

ILLINOIS SAFE CCS ACT OF 2024: HOW WILL IT IMPACT ILLINOIS MANUFACTURERS?

SCS ENGINEERS

On May 26, 2024, Illinois legislature passed SB1289, which created the Safety and Aid for the Environment in Carbon Capture and Sequestration Act (SAFE CCS Act). The SAFE CCS Act is the result of a two-year effort aimed at regulating CCS projects at the state level and was officially signed into law by Governor J.B. Pritzker on July 18, 2024. This new legislation has a broad scope, bipartisan support, and support from industry, environmental advocacy groups, and other Illinois stakeholder groups. Here, we discuss the implications of this Act and the challenges and opportunities it presents for Illinois CCS project developers.

Several U.S. states have obtained or are currently pursuing primacy for the regulation of Class VI Underground Injection Control (UIC) wells for carbon sequestration through a state agency. In Illinois' case, U.S. EPA Region 5 will continue to hold primacy under the Safe Drinking Water Act (SDWA) for the regulation of Class VI UIC wells. However, the Illinois SAFE CCS Act will prohibit project operators from implementing CCS without meeting additional state-level requirements and receiving state agency approval. The Act is designed to provide clarity for project operators and build state-level accountability into the development and implementation of CCS projects. The Act does not apply to the following:

- Carbon sequestration activities in existence and permitted by U.S. EPA on or before the effective date of the Act;
- Class VI wells for which a Class VI permit application has been filed with the U.S. EPA and received a completeness determination prior to January 1, 2023; and
- Class VI wells for which the sequestration activity will occur on a contiguous property with common ownership where the carbon dioxide is generated, captured, and injected.

Projects that do not meet these criteria will be required to comply with the Illinois

SAFE CCS Act. It is important that Illinois manufacturers who are pursuing or plan to pursue CCS and are subject to the requirements of the Act understand these requirements and the impacts they will have on project schedule, cost, and scope for the permitting, operation, and post-closure phases.

Content of the Act

The content of the Illinois SAFE CCS Act is geared towards providing clarity on several concepts that are not specified under the scope of the SDWA and introducing several state-specific requirements.

Illinois has been the subject of multiple major carbon dioxide (CO₂) pipeline proposals. Many residents are not amenable to the development of these pipelines and have brought forth concerns regarding eminent domain as well as pipeline safety due to the lack of explicit regulations. Two of the major pipeline proposals have been withdrawn in response to these concerns. While the Act will pause pipeline construction for two years, it amends the Carbon Dioxide Transportation and Sequestration Act to explicitly regulate carbon dioxide pipelines and amends the Public Utilities Act to include provisions for these pipelines. The Act places several requirements on pipeline companies to increase their accountability for the safety of the general public and the environment.

The concept of subsurface pore space ownership and the implications for carbon sequestration projects are indeterminate in many states. Questions that face the project developer include:

- How much of the subsurface pore space that will be occupied by the injected carbon dioxide will I need to have under lease?
- How do I get access to wells in my Area of Review to implement corrective action?
- How do I handle potential project interference issues?

This Act helps address these questions by clarifying some of the pore space ownership and access issues and discussing the

rights and responsibilities of both subsurface pore space owners and sequestration operators in Illinois. It additionally allows integration and unitization of ownership interests.

The Act provides more stringent guidelines for financial responsibility and demonstration of financial assurance through the establishment of a Carbon Dioxide Sequestration Fund under the State Finance Act. This includes an annual tonnage fee established at \$0.31 to \$0.62 per ton injected and an initial one-time permit application fee of \$60,000. Written cost estimates must also be updated annually through a permit modification.

