



## IOWA

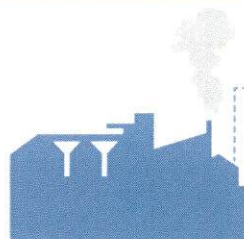
### Voluntary Easement Miles Acquired

- Over 472 miles now signed
- Over 1,132 landowners have signed, equating more than 1,982 agreements executed

OVER  
**472**  
miles

### Iowa Utilities Board

- Permit Application Submitted to Iowa Utilities Board January 2022 - Docket Number HLP-2021-0001
- Decision requested June 2023
- Iowa Utilities Board accepting comments at [iub.iowa.gov](http://iub.iowa.gov)



### 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 (CO<sub>2</sub> storage) giving Summit Carbon Solution access to the largest of only three permitted CO<sub>2</sub> 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.

- CO<sub>2</sub> 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 CO<sub>2</sub> 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.

- CO<sub>2</sub> capture is already deployed at more than 40 ethanol plants.
- There are 5,000 miles of existing CO<sub>2</sub> pipelines in the United States regulated by the Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA).
- Captured CO<sub>2</sub> is permanently and safely stored deep underground based on EPA standards.

## Pipelines Are Highly Regulated

Stringent requirements for the safe design, construction, and operation of CO<sub>2</sub> pipelines have been established by the DOT PHMSA. Additionally, constructing the Summit Carbon Solutions system requires permits from the following entities:

- |  |   |
|--|---|
| <b>State:</b>                                | <b>Federal:</b>                         |
| • Iowa Utilities Board                       | • United States Army Corps of Engineers |
| • Iowa Department of Natural Resources (DNR) | • 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.

## 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 depth.
- PHMSA - 195.403 Emergency Response Training - (a) Each operator shall establish and conduct a continuing training program to instruct emergency response personnel. (b) At the intervals not exceeding 15 months, but at least once each calendar year, each operator shall review with personnel their performance in meeting the objectives of the emergency response training program and make appropriate changes to the program based on this review. Summit Carbon Solutions will work with counties to develop an emergency response plan. The response plan will be reviewed annually and updated based on this review. Trainings will be held yearly and when emergency personnel request.
- PHMSA - 195.250 Clearance Between Pipe and Underground Structures - Any new pipe must be at least 12" away from any other applicable 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.

## 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](mailto:Kaylee.langrell@tkl360.com)

## Contact Information

For Emergency Management Questions:  
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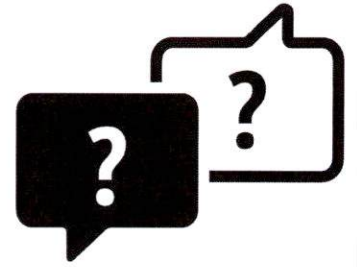
For More Project Information or Interviews  
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## ADDRESSING COMMON MISCONCEPTIONS

### Regarding the Summit Carbon Solutions Project and CO<sub>2</sub> Pipelines



#### MISCONCEPTION - CO<sub>2</sub> PIPELINES ARE NOT REGULATED



Today, there are 5,000 miles of CO<sub>2</sub> pipelines in the United States that have been operating safely for more than 40 years. Throughout that time, these systems have been extensively regulated by state and federal entities including the following:



#### PHMSA, the Pipeline and Hazardous Materials Safety Administration

The PHMSA is the federal regulatory body for Summit Carbon and other pipeline companies. PHMSA specifically regulates CO<sub>2</sub> pipelines through Title 49 of the Code of Federal Regulations Part 195. This is a 121 page document outlining safety standards and reporting requirements for hazardous liquids and carbon dioxide. PHMSA regulates everything from design to construction to operations to maintenance. Our pipeline also falls into Parts 190, 196, 198 and 199.

#### Iowa Utilities Board

The IUB regulates pipeline systems, specifically Chapter 479B, Hazardous Liquid Pipelines and Storage Facilities. The authority of the IUB is to implement certain controls over pipelines. The IUB has the authority to implement controls to protect landowners and tenants from environmental or economic damages. The IUB also controls permitting the location and route of the pipeline.



