

Natural Gas Pipeline Safety and Emergency Information

For Emergency Responders

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Emergency number: 1-888-444-6677

About Maritimes & Northeast Pipeline

Life takes energy: to heat our homes, to feed our families, to fuel our vehicles. Maritimes & Northeast Pipeline connects people to the energy they need to help fuel their quality of life.

Maritimes & Northeast Pipeline is a historic project, essential to the development of the natural gas industry in the Maritimes. The Pipeline system operates more than 1,100 km of high-pressure natural gas transmission pipeline in eastern Canada, providing natural gas to areas in Nova Scotia, New Brunswick, Maine and the northeastern U.S.

A joint venture of Enbridge Inc. (77.53%), Emera Inc. (12.92%), and ExxonMobil (9.55%), Maritimes & Northeast Pipeline is headquartered in Halifax, Nova Scotia and operates an additional business office in Walham, Massachusetts.

In case of emergency

Our pipeline is monitored 24/7. If you suspect a pipeline emergency, please call the **24-hour emergency number for Maritimes & Northeast Pipeline at:**

1-888-444-6677

How to reach us

Maritimes & Northeast Pipeline
1-888-444-6677,
our menu options are:

- 1 For emergencies**
- 2 For locate requests**
- 3 For all other general information questions**

More information can also be found by visiting www.mnpp.com.

Canadian Public Awareness Program (non-emergencies only):



Phone
1-877-640-8665
(Public Awareness hotline)



Email
cdnpublicawareness@enbridge.com



Mail
Public Awareness Program
200, 425 1 St. S.W.
Calgary, AB T2P 3L8



Website
enbridge.com/publicawareness

How to reach us

Emergency number | **1-888-444-6677**

This page contains important phone numbers you can use to contact a Maritimes & Northeast representative.

If you have any comments or questions, please contact us.

A helpful tip: Save the Maritimes & Northeast emergency phone number in your list of contacts or cell phone for quick reference in an emergency.

How to reach us:

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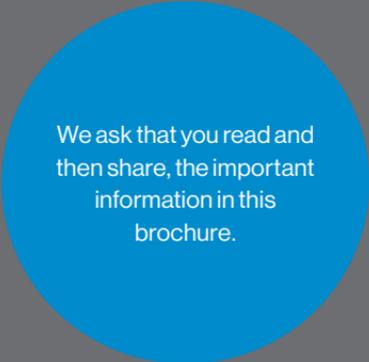
To learn more about our emergency response programs and to view our Field Emergency Response Plan, visit mnpp.com/erresponse.

Pipeline safety: A shared responsibility

Keeping in touch with you is very important to us; that's why we contact those who live, work and congregate near our systems on an ongoing basis.

This brochure is intended for emergency responders—including firefighters, members of law enforcement, 911 dispatchers, emergency medical technicians, emergency managers, medical facilities and mutual aid partners—to help inform you of your vital role in pipeline safety, which may include:

- Coordinating a community emergency response plan
- Activating your organization's emergency response plan
- Contacting the pipeline operator if your organization receives the initial notification of a potential pipeline emergency
- Providing medical aid and other lifesaving services, if necessary
- Working with Maritimes & Northeast Pipeline to keep the public safe in a pipeline emergency by disseminating information and determining and implementing evacuation procedures, if necessary



We ask that you read and then share, the important information in this brochure.



The Maritimes & Northeast system consists of an approximately 30-inch diameter underground mainline running from Goldboro, Nova Scotia through Nova Scotia and New Brunswick to the Canadian – U.S. border near Baileyville, Maine.

Maritimes & Northeast takes its responsibility for safe pipeline operation very seriously.

Being responsible for pipeline safety, however, does not mean we're in it alone. We work year-round to keep our operations safe and reliable, and we regularly communicate important information to local governments, emergency services, utilities, contractors, landowners, tenants, regulators and neighbours.

While most of our system is buried out of sight beneath the ground in the right-of way (ROW), we never lose sight of the bigger picture of our potential impact on the air, water and land around us, and our responsibility to preserve all elements of our environment.

