



What is a natural gas transmission pipeline?

A natural gas transmission pipeline is used to transport large volumes of natural gas over long distances to major markets. There are presently more than 300,000 miles of natural gas transmission pipelines across the United States.

Transmission pipelines deliver natural gas to local distribution companies, which distribute the product through their regional or municipal networks to homes and businesses for heat and energy. They also deliver natural gas directly to large industrial end-users, including electric generating facilities.

By definition, an interstate transmission pipeline crosses one or more state boundaries. The **U.S. Department of Transportation** exclusively governs the safety standards for the operation of an interstate transmission pipeline, while the **Federal Energy Regulatory Commission (FERC)** is tasked with overseeing the permitting and construction approvals of a new interstate natural gas pipeline.

A natural gas transmission pipeline is built of **high-strength carbon steel** and is coated with **fusion-bonded epoxy**, a corrosion-resistant, nonconductive resin that forms a waterproof seal around the pipe. Coating on the entire pipeline is **electronically inspected** before the pipeline is placed into the ground.

During construction, the welds that join pipe segments are **visually inspected and nondestructively tested** to verify the integrity of the weld. As an additional safety

measure, the pipeline is **hydrostatically tested** at high pressure before being placed into service. During hydrostatic testing, the pipeline is filled with water and pressurized to levels greater than the maximum allowable operating pressure.

Cathodic protection—that's the application of a safe, low-voltage direct current—is applied to surfaces of an underground transmission pipeline to **prevent corrosion**.

Natural gas is highly pressurized as it travels through a transmission pipeline. To ensure the gas remains pressurized, it must be compressed periodically along the pipeline—and this is accomplished by using **compressor stations** where gas is compressed either by a turbine, a motor or an engine.

Our pipelines are generally installed with a **minimum of three feet of cover** on top of the pipe.