GUIDE TO
PIPELINE SAFETY
FOR PUBLIC OFFICIALS

KEEP THIS RESOURCE IN A HANDY PLACE AND REVIEW FOR INFORMATION ON:

Land Use Planning in Proximity to Pipelines
Working Safely Around Pipelines
How to Recognize & Respond to a Leak

IN AN EMERGENCY CALL 911 AND THE ALLIANCE PIPELINE 24-HOUR EMERGENCY NUMBER 1-800-884-8811
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LET’S WORK TOGETHER FOR SAFETY

Alliance Pipeline puts safety first. Our company’s progressive culture of safety was the catalyst behind the advanced design, technology, materials and standards used to construct our natural gas transportation system.

This culture also propels our rigorous commitment to proactive pipeline maintenance and monitoring, and our safety management system, which includes environmental and emergency management programs.

While our approach to safety is focused on the protection of the public, there are things that you as a public official need to know to help us maintain the safety of your community and our pipeline. Understanding where pipelines are located, what products are being transported, and how to contact us and work together in the event of an emergency are critical to community safety.

Alliance promotes a proactive, collaborative approach to land development and community growth around our pipeline system. Engaging us during your initial planning stages will minimize the probability of delays and unexpected costs for developers, municipal governments and Alliance. It also minimizes the potential risks to safe operations.

We endorse the multi-stakeholder engagement approach recommended by the Canadian Standards Association’s (CSA) PLUS 663, “Land use planning for pipelines: A guideline for local authorities, developers and pipeline operators”. This CSA Standard provides guidance on land development in proximity to transmission pipelines such as the Alliance pipeline.

Please contact Alliance and follow the CSA Standard when considering land development in your jurisdiction.

Collaboration will help ensure our communities remain safe.
Alliance Pipeline began operations on December 1, 2000. We transport high-energy natural gas through a 3,848 kilometre (km) underground system from northeastern British Columbia and northwestern Alberta to Chicago. Our system delivers an average of 1.6 billion cubic feet of natural gas every day – enough to meet the daily energy needs of more than seven million homes and businesses.

With dedicated employees across our North American operations, we put safety first and strive to be a good neighbour by investing in the communities where we operate. Alliance also ensures that environmental protection is a top priority, as evidenced by our stringent environmental standards.

Alliance is subject to federal regulation in both Canada and the U.S. Our principal regulators are: National Energy Board (NEB), Federal Energy Regulatory Commission (FERC) and Office of Pipeline Safety, Department of Transportation, and Pipeline Hazardous Materials Safety Administration (PHMSA).

**ALLIANCE PIPELINE FAST FACTS**

- Our system was designed and constructed to reduce hazards by using pipe with wall thicknesses 20 to 50 percent greater than most operating pipelines in North America. Our pipe is specially coated to prevent corrosion and was buried deeper than regulatory and construction standards required.

- Our lateral system (gathering pipelines) consists of pipelines ranging in diameter from 10 cm to 61 cm (four to 24 inch) that range length from 0.3 km to 142 km (0.2 to 88 miles).

- The entire mainline system is automated and remotely controlled by our Gas Control Centre 24/7, 365 days-per-year. From this centre we can isolate and shut down any portion of the system if required.

- Compressor stations, which move the gas down the pipeline, are located approximately 193 km (120 miles) apart.

- The Alliance system carries liquids-rich natural gas (NGL): a methane gas stream in which NGLs such as propane, butane, ethane and pentane are included.
PIPERLINES

Pipelines transport energy products to help meet your everyday needs. Whether it’s heating your home, driving your car or using electronics, pipelines play a key part in getting energy to homes and businesses.

Pipelines are the safest and most efficient mode of transporting large volumes of natural gas. With more than four million kilometres of infrastructure across Canada, the national pipeline network moves huge amounts of energy every day.

Pipelines are extensively regulated federally and provincially with regard to design, construction, operations, maintenance, safety and environmental performance. This vast underground network transports natural gas from producing regions to cities, towns and industrial areas.

For more information about how pipelines contribute to your everyday life, as well as our local and national economies, please visit the Canadian Energy Pipeline Association at www.cepa.com.

ABOUT NATURAL GAS

Turning on your stove and seeing that blue flame is comforting, but if you only think of natural gas as the methane used for stoves, furnaces and dryers, you’re missing a much bigger picture. The high-energy natural gas transported by Alliance Pipeline contains other fuels like propane and butane, which are used as raw materials for manufacturing products such as plastics, textiles, and some fertilizers. The energy and products made possible by natural gas are all around you and part of your everyday life.

North America requires a varied mix of energy sources to serve the economy and growing population. Natural gas plays a vital role in that mix.

