



Pipeline information for landowners and our neighbors

You have received this brochure because you live, work, reside, or own property near the Vantage Pipeline and the West Spur Lateral.

Vantage Pipeline US LP (Vantage) is the operator of the Vantage Pipeline and the West Spur Lateral. Vantage is a subsidiary of Pembina Pipeline Corporation.

This brochure contains important information about pipeline safety to keep communities safe and prevent damage to pipelines.

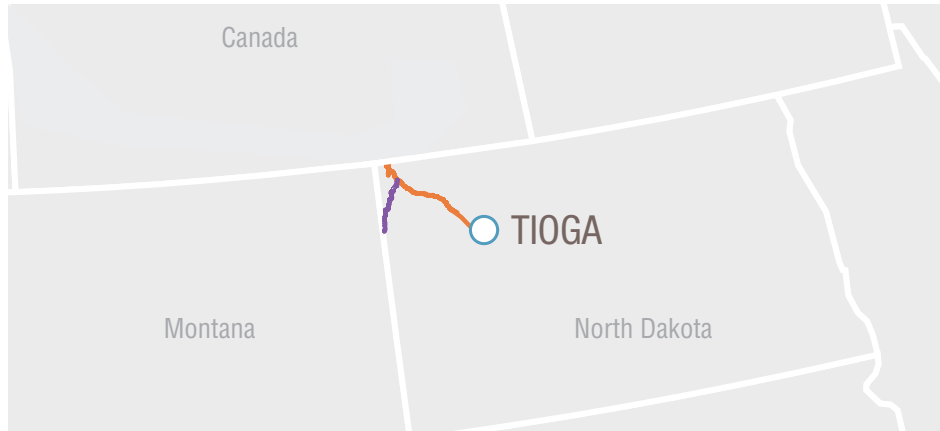
Vantage Pipeline and the West Spur Lateral

The Vantage Pipeline and the West Spur Lateral (known as Vantage U.S.) link the North Dakota Bakken Formation – an underground area that has large deposits of oil and natural gas – to the petrochemical industry. Vantage U.S. transports product to the Canadian border and from there the pipeline product is sent to the petrochemical industry for processing in Alberta, Canada.

Vantage U.S. is comprised of approximately 128 miles of pipeline and originates from gas plants in Tioga and Stateline, North Dakota and extends to the northwest corner of North Dakota.

The pipelines are high vapor pressure (HVP) pipes that transport ethane.

Vantage U.S. is regulated by the Pipeline and Hazardous Materials Safety Administration (PHMSA), Federal Energy Regulatory Commission (FERC), and other agencies.



What is ethane?

The petrochemical industry uses raw materials such as benzene, ethane, and propane from the oil and gas industry to manufacture products that we use every day. Vantage U.S. transports ethane, which is most commonly used to produce ethylene and polyethylene. These chemicals are needed to manufacture products like plastic, automotive antifreeze, and detergent.

Pipeline reliability

Vantage is focused on pipeline safety and maintaining the integrity of our pipelines.

We know that maintaining the integrity of our oil and gas pipelines is essential to the health and safety of the communities where we operate. That's why we've developed, and are continuously improving, processes and programs to monitor our pipelines.

Vantage ensures our pipelines and facilities are designed, constructed, and operated in a safe and environmentally responsible manner. We develop stringent standards and review potential hazards, in addition to conducting regular safety meetings, contractor screenings, and inspections.

Vantage conducts regular inspections, maintenance, and testing to confirm that pipelines are operating safely. Pipelines are monitored 24/7/365 from a control room using sensors that monitor flow and operating conditions. We also use in-line tools and aerial inspections to monitor pipelines.



How to obtain more information about pipelines and pipeline operators where you work or live.