In fact, our practices—including pipeline design, construction, testing, maintenance, operation and safety practices—are subject to government regulations, which we meet or exceed.

We constantly monitor all of our activities and take every step to make sure we protect the environment. Our control centre constantly monitors and controls our network of pipelines, keeping operators continuously apprised of conditions and trends along the ROW. We also have pipeline operations staff situated along the ROW in the unlikely event of an emergency.

Please see the back of this brochure for a map of operations staff locations near you.



A ROW is a strip of land of varying widths that may contain one or more pipelines.

Pipeline ROW and pipeline location

A pipeline follows a narrow, clear stretch of land, or ROW, that allows our employees and contractors to access the pipeline for inspections, maintenance, testing and emergencies. Approximate location of the pipeline can be determined by the pipeline marker.

A few important notes when it comes to ROW and pipeline markers:

- Markers should never be removed or relocated.
- If an emergency is suspected or discovered, call the number on the marker.
- ROW must be kept free from structures and obstruction to allow proper inspections, access for maintenance or in case of an emergency.
- The pipeline marker displays the operator's name, the contents and an emergency phone number.

- Markers should not be used to give exact locations and are not an alternative to contacting clickbeforeyoudig.com.

There may also be other pipelines in the area. As emergency responders, you should familiarize yourself with all pipeline systems in your jurisdiction.

That's why it's important to always call your local one-call centre, Atlantic Dig Safe, in advance of any planned activity. If underground utilities do exist, they will be located and identified using temporary colour-coded markings.

There may also be other pipelines in the area. As emergency responders, you should familiarize yourself with all pipeline systems in your jurisdiction.

All pipeline markers provide important information including the pipeline owner name, the type of product being carried and an emergency number for reporting pipeline emergencies: **1-888-444-6677.**



Signs of a leak

Given our thorough maintenance, testing, training, monitoring and safety programs, a pipeline leak is unlikely.



You might see:

- Dirt being blown or appearing to be thrown into the air
- Flames, if gas is ignited
- A white vapor stream or mist-like cloud
- Unexpected frost buildup on the ground
- Dead or dying vegetation in an otherwise green area
- Continuous bubbling in wet areas or at a pond, creek or river



You might hear:

- An unusual roaring, blowing, hissing or loud whistling sound



You might smell:

- Odourized pipelines:
An unusual sulphur or rotten egg odour
- Unodorized pipelines:
A slight smell similar to diesel fuel or oil

Most natural gas has a naturally occurring slight petroleum smell similar to diesel, oil or propane. However, typically when natural gas is distributed into homes and businesses the distributor adds an odorant to enhance the smell of the gas to make it easier to detect a potential leak.

Possible hazards associated with a natural gas pipeline leak or rupture:



Dizziness or suffocation if the leak occurs in a confined space



Ignition/fire if an ignition source is present during a leak, which may result in burns



Potential explosion with the necessary gas to air ratio



Projectiles ejected from the force of escaping gas

It is important that you do not create an ignition source if you suspect anything abnormal along a pipeline route. Potential ignition sources include smoking materials or open flames, cell phones, pagers, flashlights, keyless entry remotes and motor vehicles.

It is also important to remember that emergency responders should never try to operate pipeline valves.

The Maritimes & Northeast system doesn't just run through communities—it connects them. Maritimes & Northeast employees live near you and work with you every day.



Keeping the pipelines safe for everyone is our most important job, and pipelines have been proven as the safest transportation mode for energy commodities.

Neighbours living and working in the vicinity of our pipelines can be assured that Maritimes & Northeast is a respected and reliable operator with a strong commitment to safe construction, operations and maintenance of our pipeline system.

We value the cooperation and safety awareness of thousands of neighbours who live and work along the pipeline ROW, including police, fire and other emergency services.

A coordinated response with Maritimes & Northeast Pipeline

While rare, pipeline incidents can occur. If potential trouble occurs anywhere on the line, protecting the public is our first priority.

