

Pipelines in British Columbia

Why the Need for Pipelines?

Pipelines transport natural gas and oil from producing wells to facilities and then to processing plants and refineries before products are marketed to consumers. Pipelines can be on the surface or underground.

Pipelines transport a variety of refined and unrefined products in addition to natural gas, including sour natural gas, oil, water, high-vapour pressure hydrocarbon liquids and other miscellaneous gases and oil effluent.

Companies seeking to construct, operate and maintain a pipeline in B.C. must apply for a permit, negotiate a pipeline right-of-way, engage with First Nations, land owners and communities.

The Commission reviews pipeline applications for projects on provincial and private lands as defined in the Oil and Gas Activities Act (OGAA), and regulates and protects these pipelines under OGAA, the Pipeline Regulation and the Pipeline Crossings Regulation.

Technical Safety BC regulates the utilities operating under 700kPa - which generally serves most residences and businesses. The Canada Energy Regulator (CER) is responsible for regulating cross-jurisdictional pipelines such as those crossing into Alberta and B.C., although companies must still apply to the Commission for pipeline rights-of-way, roads and other works in and around the pipeline.



The BC Oil and Gas Commission **Incident Map** provides timely, factual information on pipeline incidents. By clicking on identified incident points on the map, specific details are displayed, such as incident type, company name and the status of the incident.

The BC Oil and Gas Commission regulates **50,047 km** of pipelines. The majority of those pipelines carry natural gas (78%).

Categories of Pipelines

Operating:

Piping actively used for the transport of fluids related to oil and gas operations, and piping that has been suspended from service for less than 18 months, but not formally deactivated or isolated.

Deactivated:

Piping removed from service but is maintained for later return to service.

Abandoned:

Piping removed from service has been cleaned, cut off at pipeline depth, capped, and all surface equipment removed.

Pipeline Product Types

Sour natural gas:

Natural gas with a hydrogen sulphide (H₂S) partial pressure greater than 0.3 kilopascals.

Natural gas:

Natural gas, sweet gas and fuel gas.

Crude oil:

Crude oil, sour crude and low-vapour pressure hydrocarbons.

Water:

Fresh, produced, salt and sour water.

High vapour pressure:

Propane, butane and pentane.

Other:

Miscellaneous liquids and gases, oil effluent, air and multi-phase lines.

source: Annual Pipeline Performance Report



For Further Information

Email ogc.communications@bcogc.ca or call 250-794-5200

24 Hour Incident Reporting for Industry 1-800-663-3456

This information is published by the BC Oil and Gas Commission and is available online at www.bcogc.ca

What Protection Programs are in Place?

The secure operation of pipelines is essential for public safety and environmental protection. The Commission has jurisdiction over most pipelines within provincial boundaries. Many of the regulations and standards are designed specifically to safeguard operations, but permit holders are required to check equipment, train employees and report to the Commission at various stages.

- ✓ All permit holders must have a fully developed and implemented Pipeline Integrity Management Program (IMP) that adheres to the Canadian Standards Association (CSA Z662). IMPs cover the planning, designing, constructing, operating, maintaining and abandonment of pipeline infrastructure in B.C.
- ✓ Permit holders must prepare and maintain an emergency response program and a response contingency plan. Response plans also include incident reporting requirements in accordance with the Spill Reporting Regulation.
- ✓ Permit holders must continually report to the Commission before, during and upon completion of pipeline construction and perform regular tests on pipelines during all phases of operation. For instance, the As-built affirms the pipeline has been constructed as permitted and to CSA standards and must be designated by the Professional Engineer responsible for the construction of the pipeline.
- ✓ Permit holders must report all pipeline incidents to the Commission. The company is responsible for ensuring the incident is contained and fully cleaned-up. The Commission has inspectors on site to oversee the response and coordination.
- ✓ The Commission has a highly-trained compliance and enforcement team to ensure permit holders are following all laws, regulations and permit conditions. An average of 4,500 inspections are completed every year. [Enforcement Actions](#) are updated weekly on the Commission's website to ensure the timely release of information. Previous [Enforcement Reports](#) and annual [Pipeline Reports](#) that include a summary of incidents, can be found on the website.



Do You Suspect a Leak?

Natural gas **smells** like rotten eggs or sulphur for a good reason. Natural gas is odourless at the wellhead, but trace amounts of mercaptan is added downstream (for home or commercial use) to create a distinctive smell.

The leak may be detected by **sight**. Vapour and/or ground frosting, bubbles in wet or flooded areas, distinct patches of dead vegetation, dust blowing from a hole in the ground, and/or flames if the leak has ignited may be visible.

A natural gas leak may **sound** like a hissing or roaring noise along the right-of-way of a pipeline.

Suspect a leak inside?

- Evacuate the premises leaving the door open.
- Walk to a safe distance and call 911.
- Do not use electrical outlets or items plugged in.
- Do not start any motors or vehicles.
- Do not use lighters or matches.

Suspect a leak outside?

- Keep clear of the area.
- Walk to a safe distance and call 911.
- Do not start any motors or vehicles.
- Do not use lighters or matches.



Call Before You Dig

Pipelines are found in both rural and urban areas. If you dig in the ground there is a risk of encountering buried gas or oil pipelines. BC One Call at **1-800-474-6886** or cellular ***6886**. Always call before you dig.



Public Concerns and Complaints

1-250-794-5200 (24-hour public number)
Report concerns such as odours, spills or noise.



Incident Reporting for Industry

1-800-663-3456 (24-hour emergency number)
Report oil and gas related incidents.