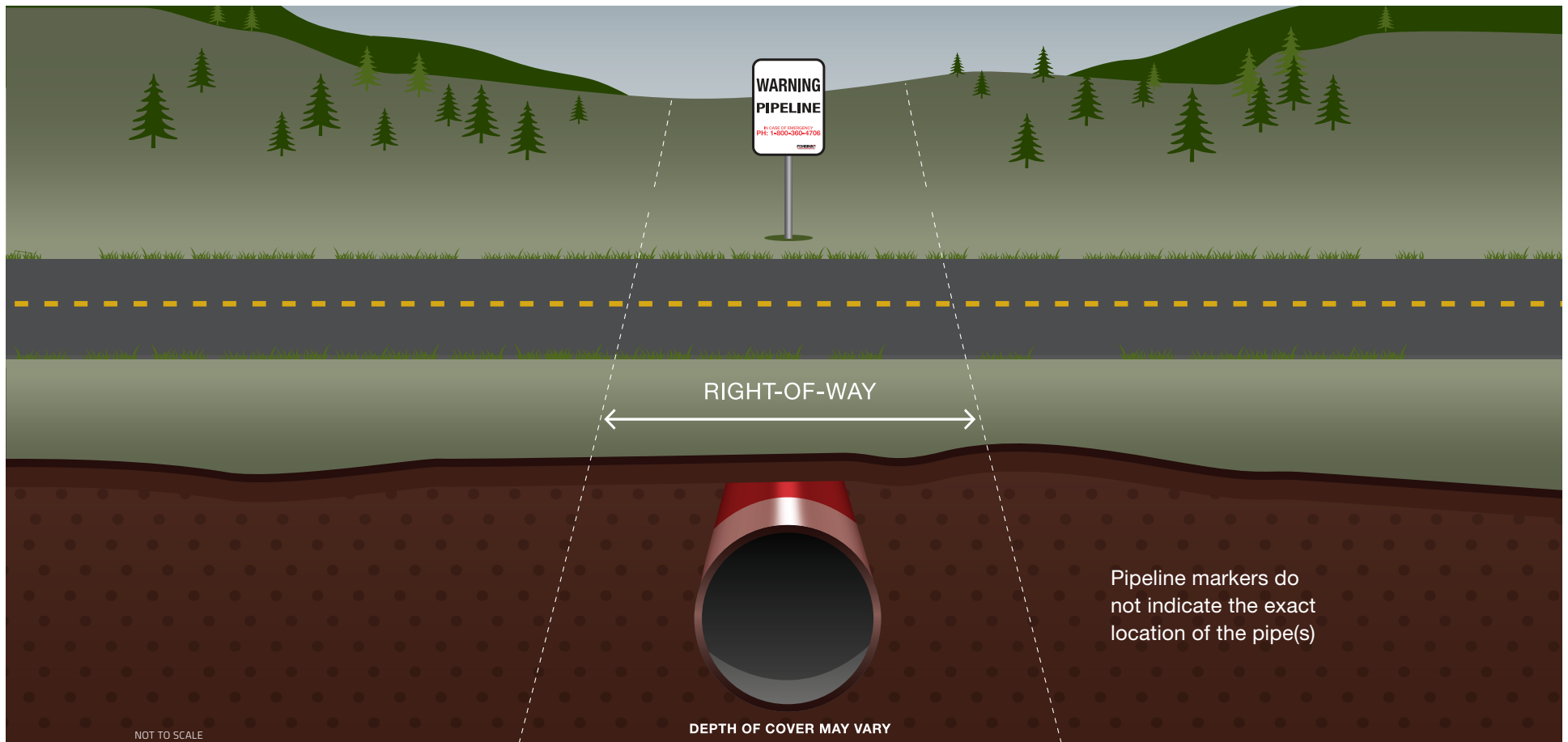
The National Pipeline Mapping System (NPMS) is an on-line mapping tool available to the public that enables you to view information on transmission pipelines that are under Department of Transportation (DOT) and Pipeline and Hazardous Materials Safety Administration (PHMSA) jurisdiction. By accessing the NPMS, you can view information on a county by county basis and obtain information on which transmission pipelines operate in your community. You can also obtain contact information for pipeline operators in your area. The NPMS can be accessed here: <https://www.npms.phmsa.dot.gov/>

Remember: The NPMS is not to be used to identify exact locations of pipelines. You must contact the North Dakota One Call system before you start any digging activities.

A Pipeline Right-of-Way

A pipeline Right of Way (ROW) is the strip of land where the pipeline is located. The width of the ROW may vary depending on factors such as pipeline diameter and the slope of the land, but the width will typically range from 40 to 100 feet for the entire length of the pipeline. The ROW enables Vantage employees and contractors to access the pipeline for inspections, maintenance, testing, and in the rare event of an emergency.

Vantage keeps pipeline ROWs free of obstructions like trees, shrubs, fences, and buildings for one reason – safety. Keeping the ROW free from obstructions and encroachments allows for access to the pipeline without interference and is essential for pipeline integrity, monitoring (by aerial or foot patrol), and safety. Generally, landowners agree to give companies the rights to the ROW for the construction, operation, and maintenance of the pipelines; however, ownership of the land remains with the landowner.