Although our pipeline response staff is immediately dispatched upon notification, local emergency response organizations often receive the initial report. Preparedness and quick response help to minimize the threat to the public.

Our safety priority includes first responders, and we value the expertise you possess. That's why we are committed to strengthening our partnerships through meetings, training exercises, personal contact and information updates such as this brochure. We always appreciate hearing from you and encourage you to call at your convenience whenever you have questions or concerns.

For Maritimes & Northeast, preparedness means developing integrated response plans based on open communication and teamwork. We also work to provide local emergency services with the necessary information they require to respond appropriately. We also hold regular emergency response training and exercises in select locations throughout the year to keep employees' skills fresh and to maintain strong and effective coordination with local emergency responders.

As emergency responders, you are trained to deal with a wide variety of potentially dangerous conditions.

In the case of a natural gas pipeline leak or rupture, your early presence on the scene can help us determine what problem has occurred, what damage or disruption is either present or preventable, and how we can work together to manage the situation.



Maintaining open communication and a close working relationship with local authorities and emergency responders is essential for us in safeguarding the communities along our pipeline routes.

It is important to remember that the natural gas carried on Maritimes & Northeast Pipeline's system is flammable, hazardous and explosive under specific conditions.

Since some commodities are more flammable than others, a pipeline leak or rupture will have different consequences depending on the commodity being transported. Hydrocarbon products such as natural gas and natural gas liquids are very flammable, and can catch fire from even the smallest spark or ignition source.

The sweet gas transported through the Maritimes & Northeast system is flammable and potentially hazardous and explosive under certain conditions.

Safety Data Sheets (SDS) contain information about regulatory classification, health hazards, toxicity, first aid and fire information for the products in the pipeline. SDS information regarding products is available at various locations across our system.

In the event of a Maritimes & Northeast Pipeline incident, representatives will provide emergency responders with the SDS for the product in the pipeline.

Emergency planning zone (EPZ)

The EPZ is the radial area from any point on the pipeline where emergency planning activities may have to occur in the event of an emergency. EPZs are dependent upon pipeline diameter and the operating pressure. Maritimes & Northeast Pipeline EPZs range from 100 to 800 metres.

Characteristics of natural gas

Natural gas	Property or behaviour
Lighter than air	Natural gas is 40 percent lighter than air.
Composition	Mostly methane and small amounts of ethane.
Hazardous material	Due to its flammability.
Flammable	Approximately 5 -15 percent.
Odourless	Natural gas is odourless in its natural state. The smell of rotten egg often associated with natural gas is normally due to an odourant that is added in some pipelines and distribution systems.
Combustion products	No significant harmful compounds result from natural gas combustion. However, incomplete combustion may produce carbon monoxide.
Ignition temperature	The ignition temperature is nearly 1,200° F / 649° C. Static electricity, pilot lights, matches, and sparks from telephones, electric motors and internal combustion engines can easily reach this temperature.
Asphyxiant	Natural gas can displace oxygen in an enclosed space, resulting in the potential for suffocation.
Non-toxic	The sweet gas transported in the Maritimes & Northeast line is non-toxic.

Maritimes & Northeast's pipeline response teams are generally dispatched to a pipeline incident in one of several ways:

- Our 24-hour control centre detects or is notified of and confirms a potential problem and, depending on the situation, notifies emergency responders directly.
- A landowner, tenant or member of the public suspects a potential problem and phones the toll-free emergency response number.
- A Maritimes & Northeast Pipeline representative is already on the scene and contacts emergency responders for assistance (such as monitoring access, controlling traffic, fighting fires or evacuating residents).
- An emergency response organization receives the initial report.

Dealing with calls

The guidelines below may augment your standard procedure for handling emergency calls that relate to pipeline emergencies. This information is also provided to landowners, residents and tenants.

