



Pipeline decommissioning: Preserving peace of mind

When we decommission a pipeline, we continue to look after it. Landowners are not responsible for Enbridge's decommissioned pipelines—we are.

What's decommissioning?

A decommissioned pipeline is a line that is taken out of service safely and permanently, but is left in place while other existing or new pipelines in the same right-of-way continue to provide service to end users.

What happens to the pipeline?

We wipe and clean the inside of the line, disconnect the line from our system, and segment the line where necessary.

Why leave the pipe in the ground?

This practice minimizes the effect on communities and the environment, and the stability issues that surround soil disturbance.

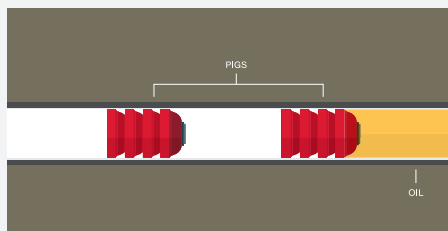
Does that mean you forget about the line?

Enbridge remains responsible for a decommissioned pipeline. We monitor a decommissioned line just as we would an active line.

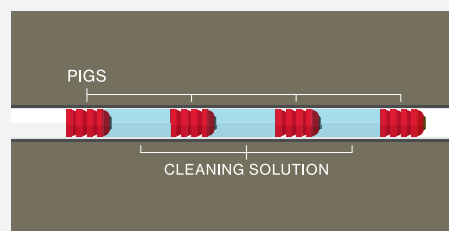
Can you do this whenever you want?

When Enbridge decommissions a line, we must first seek and receive approval from the Canada Energy Regulator (CER).

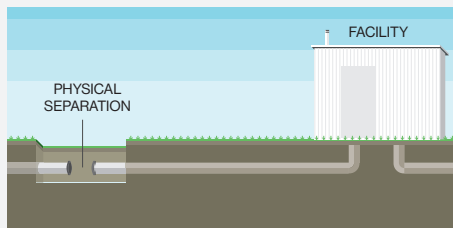
Decommissioning Process



1. Remove the Oil from the Pipeline:
The vast majority of the oil is removed using specially designed cleaning instruments.



2. Clean the Pipeline: A combination of cleaning instruments and cleaning solution is used to wipe and clean the pipeline.

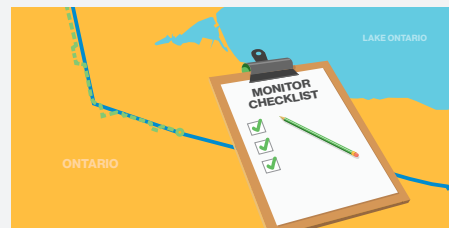


3. Disconnect the Pipeline: The pipeline is physically disconnected and sealed off from active operational facilities like pump stations to prevent oil from re-entering the system.



4. Segment the Pipeline: Permanent physical barriers are created inside the pipeline to prevent the pipeline from acting as a water conduit. This includes gate valves and permanent segmentation plugs.

1. The gate valves are closed and permanently disabled.
2. Permanent segmentation plugs are strategically placed along the pipeline.



5. Monitor the Pipeline: Cathodic protection will continue to be applied to the decommissioned pipeline and it will also be monitored with regular pipeline patrols, pipeline signs indicating exact location, depth of cover surveys and Click Before You Dig Programs.

Decommissioning, step by step

Before we decommission a line, we perform engineering and environmental assessments in consultation with landowners. And once the CER approves a decommission application, the process generally involves:

- Removing the vast majority of crude oil from the line;
- Wiping and cleaning the pipeline's interior to remove all the crude oil;
- Physically disconnecting the pipeline from our system;
- Sealing it off from active operational facilities; and
- Segmenting the line, where necessary, to prevent it from acting as a water conduit.

Avoiding soil disturbance

Removing replaced sections of pipe entails major construction activities and disturbance to farmlands, neighbourhoods, roadways, wetlands, and green spaces, which we prefer to avoid whenever possible.

By leaving a decommissioned pipeline in place, we avoid the added disturbance and significant construction activities that excavation and removal would bring. Leaving the line in the ground also reduces the risk of soil and slope instability, settlement, and compaction issues that could compromise the safety of active pipelines sharing that right-of-way.

A long-lived load-bearing structure

A decommissioned pipeline will have a very long remaining life as a load-bearing structure for supporting soil and surface loads.

Independent engineering research and analysis suggests the rate of corrosion would be extremely slow, and occur over many centuries. This research also suggests that any associated changes to the land surface would be gradual; and that the maximum estimated surface change, after many centuries, would be a depression no deeper than the length of a ballpoint pen, about eight metres across.

Looking after the line

We remain responsible for our decommissioned pipelines. We monitor decommissioned lines, just as we do with active lines, in various ways:

- Maintaining cathodic protection (an electrical current that curbs corrosion);
- Right-of-way monitoring and maintenance;
- Depth-of-cover surveys;
- Maintaining signage and contact info; and
- Maintaining the line's profile for Call/Click Before You Dig programs.