How do you know there is a pipeline nearby?

Vantage U.S. is buried underground. Line markers and warning signs are used to indicate the presence of the pipeline in areas along the ROW. Here is an example of the marker used to identify the Vantage U.S. pipeline in your area:



Markers and warning signs are located at frequent intervals along the pipeline ROW. They're found where a pipeline intersects a street, highway, railway or waterway, and at other prominent points along the route. Markers warn that a pipeline is located in the area, identify the product transported in the line, and provide the name of the pipeline operator and a telephone number to call in the event of an emergency.

Pipeline markers only show that a pipeline is present. **Pipeline markers do not show the exact location of the pipeline.** Pipeline locations within a ROW may vary along the length of the ROW. Additionally, there may be multiple pipelines located in the same ROW. Before digging in the area, you must call the North Dakota One Call Center at phone number **8-1-1** or **1-800-795-0555** to ensure that the underground pipelines are accurately marked.

Pipeline Integrity

Pipelines are a safe and efficient means of transporting crude oil and natural gas liquids.

Vantage evaluates hazards and conducts comprehensive evaluations that provide the foundation for our approach to prevention, planning, response, and recovery for a safe and effective response in the unlikely event of an accident. Should an emergency occur, Vantage is prepared and we want you to be prepared too.

Being prepared in the event of an emergency

Ethane is considered hazardous and is extremely flammable. Exposure to ethane may cause headache, nausea, dizziness and very high levels can cause suffocation from a lack of oxygen. Contact with ethane may also cause skin irritation and/or frostbite.

Indications that an ethane release may have occurred are:



Evidence of an ethane release above ground can include an ice accumulation on piping, disturbance of ground surface (dirt, snow), or a vapour cloud. Underground, a leak may result in discoloured or dead vegetation or cause bubbling in a wet area. If ignition has occurred, fire and smoke will be present.



A hissing, whistling or roaring sound.



Ethane is virtually odourless; however, a slight hydrocarbon smell may be detected.

If you suspect a release, do not investigate. Evacuate the area immediately and attempt to go upwind. Being upwind means the air or wind is moving away from you towards the ethane release. Eliminate any ignition sources such as vehicles, fireplaces, furnaces and gas stoves. Contact Vantage as soon as possible at **1-800-360-4706** and call **9-1-1**.

Safety is a shared responsibility

Pipelines are designed and constructed to be safe.

Vantage takes many steps to ensure safe and reliable operations which include a strict adherence to a solid Integrity Management Program and continuous monitoring and maintenance. Damage from third-party excavation and construction activities around pipelines is the most common cause of damage to pipelines. That's why safety is a shared responsibility and members of the digging community and the public have a responsibility to help protect pipelines from damage.

How you can help

Reporting a pipeline-related incident to our emergency phone number can help us initiate a faster response.

24-hour emergency line: 1-800-360-4706.

To report suspicious activity, please contact your local law enforcement. Describe specifically what you observed, including:

- Who or what you saw;
- When you saw it;
- Where it occurred; and
- Why it's suspicious.

Although rare, emergencies can occur. To prepare for these instances, Vantage participates in an Emergency Management Program (EMP), which includes comprehensive standards and processes to support the safety of the public, our workers and the environment.

The EMP evaluates potential hazards from our operations as well as other hazards such as security breaches and natural disasters. Our comprehensive evaluation provides the foundation for our approach of prevention, planning, response and recovery. This approach allows for a safe and effective response to an incident.

Emergency response plans (ERPs) are maintained for Vantage's facilities and products. These plans identify the organizational structure, equipment, and resources necessary to ensure that actions are taken for the protection of the public, employees and the environment.

Vantage conducts ongoing responder training, ERP exercises, and public consultation to ensure continuous improvement of our plans and program and that our personnel are ready to respond to emergencies.

A copy of the Vantage U.S. Emergency Response Plan can be found at:
<http://www.pembina.com/our-responsibility/safety-awareness/>.



Know the dangers and what you can do to ensure your safety

Unauthorized crossing or digging activities along ROWs pose serious threats to pipelines that may result in harm to workers, the environment, and the safety of others nearby. Damage from third-party activities is a leading cause of pipeline incidents and that can include damage from farming equipment and agricultural activities.

