibilities

- The GDS Emergency Response team is responsible for contacting all appropriate regulatory agencies on behalf of Sarnia Airport Storage Pool L.P., during an emergency.
- Manager, Business Development is responsible for participating in the EOC during emergency situations.
- President, Sarnia Airport Storage Pool Management Inc., is responsible for communicating with the Incident Support Team Crisis Leader during an emergency.
- Sarnia Airport Storage Pool L.P., will participate in post-incident investigations as required.

8.6 Niagara Gas Transmission Limited and 2193914 Canada Limited

8.6.1 Contact Information

Redacted. This sub-section contains the names and titles of GDS employees responsible for this affiliate organization. It is protected from publication under Clause 1(a) of Order MO-006-2016 because it discloses information about identifiable individuals.

8.6.2 Facilities

Niagara Gas Transmission Limited (NGTL) and 2193914 Canada Limited, are wholly owned subsidiaries of Enbridge Inc.

8.6.3 Notification

Manager, Business Development will be notified of any incident regarding NGTL or 2193914 Canada Limited facilities that escalates to a Level 1 (Limited), Level 2 (Severe), or Level 3 (Complex) Emergency level.

8.6.4 Response Organization

Manager, Business Development will be available to support the EOC as required. Where the Incident Support Team is activated, the President, NGTL and 2193914 will be included.

8.6.5 Roles and Responsibilities

- The GDS Emergency Response team is responsible for contacting all appropriate regulatory agencies on behalf of NGTL and 2193914 Canada Limited during an emergency situation.
- Manager, Business Development is responsible for participating in the EOC during an emergency. If unavailable, Supervisor, Pipeline Engineering is responsible for participating.
- President, NGTL and 2193914 Canada Limited is responsible for communicating with the Incident Support Team Crisis Leader during an emergency situation.
- NGTL and 2193914 Canada Limited will participate in post-incident investigations, as required.

8.7 Vector Pipeline L.P. (Canadian Partnership)

8.7.1 Contact Information

Redacted. This sub-section contains the names and titles of Vector employees responsible for the operations of this organization. It is protected from publication under Clause 1(a) of Order MO-006-2016 because it discloses information about identifiable individuals.

8.7.2 Facilities

Vector Pipeline L.P., is the owner of Vector Pipeline, Canadian Portion.

8.7.3 Notification

Manager, Operations/Engineering, Vector Pipeline will be notified of any incident regarding Vector Pipeline L.P. (Canadian Partnership), facilities that escalates to a Level 1 (Limited), Level 2 (Severe), or Level 3 (Complex) Emergency level.