- 1 Advise the caller that Maritimes & Northeast Pipeline emergency response crews will be contacted immediately and will arrive at the site as soon as possible.
- 2 If the caller reports a strong diesel fuel or rotten egg smell, advise the following at your discretion:
 - **Evacuate the area** and, if safe to do so, try to prevent others from entering. Move as far away from the leak as possible, to a safe position upwind of the potential leak site.
 - Avoid contact with escaping liquids, vapour clouds or gases.
 - If they suspect natural gas has leaked into their house or office, evacuate immediately.
 - If you can do so safely, turn off any mechanized equipment that you and others around you may be using. Put out cigarettes or other lit materials.
 - Avoid contact with escaping liquids, vapour clouds or gases.
 - Don't start your car or any other equipment that could be a potential ignition source.
- 3 **Do not operate pipeline valves.**
- 4 If an evacuation centre has been designated, advise the caller of the location.
- 5 Contact Maritimes & Northeast Pipeline using our toll-free, 24-hour emergency number: **1-888-444-6677**. This number is also located on all pipeline marker signs along the ROW.

What you shouldn't do



Never attempt to operate pipeline valves or extinguish any pipeline fires. Doing so may prolong or worsen an incident—or even cause another leak in the pipeline.

Our control centre personnel can shut down valves automatically, while trained Maritimes & Northeast personnel are required to manually close other valves.



Do not create a spark. Possible ignition sources include:

- Smoking materials
- Open flames
- Light switches
- Telephones, cell phones, pagers, flashlights, keyless entry remotes
- Motor vehicles
- Other electronic devices



If a fire occurs at a Maritimes & Northeast facility, unless lives are at risk, we ask that fire crews stay outside of the station property until Maritimes & Northeast representatives arrive.

We work to protect people, property and the environment. In the event an incident occurs, let the primary fire burn and control any secondary fires if safe to do so.

Key actions for emergency responders



1. Notify Maritimes & Northeast

Immediately phone the Maritimes & Northeast emergency toll-free number. Our monitoring system may have already alerted us to the disruption, but please call to be sure.

When calling, please provide:

- Name
- Location
- Description of the emergency

Toll-free emergency number
1-888-444-6677



2. Establish a safety zone

Establish a safety zone - minimum radius of 800 m.

- Protect people first, environment second and then property
- Evacuate if necessary and safe to do so.
- Isolate area and deny entry
- Eliminate all ignition sources
- If possible, monitor atmosphere (natural gas detection equipment)
- Contain or control secondary fires if safe to do so



3. Unified command

- Set up unified command.
- Maritimes & Northeast employees integrate into the established unified command structure.
- Maintain lines of communication until Maritimes & Northeast representatives arrive on site.
- Our representatives can provide pipeline specific information such as:
 - Pipeline pressures
 - Valve closures and or system shut in
 - Estimated time until line is depressurized

Planning ahead

Planning ahead allows us to work together as an effective team if an emergency occurs.