To protect people and the environment, and to reduce the risk of pipeline damage, state and federal laws require anyone planning to excavate near a pipeline ROW to call their local toll-free One Call number or call **8-1-1** in advance of any ground disturbance activity.

These activities, among others, can pose a risk to pipelines:

- Landscaping
- Planting a tree
- Installing fence posts or building a fence
- Fixing or improving an existing ditch, drain tile, or fence
- Building a berm
- Constructing roads, paving, parking, driveways, ditches, railways, overhead or underground utilities
- Altering the grade
- Deep tilling or ripping
- Installing drain tile
- Operating non-agricultural equipment or other vehicles on or over the ROW (such as ATVs and snowmobiles).

Before conducting any work near a pipeline right-of-way, please remember to contact your local one-call centre to have the pipeline located free of charge.

Before conducting any digging activities, follow these steps:

- 1. Know where buried pipelines are located.** Pipeline markers are signs found along the ROW, typically at road or river crossings, to identify approximately where the buried pipelines are located. However, these markers should not be solely relied on for the exact location, path or depth of a pipeline.
- 2. Always contact the North Dakota One Call Centre** at least 48 hours before digging or conducting any ground disturbance near buried pipelines by phoning **8-1-1** or **1-800-795-0555**.
- 3. Wait until the lines are marked** before digging. Upon receipt of a locate request, the One Call Centre will notify the pipeline operator(s) in the vicinity of the digging project. Within 48 hours, Vantage will contact you to determine next steps. Sometimes, Vantage may require that any excavation near its pipelines be monitored by qualified personnel. The risk of excavation damage to pipelines can be reduced when qualified personnel familiar with the pipeline system monitor excavations.
- 4. Follow the instructions of an authorized pipeline operator representative.** Don't take any actions until you are absolutely sure you will not impact a buried pipeline and then follow the instructions from an authorized pipeline operator representative.
- 5. Report any damage to Vantage immediately.** Damage to pipelines could result in service disruptions, environmental impacts, serious injuries, or potential loss of life. Report damage by contacting Vantage as soon as possible at **1-800-360-4706**.

Before conducting any work near a pipeline ROW, always contact your local One Call centre to have the pipeline located free of charge.

Call or Click Before You Dig



Phone: **1-800-795-0555**

Cellular: **8-1-1**

Website: **www.ndonecall.com**

Obtaining Written Consent for a Crossing or Ground Disturbance

If an individual or company plans to cross, dig, or excavate on the pipeline ROW, written consent is required prior to the start of the work.

Crossing or Ground Disturbance agreements are written approvals from the pipeline owner. They inform pipeline operators about upcoming crossings on, along or underneath the pipeline ROW, temporary crossings with vehicles or equipment or excavations on the ROW.

Please contact Vantage for written consent if you anticipate needing to cross or dig near the ROW by following these steps:

1. Email **landrequests@pembina.com** with your name, land description and the scope of the work you would like to do.
2. Vantage will contact you and walk you through how to submit a request for consent.
3. Vantage will review the request. Once your information has been assessed and potential impacts have been evaluated, Vantage will respond and may:
 - Grant consent that requires certain conditions to be met to assure safety; or
 - Work with you to find solutions and resolve issues or concerns regarding the consent request.
4. Once consent has been granted, then you must:
 - Make a locate request by contacting North Dakota One Call at least 48 hours before beginning the work;
 - Arrange for a representative from Vantage (contact information will be provided in the written consent) to be on site to inspect the area at time of activity; and
 - Keep written consent and documentation onsite at all times.

If you have any additional questions, please contact Vantage at **landrequests@pembina.com** and we will work with you to answer your questions.

How you can contact us

We welcome the opportunity to make a connection with you — please contact us in any of the following ways.

24-hour emergency line: 1-800-360-4706

Vantage Pipeline US LP

c/o Pembina Pipeline Corporation
4000, 585 - 8 Avenue S.W.
Calgary, Alberta, Canada T2P 1G1

Phone: **403-231-7500**
Toll Free: **1-888-428-3222**

www.pembina.com

Community and Aboriginal Relations – Non-emergency calls only

Phone Toll Free: **1-888-920-1979**
Email: **community@pembina.com**

Community Investment

Communities throughout our operations put their trust in us and permit us to operate in their backyards. Through our community investment program, we honor this relationship and give back to the communities where we live, work, and play. To review our funding guidelines or to apply through our online application, please visit our website: pembina.com > our responsibility > community investment. You can also email: **community_investment@pembina.com**.