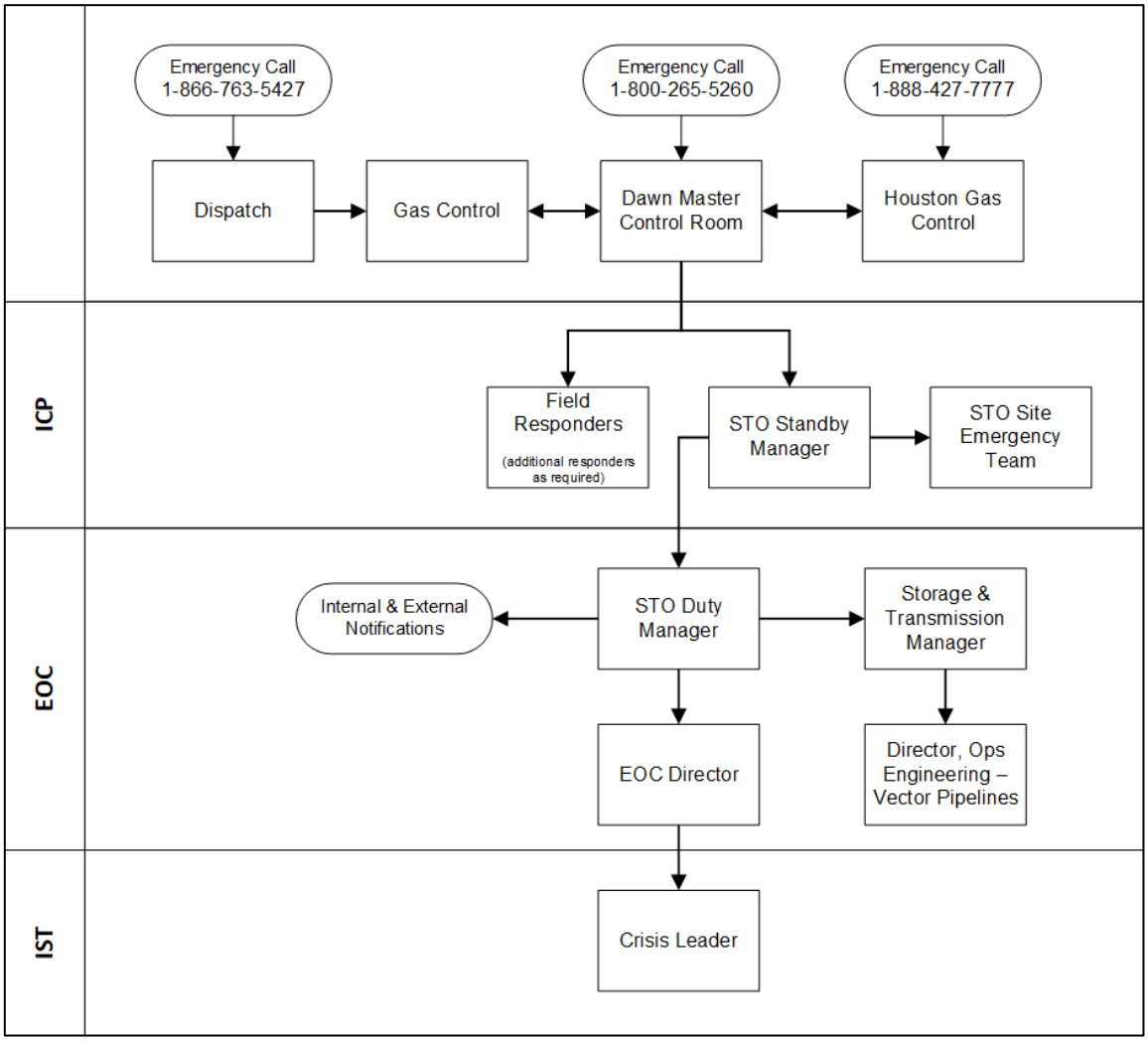
8.7.4 Response Organization

Where the GDS IST is required during a major Vector Pipeline L.P. (Canadian Partnership), emergency situation, President, Vector Pipeline will be included. Manager, Operations/Engineering, Vector Pipeline will be available to the Dawn Master Control Room as required.

8.7.5 Roles and Responsibilities

- The GDS Emergency Response team is responsible for contacting all Canadian regulatory agencies on behalf of Vector Pipeline L.P. (Canadian Partnership), during an emergency situation.
- Manager, Operations/Engineering, Vector Pipeline is responsible for participating in the EOC during emergency situations.
- EOC Director is responsible for communicating with the Crisis Leaders, Incident Support Team during an emergency situation.
- Vector Pipeline L.P. (Canadian Partnership), will participate in post-incident investigation as required.

Figure 8-1: Vector Pipeline L.P. (Canadian Partnership) Emergency Notification



8.8 References

Not applicable.

Section 9 – Region Specific

Redacted. This section contains specific emergency plan information such as the location of facility, plant, and emergency services contact information. It is protected from publication under Clause 1(a) of Order MO-006-2016 because there is a real and substantial risk that its disclosure could impair the security of GDS's pipeline system, buildings, or structures.

Section 10 – Storage & Transmission Operations

Redacted. This section contains specific emergency plans containing such information as emergency assembly areas, emergency coordinator responsibilities, and emergency services contact numbers. It is protected from publication under Clause 1(a) of Order MO-006-2016 because there is a real and substantial risk that its disclosure could impair the security of GDS's pipeline system, buildings, or structures.

Section 11 – Glossary

11. Glossary

11.1 Terms and Definitions

Term	Definition
Alarms	Warning system put in place to notify people that an emergency has occurred or is about to occur. Can be used to mobilize Emergency Response Organization plus warn people of danger so that they can take steps to protect their own safety.
Allocated Downstream Capacity	During a curtailment, Gas Distribution and Storage (GDS) must share the remaining capacity with its ex-franchise customers supplied from this system. This allotment is based on GDS peak day demand compared to the total customer contract demand.
Briefings	Means used to pass information to selected groups. Can be used to address members of the Incident Command System organization, the media, government and the public. Used to facilitate decision-making within the Incident Command System.
Business Continuity Plan	The objective of the Business Continuity Plan is to reduce the impact of a disaster or significant event on the Company by providing a framework for restoring critical or essential business operations within a required time frame and then maintaining them until normal operations are reinstituted.
Crisis	An event involving Gas Distribution and Storage facilities, products, services, policies, activities or employees that has the potential to threaten or affect the way the enterprise does business. Crises may impact operations, employees or the communities in which GDS operates.
Crisis Leader	A member of the Incident Support Team (Senior Vice-President, Operations) designated to oversee and coordinate the activities of the Company during an IST activation.
Crisis Management	A proactive operating philosophy that ensures that capabilities exist to mitigate, prepare for, respond to, and recover from a circumstance, event, or series of episodes that threaten to fundamentally affect or alter the way the organization conducts its business. It is broader in scope than emergency management and includes consideration of impacts on brand and image, legal liabilities and other business consequences.
Crisis Management Team	A team comprised of senior level personnel who provide support and oversight for the handling, containment, and resolution of an emergency or significant business disruption through planned and coordinated steps.
Critical Incident Stress	Psychological and/or physical effects experienced by people who are involved in a crisis.