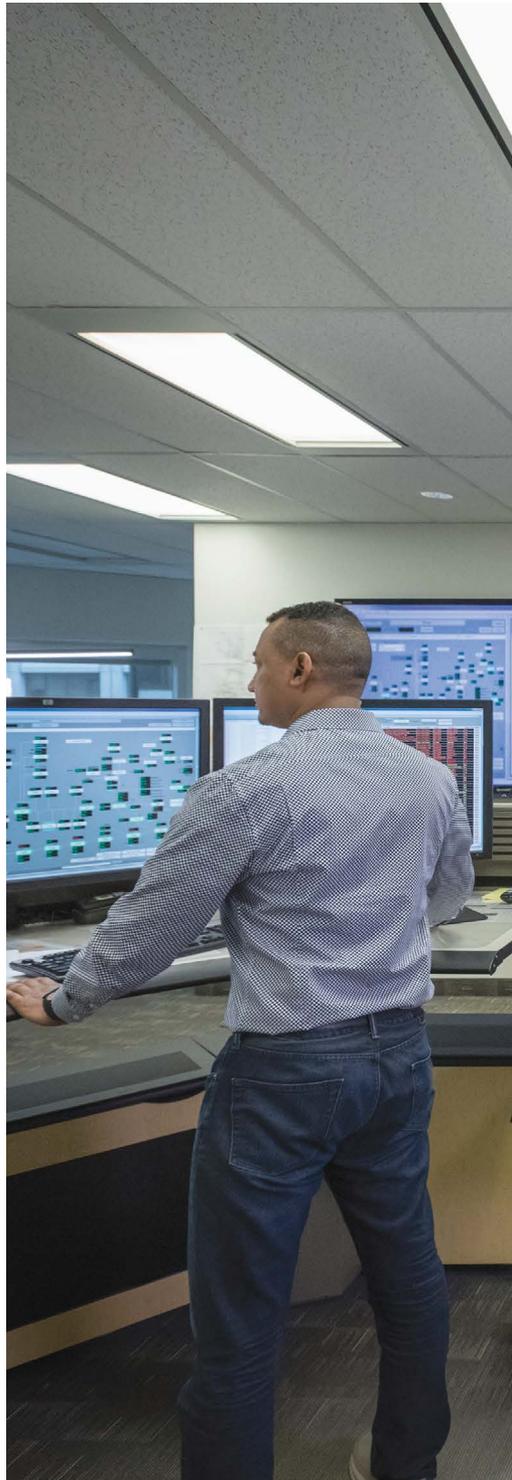
Maritimes & Northeast's visits with local authorities and emergency response organizations are an opportunity to discuss a coordinated approach to handling pipeline incidents.