#### Army Corps of Engineers

Summit Carbon Solutions has submitted Nationwide Permit 58, "Utility Line Activity for Water and Other Substances". This permit covers Section 404 of the Clean Water Act, Section 10 of Rivers and Harbor Act and Section 106 of the National Historic Preservation Act. SCS also submitted a Section 408 Permit to the Army Corp of Engineers, which reviews impact to civil works projects. A joint permit will be submitted to the Army Corps of Engineers and the Department of Natural Resources. The Joint Application covers impacts to waters of the US, as well as 401 Water Quality Certification, floodplain permits, Sovereign Lands permit, and coordination with DNR regarding federal and state threatened species, rare natural communities, and sensitive habitats.

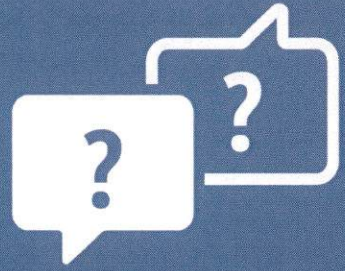
#### Iowa Department of Natural Resources

The Iowa Department of Natural Resources oversees the stormwater permitting, dewatering, water discharges, and water allocation.



# OTHER COMMON MISCONCEPTIONS

## Regarding the Summit Carbon Solutions Project and CO<sub>2</sub> Pipelines



### This is the first time Summit Carbon Solutions has built a pipeline

Summit Carbon Solutions has more than 250 years of combined pipeline experience in engineering and construction alone.

### Trucking the CO<sub>2</sub> is a better transport option than pipeline

When compared to trucks and rail, pipelines are significantly safer and less intrusive when transporting commodities like carbon dioxide. Additionally, the amount of trucks required to transport CO<sub>2</sub> in this volume is simply not feasible.



### CO<sub>2</sub> pipelines are a new technology

CO<sub>2</sub> pipelines have been in use for more than 40 years in the United States.

### The Summit Carbon Solutions pipeline will use an exponential amount of water at capture facilities

On average, the capture facilities will add 10% to the ethanol plants existing water usage.

### Landowners will be unable to acquire liability insurance for the pipeline on their land

Landowners who currently own property where existing pipelines are in operation have always been able to get insurance and that will



continue to be the case in the future, including while the Summit Carbon Solutions project is being constructed and once it is operational.

The landowner does not need liability insurance since they do not own the pipeline. Liability falls on Summit Carbon Solutions as is stated in the easement under the indemnification clause that hold landowners harmless for any loss, damage, claim or action resulting from the project, with the sole exception of cases where there is gross negligence or willful misconduct.

### Carbon Capture is not critical to maintaining a strong ethanol industry

According to a study published by the Iowa Renewable Fuels Association, without carbon capture projects:

- Iowa ethanol production could decrease by 75% by the end of the decade (nearly 3.5 billion gallons) leading many plants to shut down.
- Iowa farmers would lose local markets for more than one billion bushels of corn annually.
- Iowa would realize an eventual decline in revenues from ethanol plants of more than \$10 billion per year.

### Summit Carbon Solutions plans to sell their pipeline to be used for other purposes once in operations

There are no plans to sell the pipeline once in operation. However, if the system is sold and the future owner wanted to change the purpose of the system, they would need to go through the entirety of the regulatory process again

including county informational meetings, IUB hearings, and more.



