



# Important Pipeline Safety Information for Emergency Officials

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You are receiving this brochure because we have identified you as a emergency official near a pipeline owned or operated by Pembina Pipeline Corporation or one of its subsidiaries (Pembina). Please keep for future reference.



## Working together

Our partnership in safety with emergency responders ensures we are prepared to minimize the threat to the public and damage to the environment in the unlikely event of an emergency. We value the expertise you possess as emergency responders and are committed to strengthening our partnership through educational opportunities about our pipelines.

Read on to find out how to identify where pipelines are located in your community, how to recognize a potential pipeline release and know what to do in the event of an emergency.

## Who is Pembina?

We are a leading North American transportation and midstream service provider. For more than 65 years, we have been connecting oil, natural gas, and natural gas liquids production to markets that need it. Pembina owns an integrated system of pipelines that transport various hydrocarbon liquids and natural gas products. We also own gas gathering and processing facilities, and an oil and natural gas liquids infrastructure and logistics business. As the owner and operator of thousands of kilometres of pipelines, our highest priority is operating our assets safely and reliably to protect the people, communities and environment located nearby.

## Pipeline safety

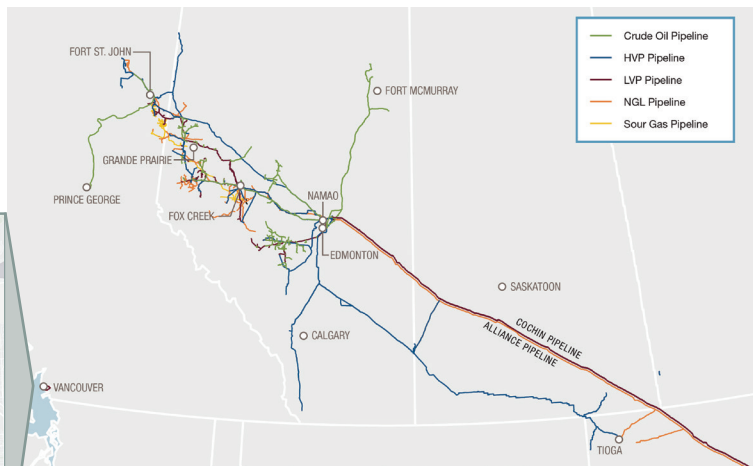
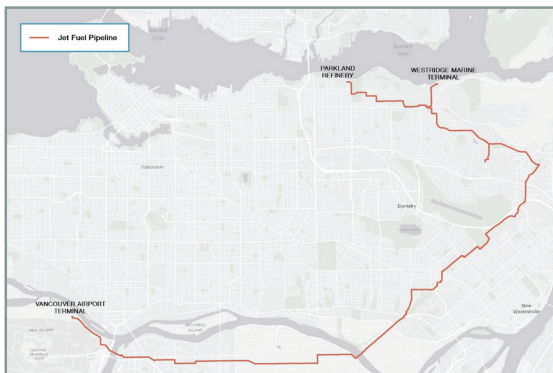
Pipelines are a safe and efficient means of transporting large quantities of crude oil, natural gas and natural gas liquids that provide the energy our world needs.

We know that maintaining the integrity of our pipelines is essential to the health and safety of the communities where we operate. All our activities - from pipeline design, construction, testing, inspections, maintenance, operations and safety practices are subject to strict government regulations, which we continue to meet or exceed.

We monitor the operating conditions of the pipeline through sensors 24/7/365 from our state-of-the-art control room. We conduct aerial and ground inspections to ensure our systems are operating safely and to identify unsafe or unauthorized activity which could damage the pipe or impact safe operations.

We reinforce our commitment to excellence in safety in our daily operations by developing stringent standards and reviewing potential hazards, in addition to conducting regular safety meetings, contractor screenings, and inspections.

Pembina works closely with communities to create a partnership committed to safety, including developing good working relationships with emergency responders to help prevent damage to our pipelines.



# Emergency Management Preparedness

Pembina is committed to being ready to respond to emergency situations related to or impacting our operations. Our Emergency Management Program (EMP) is the framework we use to plan and prepare to respond, while complying with applicable regulations. This includes:

- corporate and area-specific Emergency Response Plans (ERP) with a complete set of standards and processes to support the safety of the public, our workers and the environment
- predetermined strategies and tactics for incident response
- responder training, including annual exercises and ongoing incident response training opportunities
- specialized response equipment strategically placed within our operating areas.