The Act's new permit application requirements expand beyond the scope of the SDWA, including:

- Air Construction Permit
- Baseline Monitoring Report for air and soil gas
- Expanded Emergency Response Plan and Remedial Action Plan
- Water Impact Assessment Report
- Closure Plan that specifies a Post-Injection Site Care period of no less than 30 years
- Emphasis on Public Participation

In addition to the new requirements introduced, the Act prohibits:

- The injection of CO₂ produced by a CO₂ capture project into Class II UIC wells (or Class VI UIC wells converted from Class II UIC wells) for the purposes of enhanced oil or gas recovery; and
- Selling or transporting concentrated CO₂ produced by a CO₂ capture project for use on enhanced oil or gas recovery operations.

Challenges and Opportunities Presented by the Act

With these new requirements come new challenges. Illinois projects will face additional regulatory obligations and as a result, higher compliance costs, longer review and approval times, and the need to demonstrate long-term financial assurance.

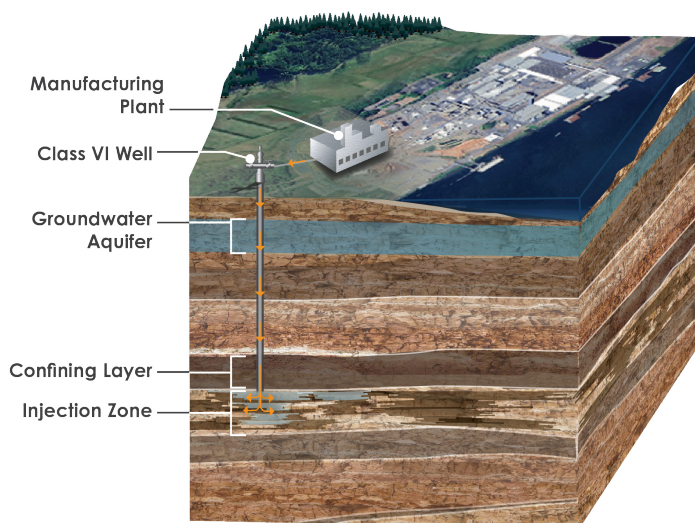
Additionally, there will be some uncertainty regarding how these new regulations will be interpreted and enforced, which may lead to increased public and environmental scrutiny as well as a need to adopt more advanced technologies and best practices. Fortunately, there are strategies available to navigate these challenges.

The newly passed Illinois SAFE CCS Act is likely to impose additional permitting and reporting complexities for Class VI project developers in Illinois that go above and beyond requirements for projects regulated through the U.S. EPA. Given previous experience working on CCS projects in states that have established Class VI regulatory programs, these complexities will impact project scope, schedule, and budget going forward. This legislation brings forth emphasis on components that are otherwise in the background through the SDWA,

such as designing and establishing shallow groundwater, soil, and air monitoring networks; project closure and ensuring compliance with the specific requirements of Title 35 Illinois Administrative Code Part 620 for groundwater protection; revisiting project cost estimates at least annually; and guiding public participation and stakeholder involvement during the permitting process. CCS project developers in Illinois should start considering strategies for navigating these complexities early in the project development process, even as early as the project scoping and feasibility study stage, by engaging professionals who are experienced with navigating the regulatory framework in Illinois. These complexities also present an opportunity to get ahead of the curve from an environmental responsibility perspective and challenge project operators to develop exceptionally safe

CCS projects. On the whole, this legislation will provide clarity for prospective project owners interested in developing value-added products based on low-carbon intensity ethanol. Value-added products such as sustainable aviation fuel and other chemicals can expand the market for low-carbon intensity ethanol and maximize the impact of financial incentives for carbon sequestration projects. ♦

This year, the IMA co-founded the Capture Jobs Now Coalition and successfully championed legislation (P.A. 103-0651) establishing a regulatory framework to smartly and safely advance carbon capture and storage in Illinois.

The SCS ENGINEERS logo is displayed in a red banner at the top of the image. Below the logo is a photograph of two male engineers wearing hard hats and safety vests, standing in an industrial facility with large pipes and machinery. One engineer is holding a tablet and pointing at it, while the other looks on.

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