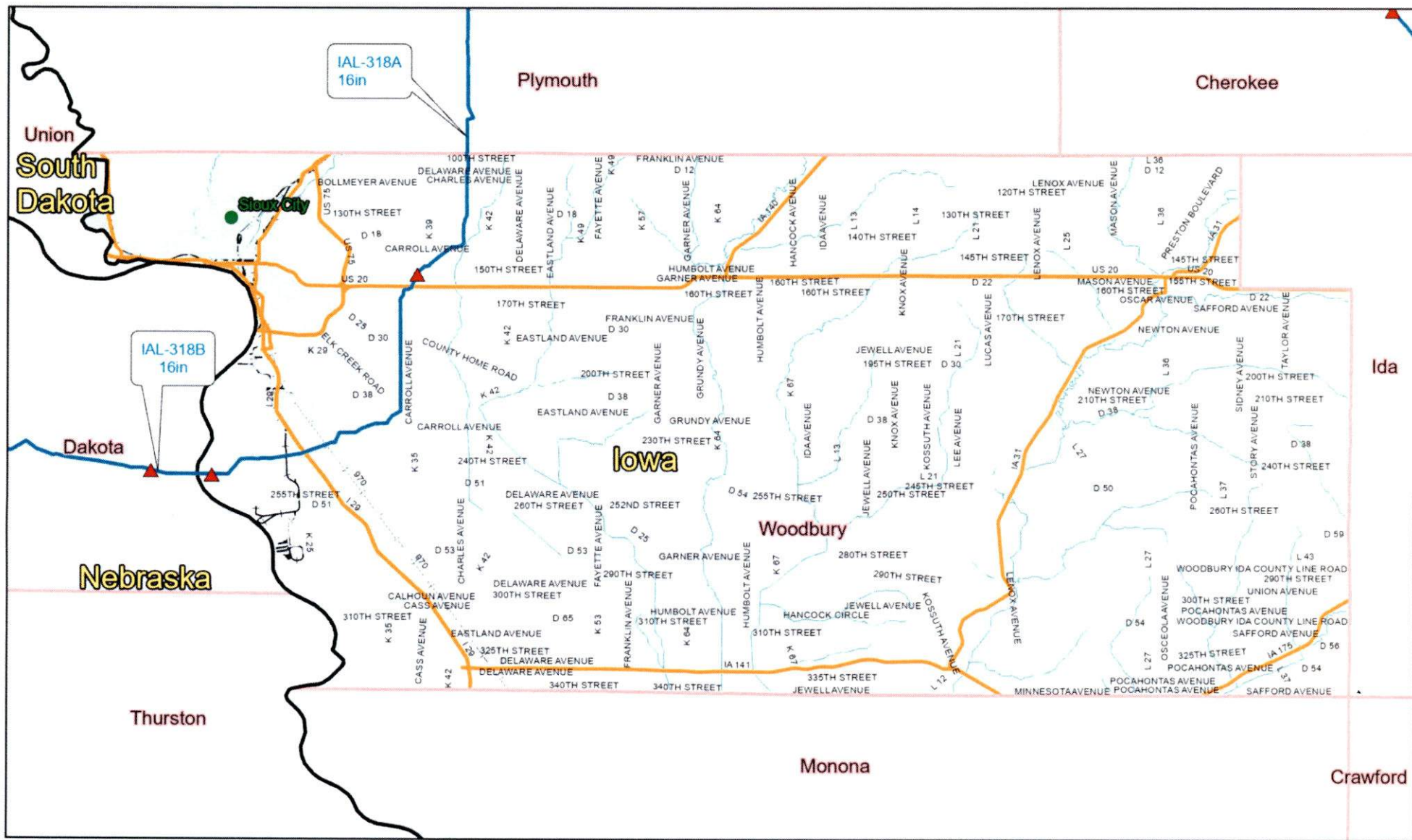
### The Summit Carbon Solutions Pipeline will be used for enhanced oil recovery

Summit Carbon Solutions' project is designed solely to capture, transport, and safely store CO<sub>2</sub>. Our project will not be used for enhanced oil recovery. The company's sequestration site outside of Bismarck, North Dakota is entirely separate from the Bakken or other areas where enhanced oil recovery is possible. Utilizing CO<sub>2</sub> from our sequestration site for enhanced oil recovery in another part of the state would be extraordinarily difficult from an engineering standpoint and the economics create a strong disincentive to do so.

### The Summit Carbon Solutions easement can be sold to another entity that will use the pipeline for something other than CO<sub>2</sub>

Easements state that the pipeline can only be used for the transportation of CO<sub>2</sub>. If sold, the easement language would remain the same.



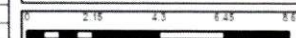


- Participating Ethanol Plant
- County Seat
- Mainline Valve
- Pump Station
- Highly Populated Areas
- State Boundary
- County Boundary
- Route
- Primary Road
- Secondary Road
- Local Road
- Railroad
- River

## 20.62 MILES OF ANTICIPATED PIPELINE WOODBURY COUNTY, IA

Pipeline centerline is based on the 5/1/23 route.

Woodbury County, IA Pipeline Mileage Overview		
COUNTY	Woodbury	DRAWN BY: CC
STATE	IOVA	CHECKED BY:
REV. NO.	REVISION	DATE
1	ISSUED FOR REVIEW	2/10/24
PRELIMINARY ROUTE SUBJECT TO CHANGE		
DATE: 5/1/23	PROJECTION: NAD 83	



DWG: SHEET