Term	Definition
Critical Injury *(as defined in the Occupational Health and Safety Act)*	An injury of a serious nature that: a. places life in jeopardy, b. produces unconsciousness, c. results in substantial blood loss, d. involves the fracture of a leg or arm, but not a finger or toe, e. involves the amputation of a leg, arm, hand or foot but not a finger or toe f. consists of burns to a major portion of the body, or g. causes the loss of sight in an eye.
Curtailment	An unplanned suspension of gas deliveries caused by a physical failure or a high risk of failure on Gas Distribution and Storage (GDS) system OR non-delivery of gas by a GDS supplier into the system.
Customer Emergency Plan	A customer's own plan by which a contract customer reduces its use of natural gas during a gas supply curtailment.
Dead Premises	A premises on record within a defined emergency area, where no one has responded to a knock on the door or to repeated phone calls.
Declaring a Force Majeure	In compliance with the terms of the contract between Gas Distribution and Storage (GDS) and its customers, GDS must advise the customer that a force majeure condition exists. Responsibility for making this declaration rests with the executive of GDS.
Delegate, Emergency Management	Individual designated by management to act on their behalf in their absence during an emergency.
Dwelling Unit	A housekeeping unit used or intended to be used as a domicile by one or more persons, and usually containing cooking, eating, living, sleeping and sanitary facilities.
Eastern Canada Mutual Assistance Plan (ECMAP)	The plan developed by the Local Distribution Centres with participation by TC Energy (formerly known as TransCanada Pipelines) where emergency supplies of gas are made available to each other.
Emergencies	Incidents that threaten human life, health, property and/or the environment, if not controlled, contained, or eliminated promptly. Usually localized in scope and fast-moving, most emergency situations are addressed by facility plans and supplemented with business unit support, as needed.
Emergency Operations	Actions taken to bring an emergency to an end. Descriptions of these actions are contained in the Emergency Response Plan. The goal of Emergency Operations is to protect the safety of the community and the Company personnel as well as to minimize any damage caused by an emergency.
Emergency Operations Centre (EOC)	Facilities located in Regions, Storage and Transmission Operations, or Corporate Offices from which operating instructions are issued to the field staff and where the emergency is monitored. Senior management employees from the Operations Administration, Gas Control Departments, Public Affairs and other groups relevant to the emergency staff the centre continuously during the emergency period.

Term	Definition
Emergency Repair	An emergency repair is any repair that limits or stops the escape of gas, or that reduces the degree of hazard. Use emergency repairs only as a stopgap measure until additional help or equipment arrives, then make a temporary or permanent repair. ***NOTE:*** *Do not leave an emergency repair unattended, under any circumstance.*
Exercise	Examination of potential emergency situations for the purpose of evaluating the Emergency Response Plan and procedures.
External Organization/ Agency	A group who would have special knowledge or skills to assist in a specific area during an emergency. Not directly involved in Emergency Response.
Force Majeure	An unforeseen circumstance beyond the control of Gas Distribution and Storage that will ultimately excuse it from its contractual obligation to supply gas to its customers.
Hazard	A condition that exists which represents the potential to create danger.
Hazard Analysis	Subjective evaluation of factors that will create risk to Gas Distribution and Storage.
Hazardous Materials (Haz-Mat)	Products and materials that can cause injury or death if they come in contact with a living organism. Usually chemical in nature, they can harm people, animals or vegetation. Harm is caused by means of direct contact, inhalation or ingestion.
Impaired Deliveries	This clause appears in the same contracts as the Priority of Service clause and requires that Gas Distribution and Storage notify the customer if its ability to deliver the contracted demand is impaired. The buyer is entitled under the prior year's contracts to their share of the available gas supply. The current clause only requires GDS to notify the buyer of the impairment.
Incident	An event, series of events, or set of circumstances that impacts operations and requires a prompt, coordinated response beyond normal business processes.
Incident *(in accordance with the Onshore Pipeline Regulations)*	The occurrence of one or more of the following: a. the death of or serious injury to a person; b. a significant adverse effect on the environment; c. an unintended fire or explosion; d. an unintended or uncontained release of LVP hydrocarbons in excess of 1.5 m^3; e. an unintended or uncontained release of gas or HVP hydrocarbons; f. the operation of a pipeline beyond its design limits as determined under CSA Z662 or CSA Z276 or any operating limits imposed by the Board.