NATURAL GAS IS

• Versatile... it fuels electric generators that produce about 20 percent of our electricity; heats and cools six million homes and businesses; is a vital component of products such as fertilizer; and powers manufacturing and transportation.

• Cleaner burning... it produces 45 percent less carbon dioxide than coal and 30 percent less carbon dioxide than fuel oil when it’s burned.

• domestically abundant... nearly all the natural gas consumed in North America – 98 percent – is produced in Canada and the United States, with current estimates suggesting enough gas to meet 100 years of demand.

• Reliable... it’s available 24 hours-a-day, seven days-a-week, regardless of weather conditions.

For all these reasons, natural gas is a popular fuel choice.
Source: naturalgas.org

1-800-884-8811 Alliance Pipeline 24-hour emergency number 3
Each year the pipeline industry pays millions of dollars in taxes to the municipalities where they operate. Alliance alone pays more than $23 million per year in taxes to the municipalities it crosses in British Columbia, Alberta and Saskatchewan.

As such, pipelines are an important tax revenue source and help enable municipalities to provide valuable services to constituents. In addition to being an important tax source, Alliance also supports local economies in proximity to our operations by employing those who reside in the communities near our pipeline.

We further demonstrate our pride in being a good neighbour through our Community Investment program.
COMMUNITY INVESTMENT

Alliance is privileged to be part of your community. Every day, communities along our Right-of-Way trust Alliance to be a responsible and safe pipeline operator. We show our appreciation by investing in the many communities where we operate and have facilities.

Safety is our number one priority and we know that safety matters for communities as well, which is why our community investment program focuses on supporting community safety through the following two initiatives:

COMMUNITY SAFETY INITIATIVE

Alliance’s community safety initiative provides safety grants of up to $5,000 to non-profit organizations in communities along of our pipeline. The safety grants can be used towards programs, projects and initiatives that enhance safety within the community.

Examples of eligible initiatives include:

- First aid training for volunteers.
- Rescue equipment for a community pool.
- Safety equipment for a community centre.
- Safety awareness programs.

The applicant organization’s specific focus doesn’t have to be safety in order to apply, as long as the funds would enhance safety for the community overall or for a significant number of people. Funding requests can be for safety devices, equipment, training, initiatives or awareness/education.

EMERGENCY RESPONDER PROGRAM

Our emergency responder funding program provides up to $5,000, once every three years, to emergency responders that serve communities along our pipeline. Funds can be used for equipment and other high-priority needs, ensuring that emergency responders are safely equipped to address community emergencies and disasters. Applicants are eligible to reapply three years after receiving an initial grant.

The following are a few examples of the types of equipment and training that we’ve funded through our emergency responder program:

- “Jaws of life”
- Volunteer firefighters training
- Thermal imaging cameras
- Radios, lights, etc.
- Contributions toward new fire trucks, ambulances, facilities, etc.
- Search and rescue training
- Self Contained Breathing Apparatus
- Hydraulic rescue tools
- Turnout gear
- Defibrillators

As part of Alliance’s commitment to safety, we endeavour to build strong relationships with emergency responders along our pipeline, so that we are prepared to work together in the unlikely event of a pipeline emergency. As such, priority will be given to response organizations that are open to establishing and maintaining a relationship with Alliance (e.g. participating with us in joint emergency response exercises).

For more information about Alliance’s community investment program and to apply for funds, visit our website: www.alliancepipeline.com
INTEGRITY MANAGEMENT PROGRAM

Alliance’s pipeline was built using the most advanced pipeline design, technology and materials available at the time, to provide safe, reliable, efficient and environmentally responsible natural gas transportation. We regularly demonstrate and provide evidence to federal, provincial and state agencies that the integrity of our pipeline and facilities is maintained.

Our Integrity Management Program serves as the cornerstone of our operating and maintenance plans. The Program consists of a written set of inspection, testing and documentation standards, which guide us in our efforts. It is key to ensuring that our system operates safely and reliably.

Alliance employs a robust, inside-and-out inspection and monitoring regime to ensure that the pipeline is kept in top condition. In-line inspections include the use of a tool that travels through sections of the pipeline, collecting highly detailed information about its interior, such as pipe wall thickness and condition. The data we obtain alerts us to any issues that could potentially lead to safety concerns. Alliance completes these inspections on a regular basis.

Alliance personnel routinely walk and drive the pipeline route looking for potential threats to safety, such as earth movement. Our exterior inspection program also includes aerial patrols along the pipeline corridor to monitor for activities such as unauthorized excavation and construction, or signs of potential leaks.