Our preparation and training provide the foundation for our approach to a safe and effective response.

## The Emergency Official's role

In the unlikely event of an emergency, Pembina may request support from emergency officials to assist with:

- providing medical aid, or other lifesaving services, if necessary
- providing support with roadblocks, site security or crowd control, if necessary
- public notifications and evacuations, if necessary and safe to do so.
- fire suppression for areas outside company property, if safe to do so.

## What should First Responders do in the event of an industry related emergency?

1. Stay upwind
2. Block off access to the incident site
3. Call Pembina's 24-Hour Emergency Line **1-800-360-4706** to report the nature and location of the incident
4. Remove all sources of ignition
5. Do not drive into a vapor cloud

6. Do not approach a leak or suspected leak
7. Do not extinguish a leaking gas flame
8. Do not operate pipeline valves
9. Wait for Pembina to isolate the pipeline

## What will Pembina do in the event of an Emergency?

- locate the release/site
- isolate the area
- shut in the source, if possible
- depressure pipeline
- activate the Incident Command System
- initiate public protection measures
- notify:
  - First Responders
  - Regulatory agencies
  - Affected area stakeholders
- conduct containment and recovery actions
- preserve the area for incident investigation
- prepare for clean-up and repairs

## What you shouldn't do

- do not touch or go near any liquid, gas or vapor cloud
- do not start your vehicle or any equipment that could be a potential ignition source
- do not smoke or light a match, and avoid heating sources or making sparks
- do not turn on or off anything that may create a spark, including cell phones, pagers, flashlights, keyless entry remotes, vehicle alarms, and light switches, until you are in a safe location
- do not attempt to operate or turn pipeline valves

If there is a fire at a facility, unless lives are at risk:

- Fire crews are to stay outside of the facility boundary.
- Do not extinguish crude oil fires with water
- Facility should not be entered unless immediate risk to public safety

# Emergency Management Program

## Plans

Pembina's Emergency Response Plans (ERP) have been developed to provide strategic plans and processes that protect public safety and minimize, or eliminate, impacts to the public in accordance with regulatory requirements.

An emergency response led by Pembina is guided by geographic area and/or operating system specific ERPs Plans which include:

- ERPs incident Command System (ICS) roles and responsibilities
- contact information for key Pembina employees and support resources
- methods to notify affected stakeholders, local authorities, government agencies, and First Responders
- identification of emergency response materials and equipment locations
- implementation of public protection measures such as environmental monitoring, isolation, sheltering, evacuation, installation of specialized equipment to isolate and minimize environmental impacts
- detailed mapping and/or diagrams
- references to additional supporting documentation relevant to the response.

Pembina's ERPs Plans are reviewed and evaluated for effectiveness and updated on a regular basis.

## Responder Training

Pembina ensures that first responders are adequately trained to respond to a release. Training sessions are held throughout our operating areas focusing on response issues specific to the location.

These training sessions include:

- tabletop exercises to review procedures
- drills, functional and full-scale functional exercises to practice skills
- equipment deployments to test our resources

## Response Equipment

Pembina invests in specialized response equipment and associated personnel training. Our equipment is strategically placed within our operating areas to ensure a rapid and effective response. Pembina has created a tiered response to organize our equipment and ensure an efficient response to an incident. This structure ensures first responders have access to the required equipment as they need it.

## Public Protection Measures

Shelter-in-place or "sheltering" is the practice of remaining safely indoors during an outdoor release of a hazardous product. This will help to create a safe environment during an incident. In an incident, sheltering has been determined to be the best initial public protection measure.

Sheltering may be used to protect the public from a product release in circumstances when:

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

Evacuation procedures may be initiated once it is safe to do so. Appropriate environmental monitoring equipment may be used to assist with facilitating a safe evacuation. Transportation will be provided, if required.

Ignition procedures may be implemented if deemed as an appropriate public safety measure.



Spill Exercise

# Product Characteristics

Pembina's pipelines carry different product, and warning signs differ depending on the type of resource transported.