Term	Definition
Incident *(further defined by the Canada Energy Regulator [CER])*	Immediately reportable events as the occurrence of one or more of the following: • An Incident that harms people or the environment: • a death • a serious Injury (as defined in the Onshore Pipeline Regulations or the Transportation Safety Board Regulations) • an unintended or uncontrolled low vapour pressure (LVP) hydrocarbon release in excess of 1.5 m^3 that leaves company property or occurs on or off the right of way • an unintended or uncontrolled sweet natural gas or high vapour pressure (HVP) release in excess of 30,000 m^3 • any unintended or uncontrolled release of sour natural gas or hydrogen sulfide • a significant adverse effect on the environment • A rupture: • an instantaneous release that immediately impacts the operation of a pipeline segment such that the pressure of the segment cannot be maintained • A toxic plume: • a band of service fluid or other contaminant (e.g., hydrogen sulfide or smoke) resulting from an incident that causes people, including employees, to take protective measures (e.g., muster, shelter in place, or evacuation)
Incident Command Post (ICP)	The location of the onsite incident tactical response.
Incident Command System (ICS)	The ICS describes the emergency response organization for Gas Distribution and Storage. The three levels of the ICS include the Incident Command Post (ICP), the Emergency Operations Centre (EOC) and the Incident Support Team (IST). Specialized functions (Emergency Management, Legal, and Human Resource, etc.) are part of ICS and provide support to the EOC throughout the franchise.
Incident Support Team (IST)	The Senior Leadership Team who provides strategic leadership and policy guidance to the Emergency Operations Centre. This includes response to a force majeure, coordinating resources to restore service and communications for public response.
Level 1 – Limited Emergency	Incidents led by the Operations / STO Manager (Manager on Call). Incidents where the Field Supervisor requires additional tactical and strategic support. Duration of incident is one operational period.
Level 2 – Severe Emergency	Incidents led by the Region / STO Director. Incidents where the Incident Command Post requires elevated strategic support beyond the Operations / STO Manager. Duration of incident is more than one operational period.
Litigation	Legal action taken by a person or group of persons against Gas Distribution and Storage. Action may be for personal injury, loss of livelihood or damage to the environment.

Term	Definition
Load-Shed Procedure	A Company procedure implemented during a curtailment to balance demand with supply.
Local Authorities	Government agencies that have responsibility over the area in which Gas Distribution and Storage operates.
Major Customer	A customer that would attract the attention of Gas Distribution and Storage Senior Management in the event of an outage.
Make Safe	Upon arrival at an emergency situation, the trained responder is to evaluate the scene, identify and mitigate visible hazards where possible, evacuate the scene as required, report back as needed to provide an update of the situation and advise if additional resources (people/tools/material) are required. After the scene has been made safe, repairs may be started.
Master Control Room (MCR)	Master Control Room located at the Dawn and Tecumseh Operations Centres.
Minimum Required Demand	The daily rate required by large industrial customers during a curtailment to maintain a safe and viable operation.
Mitigation	To make an emergency less intense, serious or severe.
Mobilization	Transition from normal operations to emergency response. All resources needed to cope with the emergency situation are called out in this way.
Municipal Emergency Services	Fire, police and health agencies that provide protection to the community on an ongoing, daily basis supplemented by the Public Works Departments of the regional municipalities.
Nominated Volumes	Daily volumes required by Gas Distribution and Storage ex-franchise customers which are delivered by GDS the following day through the Trafalgar system.
Nonessential Firm Market	The segment of the Gas Distribution and Storage firm market that can be curtailed during a major gas supply emergency.
Peak Design Day	The maximum demand that a system is designed to deliver on the coldest winter day of –26 degrees Celsius.