As a neighbour and a community leader, you can help us maintain the safety and integrity of our system. Please contact us if you see any suspicious activities, or land changes near the pipeline.
As towns and communities grow, the importance of a multi-stakeholder consultative approach to land use planning grows as well. By ensuring public officials, developers, industry, and members of the general public consult with each other and are aware of the importance of the others’ interests, public safety is prioritized and expensive changes to plans and operations are avoided.

As a trusted transporter of natural gas, Alliance seeks to establish relationships with public officials and developers in proximity to our system so they are aware of our operations. In the land use planning process, it is vital for the safety of the public, employees and all affected stakeholders that transmission pipelines are carefully considered. Industrial, residential and commercial development that encroaches within a pipeline corridor can present serious safety and operational risks if the pipeline is not considered early in the planning stages.

Encroachment of development near a pipeline can put those working and living near it at unnecessary risk and potentially creates financial burdens for the developer or Alliance. By working with a pipeline operator early in the planning stages of land development, different options to accommodate growth can be explored.

The transmission pipeline industry is highly regulated, and our operations and emergency response plans were designed to accommodate the level of development in the surrounding area at the time Alliance received regulatory approval.

By working with a pipeline operator early in the planning stages of land development, different options to accommodate growth can be explored.
If population and infrastructure grow around the pipeline without the pipeline operator’s knowledge, potential safety risks can arise and costly changes may be required. Proactively consulting with the pipeline’s operator in the initial stages of land use planning can help avoid these issues.

To help you plan land use development that respects the integrity of pipelines and community safety, we encourage you to look at the Canadian Standards Association’s Special Public PLUS 663 “Land use planning for pipelines: A guideline for local authorities, developers, and pipeline operators” (CSA PLUS 663). It is the primary reference for local authorities and developers in Canada to consult when considering land use development in proximity to transmission pipelines. This standard promotes a proactive consultative approach to land use planning. Alliance endorses and abides by this approach.

This guide provides important information for you to consider when planning land development in your area. We encourage you to review this information carefully, and share it with your colleagues.

Please share the checklist to the right with developers who are considering land use development and planning.

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A consultative approach to development in proximity to a pipeline Right-of-Way can help minimize the potential for incidents or mitigate the potential consequences of an incident.

### Checklist for developers

**Review the following:**

a. Have you checked your proposed development area for pipelines?

b. If yes, have you reviewed your proposal with the pipeline operator?

c. Does the pipeline operator have any outstanding concerns with the development proposal?

d. Does the pipeline operator agree with your development proposal?

e. Have you identified the pipeline operator contact (person, company, phone number)?

*From Canadian Standards Association “Land use planning for pipelines: A guideline for local authorities, developers and pipeline operators” pg. 13, August 2004.*
EMERGENCY PREPAREDNESS

While unlikely, energy pipeline incidents present some of the most dangerous situations emergency responders may encounter. In the event of a pipeline emergency, Alliance would put into motion our comprehensive Emergency Response Plan. The top priorities of the plan are to protect life, stabilize the incident and safeguard the environment.

Effective communication with local officials and emergency responders is critical to maintaining safety along the pipeline corridor. We commit to building lasting relationships with all, in order to learn about each other’s resources and capabilities, and take part in training and drills. Resources Alliance can offer include:

- Meeting/discussions with you and representatives from your area that have emergency response accountabilities.
- A tabletop or field exercise engaging local Alliance Pipeline and emergency personnel.

Please contact your local Alliance office if you want to set up a meeting or a drill, or are interested in any additional information. See contact information at the back of this guide.

Signs of a natural gas pipeline leak

In the unlikely event of a pipeline emergency, it’s important that you know the warning signs.

- Unusual hissing, whistling or roaring.
- Steam-like cloud.
- Unexpected frost on the ground.
- Dirt blowing from the ground.
- Bubbling in wet areas.
- Dying or discoloured vegetation along the Right-of-Way.

* Unlike natural gas delivered to your home that may be odourized, natural gas on the Alliance System is not odourized.

Actions to take in the event of a pipeline leak

- Extinguish/eliminate ignition sources like cigarettes or machinery.
- Start vehicles or machinery in the area.
- Alert others in the vicinity.
- Come into contact with leaking substance.
- Leave the area immediately, in an upwind direction.
- Operate phones or electrical devices.

If you encounter a pipeline leak, call 911 as soon as you are in a safe location. Then call our 24-hour emergency number – 1-800-884-8811 – and notify us about the issue.
DAMAGE PREVENTION

PROTECTING THE RIGHT-OF-WAY

Alliance Pipeline has an 18 metre (60 feet) Right-of-Way (RoW) for most of its mainline system. These RoW corridors are often recognizable because they are clear of trees, buildings and other structures. On either side of the centre of the Alliance pipeline is the NEB-regulated “Prescribed Area”, as pictured in the image below.