## Natural Gas Liquid (NGL)

NGL is a mixture of natural gas components such as ethane, propane, butane and/or pentane which are pressurized to keep in a liquid state. An NGL release:

- is transparent in colour
- has a vapour density equal to, or heavier than air
- contact may cause frostbite
- inhalation may cause respiratory irritation, dizziness and or nausea

## Crude Oil

Unrefined petroleum product composed of hydrocarbons may appear as a cloudy or dark liquid. Vapours are heavier than air and will collect in low lying areas.

## Condensate

Condensate is a light petroleum liquid used to dilute heavier products. It is pale yellow to clear in colour with odours similar to crude oil. Vapours are heavier than air and will collect in low lying areas.

High concentrations of crude oil or condensate:

- may irritate the eyes or respiratory tract
- irritation may cause headaches or dizziness

These products are extremely flammable. Response efforts are focused or determined based on the product, type of hazard, and potential impact.

# How to spot a pipeline release

## Know the warning signs

Although a pipeline release is rare, it is important to know the warning signs:



### You might see:

- a pool of black liquid or oily sheen on a water surface
- dead or dying vegetation in an otherwise green area
- dirt being blown or appearing to be thrown into the air
- a white vapor stream or mist-like cloud over the pipeline
- unexpected frost or ice on the ground
- discolored snow or vegetation



### You might hear:

- an unusual hissing, blowing, or roaring noise



### You might smell:

- a petroleum or hydrocarbon smell



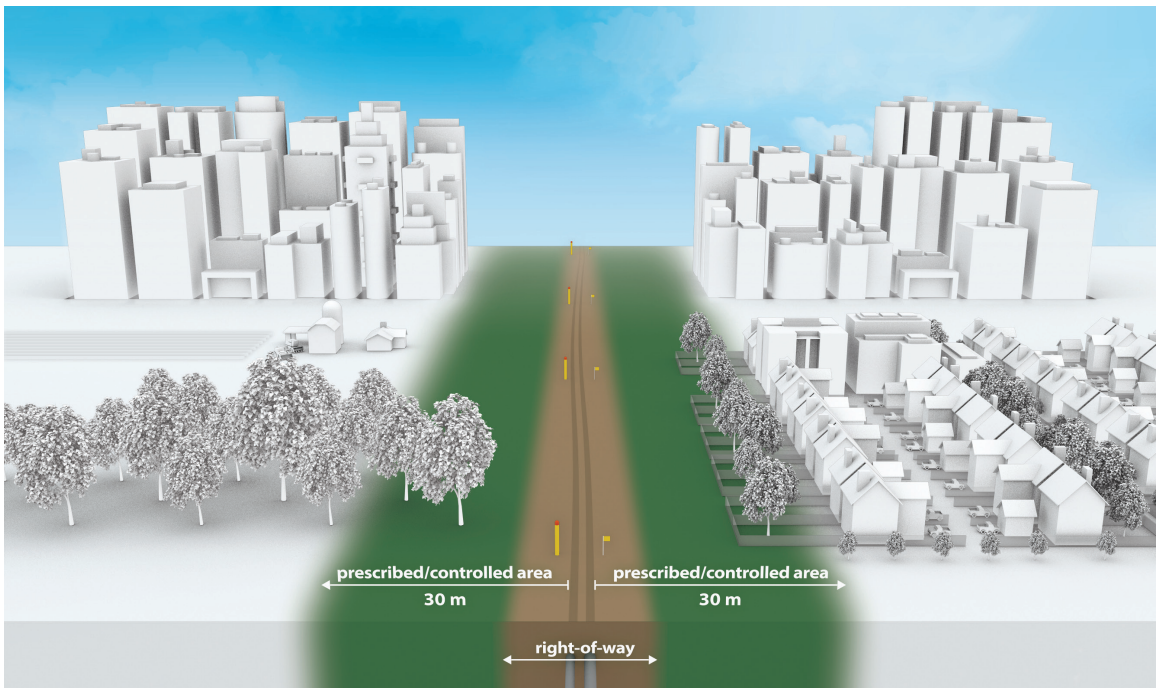
## Right of way

A pipeline right-of-way is the strip of land where the pipeline is located. The width of the right-of-way may vary depending on factors such as pipeline diameter or the number of pipelines in an area. The area extending 30 meters (100 feet) on either side of the pipeline is called the Prescribed Area / Controlled Area.

Right-of-way corridors are often recognizable because they are clear of trees, buildings and other

structures. The corridor enables Pembina employees and contractors to access the pipeline for operations, inspections, maintenance, testing, and in the rare event of an emergency.