Term	Definition
Pipeline Designation	Pipelines receive one of the following six designations based on which criteria they meet. **distribution:** A pipeline in a gas distribution system that conveys gas to individual service lines or other distribution lines. **gathering:** A pipeline that conveys gas from a wellhead assembly to a treatment plant, transmission line, distribution line, or service line. **service:** A utility-owned or maintained pipeline that conveys gas from a gathering line, transmission line, distribution line, or one other service line to the customer. **transmission:** A pipeline system that conveys gas from a gathering line, treatment plant, storage facility, or field collection point in a gas field or another transmission line, with no pressure regulation or odourization and conveys it to a distribution line, service line, storage facility, or another transmission line, or a pipeline with an MOP resulting in hoop stress levels greater than or equal to 30% SMYS of the pipe. **Transmission Integrity Management Program (TIMP):** Pipelines in scope of the GDS Transmission Integrity Management Program. In consideration of the high stress operating conditions and failure modes applicable to these pipelines, stringent design, operating, and maintenance requirements apply. **vital:** A subset of pipelines that are critical to the safe and reliable operation of the natural gas system. Damages to vital mains could result in significant negative impact to public and worker safety or significant customer outages.
Preparedness	A state of readiness for emergencies Gas Distribution and Storage maintains. Provides the capability to deal with emergencies when they arise.
Primary Responder	The responsibilities of this responder are to assess the situation, perform any initial duties required to make the situation safe from a natural gas perspective, and initiate the investigation and repairs.
Priority of Service	Contracts state that: “When required due to the curtailment or restrictions ordered by any authorized government agency, the buyer shall in accordance with the direction of GDS, curtail or discontinue use of gas during the period in which Gas supply is jeopardized.” Gas Distribution and Storage is not liable for any loss of production or damage due to the curtailment or the length of advance notice given.
Program Coordinator	The role responsible for the creation and maintenance of the preparedness program of a specific discipline.
Reallocation Procedure	A procedure used by the Gas Control Department for determining the magnitude of a supply shortfall on the **Trafalgar system** and to allocate the remaining capacity among the ex-franchise customers and Gas Distribution and Storage itself for its in-franchise customers.
Relocation Plan	The alternate location (which could be an alternate Emergency Operations Centre or other location as applicable) that would be used if the primary building needs to be evacuated for any reason.

Term	Definition
Resources	Materials, equipment and supplies used in Emergency Operations. Includes the skills and abilities of the people who will carry out Emergency Operations.
Secondary Responder	This responder has limited responsibilities and is dispatched to the site to assist the Primary Responder. • The Secondary Responder will not initiate investigations or the repair. • If first to arrive on site, they will make safe only and wait for qualified responders to complete the investigation and repair.
Security Threat Response Plan	A system used to disseminate information regarding threat or security risks to Company facilities and characterizes appropriate levels of vigilance, preparedness and readiness in a series of graduated threat conditions.
Spills - Leak, Spill or Major Spill	***NOTE:*** *This does not refer to natural gas releases.* • A **leak** is defined as a contained release of a product from the system that has no environmental impact and can be cleaned up using internal resources. Leaks are reportable to the manager and Health & Safety. • A **spill** is defined as an uncontained release of product to land or air that results in any of the following: actual or potential environmental impacts that are confined to site or minimal impact off site; and/or has the potential to draw minor or local public attention. All spills are reportable to the Spills Action Centre, Legal officer on call, Legal & Claims, and Health & Safety. • A **major spill** is defined as an uncontained release of product to land, air or water, which results in or has the potential to result in any of the following; significant regulatory action; likely to cause significant adverse environmental impact beyond site; potential for extensive media attention and/or regulatory action. All major spills are reportable to the Spills Action Centre; Legal officer on call, Legal & Claims, and Health & Safety.
State of Local Emergency	The local authority of a municipality may, at any time when it is satisfied that an emergency exists or may exist, by resolution or, in the case of the Minister responsible for the *Municipal Government Act*, the Minister responsible for the *Special Areas Act* or a park superintendent of a national park, by order, make a declaration of a state of local emergency relating to all or any part of the municipality.
Strategy	The general plan or direction selected to accomplish incident objectives.
Supervised Entry	An emergency procedure in which employees of Gas Distribution and Storage enter dead premises, under supervision and as a last resort in order to make safe and/or to relight.
Supervisory Control and Data Acquisition (SCADA)	This software program is used by Gas Control (**Chatham, Dawn, Tecumseh or Sombra**) to monitor and control gas supply within Gas Distribution and Storage pipelines.
Tactical Operations	The operational methods by which the strategy will be implemented at the incident site.

Term	Definition
Trafalgar System Shortfall Allocation Procedure (TSSAP)	A procedure used by Gas Control to determine and allocate shortfall in the event of a pipeline or compressor failure along the Dawn-Trafalgar transmission system during the operating season. TSSAP is used to predict the magnitude of the shortfall and provides guidance to minimize system impact.