CARBON CAPTURE COALITION

Class VI Fact Sheet

CLASS VI WELLS BACKGROUND:

- Class VI wells are used to inject CO_2 into deep geologic formations for the purpose of safely and permanently storing CO_2. Geologic storage of CO_2 occurs about 1 mile below the earth's surface, far beneath underground sources of drinking water; EPA established this well class to provide specific regulations for such projects. Additionally, EPA tailored Class VI program rules to address the permanent storage of CO_2 and ensure that wells are appropriately sited, constructed, tested, monitored, funded, and closed once injection activities are completed.

- Project developers looking to store CO_2 securely and permanently underground must receive permits to construct Class VI wells from EPA or the relevant state, territory, or tribe that's been granted primary enforcement authority, referred to as primacy, by EPA. States, territories, or Tribal Nations can be approved for primacy only if their regulations meet or exceed the EPA's UIC program regulations.

- To date, the EPA has permitted four Class VI wells, with draft permits for four additional wells pending. With the influx of project announcements over the last several years, as of March 2024, there are now 130 individual well permit applications for a total of 44 projects that are currently pending at EPA. Under state primacy programs, the state of North Dakota has issued six permits for Class VI wells. Wyoming has issued three Class VI permits, denied one permit, and has six additional permits under review, all for the same project. Additionally, Louisiana, which recently received Class VI primacy, currently has 58 wells under review for 24 projects.