Regulations restrict certain activities near the right-of-way that could pose a threat to public safety and the safe operation of the pipeline.



## Pipeline markers

Pipeline markers are located along the pipeline right-of-way. Note that more than one pipeline can share a right-of-way. Markers identify the area, but not the exact location or depth of the pipeline. They also specify the product transported, the operator's name and emergency contact number. ONLY a Pembina representative can identify the exact location of the pipeline.



# Digging around pipelines

Some of the biggest threats to pipelines come from unauthorized construction, development, encroachment and digging activities. To protect people and the environment, and to reduce the risk of pipeline damage, state and federal laws require anyone planning ground disturbance activities near a pipeline right-of-way to call their local toll-free One Call number or visit **clickbeforeyoudig.com** advance of the activity.

Pembina works with members of the public and the digging community to ensure safe protocols are followed when work is conducted near pipelines. We inform stakeholders about:

- where pipelines are located.
- the importance of contacting the local One Call Center at least 48 hours before conducting any ground disturbance activities.
- waiting until the lines are marked before digging.
- following the instructions of an authorized pipeline operator representative.
- reporting any damage to underground infrastructure immediately by calling Pembina’s emergency line at **1-800-360-4706**.



## What is Excavation?

Excavation activities include any work, operation or activity that results in the disturbance of the earth. These activities include but are not limited to:

Tree planting	Augering
Building a fence or pounding in posts	Topsoil stripping, levelling, grading
Excavating, trenching, digging	Quarrying, seismic exploration, blasting
Plowing or tilling	Installing drain tiles
Tunnelling, boring, drilling	Ditching

# How to obtain written consent

Stakeholders who live and work around our pipelines must notify Pembina before planning excavating activities. The following includes steps to obtain written approval from Pembina:

1. Email [landrequests@pembina.com](mailto:landrequests@pembina.com) with your name, legal land description, and a description of the work you would like to do.
2. Pembina will contact you and walk you through how to submit a request for permission to proceed with your activity in, along or adjacent to the right-of-way.
3. Pembina will review your request once your information has been received. Pembina may:
  - Grant consent with standard conditions; or
  - Grant consent that requires specific conditions be met to ensure safety; or
  - Work with you to find solutions and resolve issues regarding the consent request; or
  - deny consent in the rare situation that a feasible safety solution cannot be found.
4. Once consent has been granted, you must:
  - Make a locate request to your local One-Call Centre at least three business days before beginning the work. Pembina will arrange for a Company representative to be on site to inspect the area at time of crossing.
  - Always keep the written consent and documentation onsite.
  - Follow all terms and conditions laid out in the consent, and all instructions from Pembina personnel onsite.



If you have additional questions, please contact Pembina at 403-231-7500 or toll free at 1-888-428-3222 and we will work with you to address your needs.



## 24-hour Emergency Response Number:

**1-800-360-4706**

If you notice any unusual or suspicious activity on or near the ROW, please report it by calling 9-1-1 first, followed by Pembina's 24-hour emergency number above.

## Always click before you dig!

Some of the biggest threats to pipeline safety come from damage from unauthorized construction, development, encroachment and digging activities. Notifying Pembina and your local One-Call Centre are your first steps to preventing damage to underground infrastructure and working safely around pipelines.



British Columbia One Call

1-800-474-6886

bc1c.ca



Utility Safety Partners (Alberta)

1-800-242-3447

utilitysafety.ca



Saskatchewan 1st Call

1-866-828-4888

sask1stcall.com



Ontario 1 Call

1-800-400-2255

ontarioonecall.ca

## How to contact us

Pembina strives to be a trusted member of the community. We're committed to open, two-way communication with our stakeholders. We welcome the opportunity to make a connection with you — please contact us in any of the following ways.

Toll Free: **1-888-428-3222**

### Community Relations:

Phone Toll Free: **1-888-920-1979** (Non-emergency calls only)

Email: [community@pembina.com](mailto:community@pembina.com)

Pembina's head office:

### Pembina Pipeline Corporation

4000, 585 - 8 Avenue S.W.

Calgary, Alberta, Canada T2P 1G1

Phone: **403-231-7500**

[www.pembina.com/safetyaroundpipelines](http://www.pembina.com/safetyaroundpipelines)