

Carbon Capture and Storage:

Pipeline Operation

Responsible Pipeline Operation

Since 1987, Tenaska has been proud to serve our nation's energy needs. Our representatives are meeting with landowners in this area to discuss land use and fair compensation for a planned carbon capture and storage (CCS) pipeline that would transport carbon dioxide (CO₂) from regional businesses. Pipelines are the most efficient — and safest — way to transport CO_2 . There are more than 5,000 miles of active CO_2 pipelines in operation in the United States today.

Thank you for taking the time to learn about Tenaska's approach to CCS and CO₂ pipelines, including how the technology works, how pipelines operate, and how rigorous regulations and safety standards protect communities.



What is Carbon Capture and Storage?

Carbon capture and storage (CCS) helps manufacturers, industrial producers and power plants meet environmental requirements and climate mandates in a cost-effective and responsible manner by capturing carbon dioxide (CO₂), transporting it, and storing it safely and permanently deep underground.

Tenaska's CCS model is built on a hub-and-spoke system. Our projects utilize an underground storage field that connects to regional CO₂ emitters via a small pipeline network. The pipeline is carefully sited to lessen the impact on communities and the environment.

CO₂ is non-flammable — humans and animals exhale it, and plants use it to grow. However, too much CO₂ emitted into the atmosphere contributes to climate change.



Learn how CO₂ is captured, transported and stored. Watch our CCS 101 video by scanning this code with a mobile device or by visiting **tenaska.com/ccs101**.



Safety Every Step of the Way

Safety is at the core of every project Tenaska develops and operates. Strict safety protocols are in place throughout every step of the CCS process: planning, design, construction, operations and long-term monitoring.

Learn more about our high standards for safety.

Watch our safety overview video by scanning this code with a mobile device or by visiting tenaska.com/safetyandccs.



Pipeline Operation Overview

Operator standards	In addition to 24/7 monitoring, the CCS project will have an on-site operations staff. Operators are trained in an operator qualification program to meet all requirements of the Pipeline and Hazardous Materials Safety Administration (PHMSA). Operators also have supplemental training, including managing and coordinating response efforts.
Proactive planning	Pipeline operators prepare extensive emergency response plans before construction even begins. The plans are reviewed by regulators and shared with local first responders and officials to ensure a coordinated response if an incident does occur.
	Pipeline operators work with local authorities, first responders and other local stakeholders to practice this plan. Emergency personnel will know in advance what to bring and what to do.
	The operators place emergency response equipment at points along the pipeline to be available in case of an emergency.
Safety technology and monitoring	There is redundant communication and power supply at all of the pipeline's connection points, critical valves and metering facilities. The pipeline will have an on-site operations staff, as well as a 24/7 monitoring system.
	CO_2 quality controls are in place to ensure no contaminants adversely affect the system, environment or community. A slight electrical current system, called cathodic protection, helps prevent corrosion and preserves the pipeline's integrity.
	High-tech probes, called Pipeline Inspection Gauges or "smart pigs," will routinely inspect the pipeline for corrosion or damage. The probes send this information to pipeline operators to pinpoint any signs of trouble, which are then fixed.
	In the rare event of a pressure loss, which indicates a leak in the pipeline, our automated system will shut down and isolate the affected section of the pipeline within three minutes. Trained operations employees will assess the situation and coordinate with emergency personnel as needed.
Public awareness	Damage from excavation-related activities, particularly from equipment digging into pipelines, is the number one cause of pipeline accidents. That's why this pipeline will be part of the 811 "Call Before You Dig" system, which is free for anyone to call.
	Before undertaking any work, excavators are lawfully required to call to locate anything beneath the work site. Excavation includes inserting, moving or removing any object in the ground, even fence posts, rods, stakes, picks, shovels or other hand tools.

Common Questions

How long will the pipeline operate?

This CCS project's operation is anticipated to span 30+ years. After that time, the pipeline will either be repurposed or decommissioned.

How can I use my land after a pipeline begins operation?

In agricultural or recreational areas, land over a pipeline can return to its normal use. If you plan to dig or drill into the land, it's important to call 811 to ensure the pipeline is protected.

Who do I contact with concerns or questions?

The project will have an on-site operations team. Once that team is hired and trained, information will be provided to the public about how to reach the team for questions or contact an emergency call line.



Schedule a visit with a Tenaska land agent to begin discussing the use of your land and fair compensation.

Tenaska.com