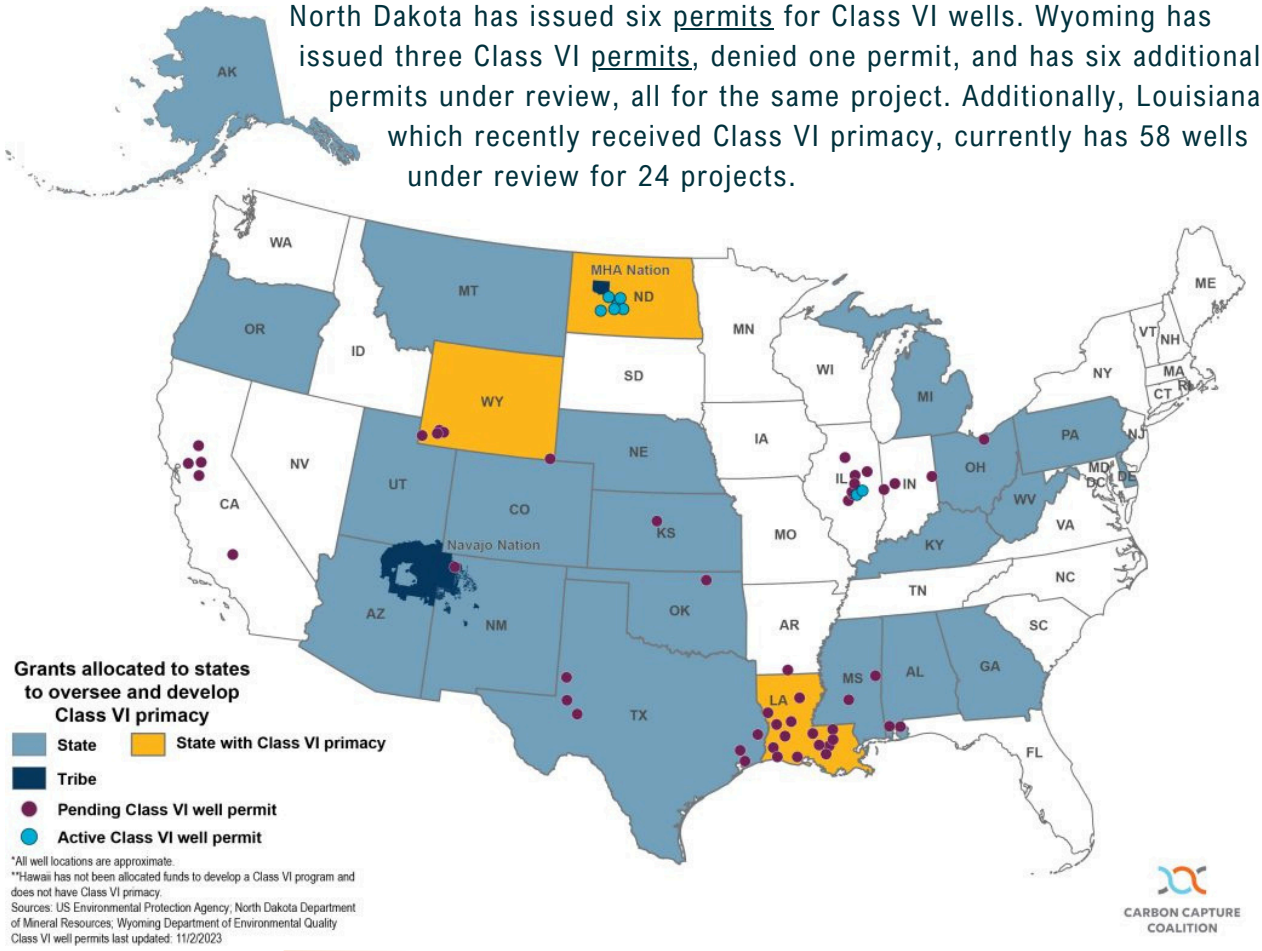

Figure 1: EPA State Class VI primacy grant allocations, active and pending Class VI wells (as of February 2024)

- Timely and rigorous permitting of appropriate geologic storage by state and federal regulators is the lynchpin in scaling safe, reliable, and permanent sites for geologic storage of captured CO_2. Here are a few key takeaways to ensure that geologic storage capacity can scale to meet the anticipated need from announced projects:

    - Saline geologic formations are essential to successfully deploying carbon management technologies at the rate and scale necessary to meet US and global climate goals;

    - Project developers and communities could benefit from tremendous economic and job opportunities in carbon management project deployment, thanks to sustained federal investments in the technology, geologic storage, and industrial decarbonization in recent legislation.

    - Robust federal funding enacted as part of annual appropriations and the Bipartisan Infrastructure Law will provide essential support for project deployment, including by expanding the capacity of federal and state authorities to permit geologic storage in saline formations and providing funds for further geologic storage site characterization.

THE US HAS AMPLE CAPACITY TO SAFELY, PERMANENTLY STORE CAPTURED CO_2 IN GEOLOGIC FORMATIONS

- Safe and permanent injection and storage of CO_2 in deep geologic formations represents a well-understood commercial practice worldwide, with the longest operating CO_2 storage facility, the Sleipner carbon capture and storage project operating offshore of Norway in operation since 1996.

- The United States' geology offers vast potential to permanently and securely store captured carbon deep underground in appropriate geologic formations, as detailed in the US Department of Energy (DOE) Carbon Storage Atlas. According to DOE, the country's geologic storage capacity is anywhere from 2.2 trillion to 21.2 trillion metric tons of CO_2. For context, US greenhouse gas emissions totaled approximately 6,340 million metric tons of CO_2 in 2021; in essence, we won't run out of available geologic storage.

- Here in the US, DOE has been studying and field-testing geologic storage for over 20 years in addition to more than fifty years of experience storing CO_2 in oil and gas fields. Their work has overwhelmingly demonstrated that geologic storage of CO_2 is a safe and permanent practice with a very low risk of CO_2 migrating outside the target formation when properly sited and carried out. To that point, no DOE-supported storage project has "observed migration of CO_2" outside the intended storage formation.

BUILDING ON CARBON STORAGE MOMENTUM

- Domestically, the ingredients for success are coming together — geologic storage potential, available technologies ready to deploy, and a strong foundation of supportive federal policies to ensure that carbon management projects can scale to help reach midcentury net-zero climate goals.

- To attain geologic storage on the needed scale, policymakers must provide the resources, staffing, technology, and training to state and federal regulatory authorities necessary for deployment and ensure that proper regulations are in place to allow storage to move forward at the scale necessary to mitigate the worst impacts of climate change.