

NORTH DAKOTA

NORTH DAKOTA

Construction Anticipated Start Date: August 2023

Voluntary Easement Miles Acquired

- Over 115 miles now signed
- · Over 188 landowners have signed. equating more than 309 agreements executed



Investors

- Ethanol Plant Partners
- John Deere
- Continental Resources
- Tiger Infrastructure
- TPG Rise Climate
- · Summit Agricultural Group

Partners

- 32 ethanol plants across 5 states -(Nebraska, Iowa, Minnesota, North Dakota, South Dakota)
- Minnkota Power Cooperative (CO₂ storage) giving Summit Carbon Solution access to the largest of only three permitted CO2 storage sites in the United States.





- · A gas in atmospheric conditions.
- A dense phase deep underground or in a pipeline. A dense phase has the viscosity of a gas but a density closer to that of a liquid.
- Nonexplosive and noncombustible.
- Dispersed as a gas when introduced to conditions outside the pipeline.
- CO₂ pipelines have an excellent safety record exceeding pipelines that carry other materials.
- Transported at ambient temperature that does not affect the surrounding soil.

Pipeline Transport Is Critical to Carbon Capture & Storage

Transporting carbon dioxide by pipeline is the safest method for the large volumes of CO2 that will be captured and permanently stored. With more than 5,000 miles of infrastructure currently operating in the United States, carbon dioxide pipelines have an excellent safety record.

Carbon capture and storage utilizes longstanding technology that is safe for landowners and communities.

- CO2 capture is already deployed at more than 40 ethanol plants.
- There are 5,000 miles of existing CO2 pipelines in the United States regulated by the Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA).
- Captured CO₂ is permanently and safely stored deep underground based on EPA

Summit Carbon Solution's Pipeline is Overbuilt for Safety Summit Carbon Solutions' pipeline will be built beyond federal

specifications in these ways:

- PHMSA 195.248 Pipeline Location requires 3ft depth below ground level. Summit Carbon Solutions will be at 4ft minimum
- PHMSA 195.210 Pipeline Location requires 50ft setback from all dwellings. Summit Carbon Solutions is designing the pipeline that far exceeds the minimum setback.
- PHMSA 195.250 Clearance Between Pipe and Underground Structures - Any new pipe must be at least 12" away from any other underground pipe or structure. Summit Carbon Solutions' best practice is 24".
- PHMSA 49 CFR Part 195 defines minimum requirements like the spacing between block valves, which is no more than 20 miles apart and in some cases less for Summit Carbon Solutions' pipeline.

Summit Carbon Solutions will employ a computer based, computational leak detection system that continuously monitors the operation of the pipeline from a manned control center. Similar leak detection systems are currently being utilized in the operation of numerous pipelines across the United States. Data will be continuously collected from pressure sensors, flowmeters, and temperature sensors installed along the pipeline and used to identify abnormal operating conditions. In the unlikely event of a leak, the system will provide information necessary to locate the leak, isolate the pipeline segment, and mitigate risk.

Pipelines Are Highly Regulated

Stringent requirements for the safe design, construction, and operation of CO2 pipelines have been established by the DOT PHMSA. Additionally, constructing the Summit Carbon Solutions system requires permits from the following entities:

 North Dakota Public Service Commission

- United States Army Corps of Engineers
- United States Fish and Wildlife

Summit Carbon Solutions is working with landowners, community leaders, stakeholders, and more with respect, honesty, and transparency to obtain the necessary rights from the landowners for any proposed temporary and permanent easements.

Community Investment

Summit Carbon Solutions is looking to invest and volunteer in local communities. If there is somewhere we can invest in your community, please contact Kaylee Langrell 501-581-3348 or Kaylee.langrell@tkl360.com

Contact Information

For Emergency Management Questions: **ROD DILLON**

Director of Regulatory Compliance rdillon@summitcarbon.com 515-531-2624

For More Project Information or Interviews:

JESSE HARRIS

Director of Public Affairs jharris@summitcarbon.com 515-240-2104