To perform necessary inspections and maintenance, crews must be able to safely access the pipeline RoW. Trees, shrubs, buildings, and other structures hinder our ability to maintain the integrity of the pipeline, restrict our ability to access the land in case of an emergency and increase the potential for pipeline damage. For this reason, we ask anyone planning to excavate, or considering construction to notify Alliance well in advance of the work and contact the local One-Call Centre or visit www.clickbeforeyoudig.com.

RoW corridors are also marked near road intersections, fence lines and water crossings. Bear in mind that marker posts and signs do not indicate the exact location of a pipeline. When you encounter a marker, you should notice three key messages:

- The name of the operator
- An emergency phone number
- What product is being transported

Always visit www.clickbeforeyoudig.com or contact your provincial One-Call Centre before you dig, and follow the instructions provided.
FARMING AND DAMAGE PREVENTION

Most of the land where our pipeline is located is used for agriculture. Our system is constructed and designed to cause minimal interference with normal farming operations. However, some farming activities could adversely affect the pipeline. These include but are not limited to:

- Sub-soiling (deeper than 30 cm or one foot)
- Chisel ploughing (deeper than 30 cm or one foot)
- Drainage system excavation
- Contouring
- Driving posts
- Fencing
- Deep mechanical planting/harvesting (e.g., tree farming)

CROSSING AGREEMENTS

If your work involves crossing or excavating within 30 metres (100 feet) of the centre of the pipeline (the “Prescribed Area”) of any transmission pipeline regulated by the National Energy Board (NEB), federal laws require that you obtain written permission from the pipeline operator.

The NEB Regulations are intended to protect public safety by making pipeline operators aware of activity within the Prescribed Area so that they can ensure that the proposed activity will not damage or threaten the integrity of the pipeline.

To obtain a crossing agreement from Alliance, email crossings@alliancepipeline.com.

Uniform Colour Code
For Marking Underground Utility Lines

- **White**: Proposed Excavation
- **Pink**: Temporary Survey Markings
- **Red**: Electric Power Lines, Cables, Conduit and Lighting Cables
- **Yellow**: Gas, Oil, Steam, Petroleum or Gaseous Materials
- **Orange**: Communications, Alarm or Signal Lines, Cables or Conduit
- **Blue**: Potable Water
- **Purple**: Reclaimed Water, Irrigation and Slurry Lines
- **Green**: Sewers and Drain Lines
# Pipeline Regulatory Agencies – Federal

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<td>National Energy Board (NEB)</td>
<td>403-292-4800&lt;br&gt;www.neb-one.gc.ca</td>
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<tr>
<td>Transportation Safety Board of Canada</td>
<td>1-800-387-3557&lt;br&gt;www.tsb.gc.ca</td>
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# Pipeline Resources and Information

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<td>Canadian Energy Pipeline Association</td>
<td>403-221-8777&lt;br&gt;www.cepa.com</td>
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<td>Canadian Common Ground Alliance</td>
<td><a href="http://www.canadiancga.com">www.canadiancga.com</a></td>
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<tr>
<td>The Canadian Gas Association</td>
<td>613-748-0057&lt;br&gt;www.cga.ca</td>
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<tr>
<td>British Columbia Common Ground Alliance</td>
<td>604-568-2700</td>
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<tr>
<td>Alberta Common Ground Alliance</td>
<td>1-833-344-7233&lt;br&gt;www.albertacga.ca</td>
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<tr>
<td>Saskatchewan Common Ground Alliance</td>
<td><a href="http://www.scga.ca">www.scga.ca</a></td>
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KEY CONTACT INFORMATION

Alliance Pipeline

Head Office
800, 605 – 5th Avenue SW
Calgary, Alberta, Canada T2P 3H5

Alliance Toll-Free: 1-800-717-9017
Telephone: 403-266-4464
Fax: 403-266-4495

info@alliancepipeline.com
www.alliancepipeline.com

AREA OFFICES

British Columbia and Alberta Gathering Office
10944 – 92 Avenue
Grande Prairie, Alberta T8V 6B5
Telephone: 780-402-3102
Fax: 780-402-3134

Alberta Mainline Office
PO Box 3149, Stn. Main
Morinville, Alberta T8R 1S1
Telephone: 780-706-4160

Saskatchewan Office
1990 Industrial Drive
Post Office Box 3527
Regina, Saskatchewan S4P 3J8
Telephone: 306-775-3030
Fax: 306-775-3035

HOW WE CAN HELP

Alliance has a team of Corridor Representatives who work with our neighbours, local public officials and others. These representatives are available to meet with you to discuss our operations in your community and provide damage prevention information or emergency response presentations.

Please contact your local Alliance office if you wish to arrange a meeting with a Corridor Representative.