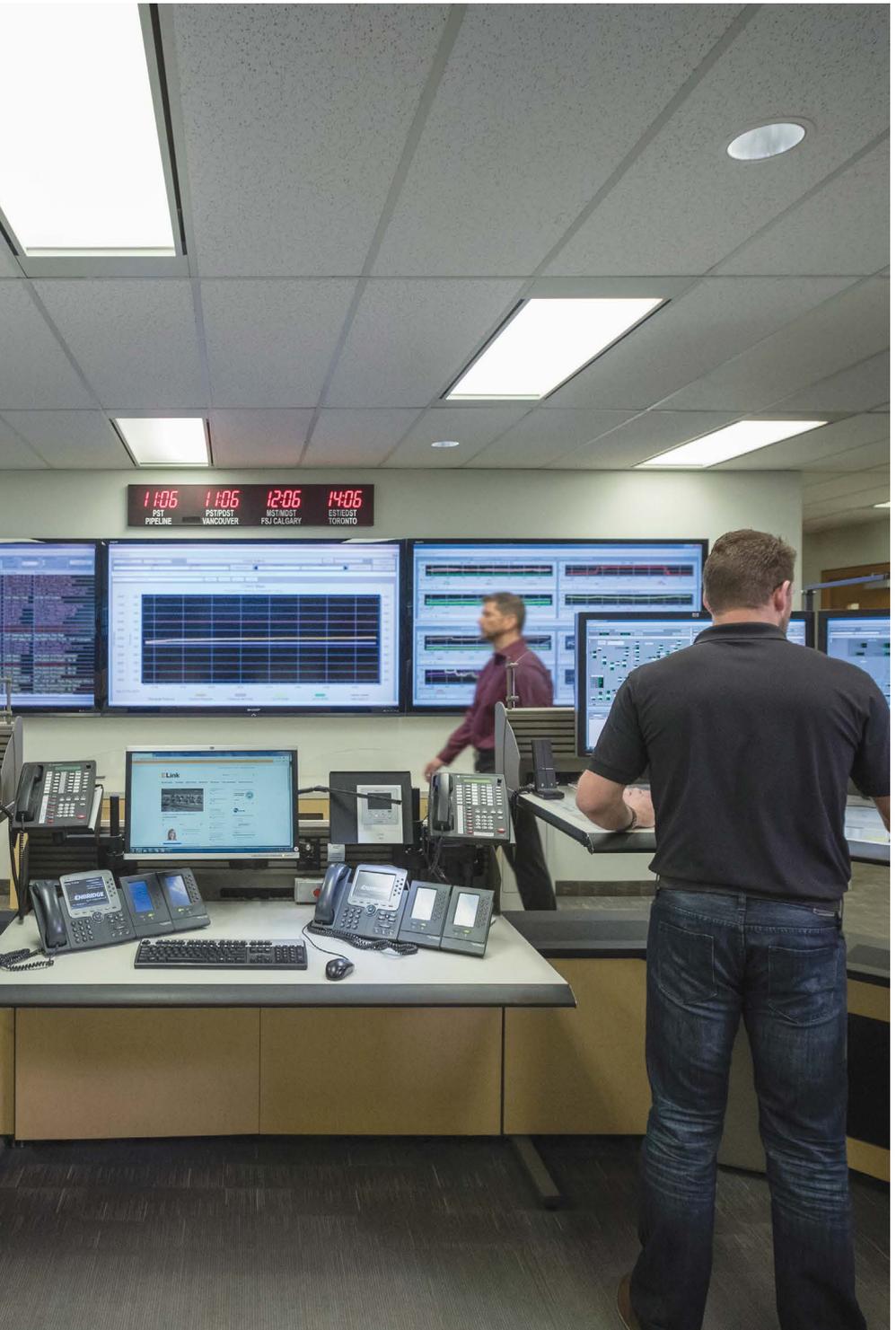
Immediate response

In the event of an incident, our emergency plan will immediately go into effect.

- Maritimes & Northeast will work with local emergency responders to identify and solve the problem.
- Personnel from our control centre have the ability to quickly shut down and isolate sections of the pipeline.
- Local emergency responders will be notified. They may secure the area and move residents to a safe location depending on the situation.
- Our trained response staff will arrive to deal with the release and repair the damaged pipe or facility.

If an incident occurs, Maritimes & Northeast emergency response teams are responsible for ensuring the problem is dealt with quickly and efficiently. Our personnel will work to keep responders and the public safe, protect the environment from further harm and conduct all necessary follow-up steps to return the community to its original condition.





Maritimes & Northeast uses the ICS for managing a response to an emergency.

Its organizational structure is designed to coordinate with other responding agencies.



Elements of response management enabled through use of the ICS:

- Incident Action Plan—define objectives, strategies, resources that contribute to public safety, responder safety and the environment
- Site safety and security
- Communications plan
- Containment
- Clean-up and waste management
- Public information management

Through specific roles under a unified command system, Maritimes & Northeast will work together with local responders to effectively, safely and efficiently manage any incident along our system.

Basic ICS structure

Command	Operations	Planning	Logistics	Finance
Overall management and determination of priorities and objectives	Reduce or eliminate the hazard, implement containment and control measures for the safety of responders, the public and the environment, and restore normal operations	Collection, evaluation and dissemination of tactical information, development of an Incident Action Plan, and coordination of resource identification	Supplying support needs	All financial matters



The ICS is a flexible, scalable tool that provides a common framework, uses common terminology and has standardized job aids.

These attributes help ensure that the incident swiftly transitions from the reactive to proactive phase by setting up a chain of command, establishing a set of priorities and strategies and coordinating resources to address those priorities, often with our emergency response partners. By using the ICS, trained personnel from across the organization can be deployed to support an incident.

Emergency response training exercises are a key part of our emergency response preparedness. Frequent exercise participation by all emergency response staff is critical to maintaining response readiness.

Online emergency responder training

The American Petroleum Institute and the Association of Oil Pipe Lines have created a free online training portal to assist first responders on the techniques and skills necessary to address liquids or natural gas pipeline emergencies. Content for these offerings comes from the National Association of State Fire Marshals “Pipeline Emergencies” curriculum and as such is considered best in class.

