

# PROJECT PROFILE PIPELINE INTEGRITY MANAGEMENT FOR CO2 TRANSPORTATION



Client: **SUMMIT CARBON SOLUTIONS** | Location: **IA, MN, ND, SD, & NE**

Audubon was contracted by [Summit Carbon Solutions](#) (SCS) to develop a regulatory compliance program for its new 3,300-mile carbon capture and storage (CCS) pipeline in the midwestern US. The SCS project helps lower the carbon intensity at ethanol plants in the region by safely transporting and permanently storing CO2.

Audubon's scope of work included preparing SCS' public awareness and emergency response plans as well as a [pipeline integrity management](#) program to comply with the Pipeline and Hazardous Materials Safety Administration's (PHMSA's) [49 CFR Part 195](#): Transportation of Hazardous Liquids by Pipeline.

Audubon also provided pipeline predesign and pipeline integrity construction expertise per 49 CFR 195 requirements, including a quantitative risk analysis that considered anticipated pipeline threats and proximity to receptors; a CO2 overland vapor cloud dispersion analysis; an emergency block valve location study; and a high-consequence area (HCA)/emergency flow restriction device (EFRD) analysis.

The integrity services supplied by Audubon enabled SCS to minimize its CO2 pipeline's impact on populated and environmentally sensitive areas and to ensure safe operations.

## Project overview

- 3,300-mile pipeline spanning five midwestern states
- [CO2 capture](#) & storage system
- PHMSA 49 CFR 195 compliance

## Scope of work

- Vapor dispersion modeling
- [Risk analysis](#)
- HCA & EFRD studies
- Risk modeling
- Public awareness & emergency response plans
- Integrity management plan
- [Permitting](#) & regulatory support