The three available courses are organized by need:

- 1 Emergency Personnel Awareness (Introduction)
- 2 First Responders Operations (Intermediate)
- 3 Hazardous Materials Technician (Comprehensive)

Throughout the courses, participants will learn:

- The basics of gas and liquids pipeline operations
- Potential hazards associated with products
- Pipeline emergency response tactics
- How to manage pipeline emergency response
- How to apply the information to real-life situations

The training is available at **mypipelinetraining.com**. Certification is also available, by request, upon completion of the program.

Please note that the API/AOPL training program is currently only available in English. To request training in French, please contact Enbridge directly at **1-877-640-8665** or by email at **cdnpublicawareness@enbridge.com**, and we will connect you with a local emergency response coordinator who can help facilitate French training.

Exercise participation

Maritimes & Northeast’s Field Emergency Response Plans are available to all emergency response organizations within proximity of our operations. The Field Emergency Response Plans focus on first responder actions, including how Maritimes & Northeast will work with first responder organizations during the initial stages of a pipeline incident.



If you would like to participate in an emergency response exercise, please call the number for your area, listed on the last page of this brochure and ask to speak to an emergency response coordinator.



We have comprehensive emergency response and preparedness plans that meet the strict guidelines set out by the Canada Emergency Regulator (CER).

These programs are made up of several parts such as plans to respond to incidents and minimize impacts, staff training and public notifications. To learn more about our emergency response programs and to view our Field Emergency Response Plan visit mnpp.com/ERresponse.

Types of training

Our response personnel receive regular training—both in classroom and field demonstrations including:

- Pipeline operating practices and procedures (including emergency response)
- Implementation and activation of Emergency Response Plans
- Safety procedures
- Selection and use of personal protective equipment
- Material hazards and risk assessment techniques
- Basic first aid skills
- Initiating notifications
- ICS organization during an emergency
- Media communications

Types of exercises

- Workshops
- Tabletop exercises
- Drills
- Functional exercises
- Full-scale exercises

Media communications

A coordinated approach to media communications allows accurate, important information to be provided to the public with minimum confusion or delay. We have trained and qualified spokespeople to coordinate public statements and respond to media inquiries. Our spokespeople can be reached at **1-888-992-0997** or email us at media@enbridge.com.

Prevention is key.

While Maritimes & Northeast has developed effective emergency response procedures, we continue to focus on all of the tools, technologies and strategies that support safe and reliable operations.



These measures include:

- Sophisticated monitoring and control systems that operate 24 hours a day, 365 days a year
- Regular pipeline ROW patrols by aircraft and in some areas by land
- Investigative dig programs to support pipeline integrity
- Meeting and exceeding industry standards and regulations
- Public awareness education
- Pipeline response staff at key locations along the pipeline route
- Research and development on technologies designed to prevent corrosion and cracking
- The use of durable coating systems and cathodic protection (use of low voltage electric current) to protect pipe from external corrosion
- The use of increasingly sophisticated in-line inspection technologies to measure the size and location of every minuscule change in the integrity of every line in our system

Security

Maritimes & Northeast views the security of our facilities as an integral part of our Emergency and Security Management Program. As such, we continue to exercise our plans and maintain open communications and close working relationships with local authorities and emergency responders.

Maintaining pipeline integrity

From the purchase of high quality steel pipe manufactured to meet stringent criteria, to the cathodic protection system we employ to prevent corrosion, Maritimes & Northeast makes the safety of the system a priority before and during its operation with a variety of processes and technologies.



In Case of Emergency, Call:
1-888-444-6677



120 Western Parkway, Bedford, Nova Scotia, B4B 0V2

Maritimes & Northeast Pipeline (Canada)

30" Main	2" St George Lateral
16" Saint John Lateral	12" Halifax Lateral
8" Moncton Lateral	8" Pt Tupper Lateral
4" Lake Utopia Lateral	6" Pt Tupper Lateral



NAD 1983 Quebec Lambert
 North American 1983

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- Pipeline Operations Staff
- Compressor Station
- M&R Station
- Maritimes & Northeast Pipeline
- Other Enbridge Pipeline
- Highway
- Municipal District
- First Nations Reserve
- Parks or Recreation Area

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