Class VI Wells: Permitting & Primacy for Secure, Long-Term Storage of CO₂

Class VI Wells Background:

- Carbon capture projects that seek to inject carbon dioxide into appropriate geologic formations for the sole purpose of long-term storage are subject to the Environmental Protection Agency’s Class VI rule, which is part of EPA’s Underground Injection Control (UIC) Program. UIC establishes federal minimum technical criteria to protect underground sources of drinking water.

- EPA adopted the Class VI rule in September of 2011, providing a regulatory framework to ensure that large volumes of CO₂ captured from industrial facilities, power plants and ambient air can be safely and securely stored underground long-term.

- The Class VI rule includes requirements for well siting, permitting, operation, testing and monitoring, post-injection site care and site closure. Reporting under GHGRP Subpart RR is required for all facilities with a Class VI permit.

- Currently, there are two active Class VI well permits in the United States, at Illinois Industrial Carbon Capture and Storage Facility, which is storing CO₂ from ADM’s Decatur IL corn processing facility. There are 180,000 active Class II wells (oil & gas).

- Eight states (KS, LA, MD, MT, ND, PA, OK, WY) have formed a memorandum of understanding committing to the establishment and implementation of a Regional CO₂ Transport Infrastructure Action Plan through the State Carbon Capture Working Group. Activities include collaboration on Class VI.

EPA UIC Program and State Primacy:

- The UIC Program regulates the function, construction, operation and closure of various types of injection wells. Under the UIC Program, states can apply to EPA for delegation of primacy for over well classes, allowing for states, not EPA, to hold primary enforcement responsibility of federal standards. Currently 34 states have primacy over several aspects of the UIC program.

- North Dakota and Wyoming have been granted primacy to regulate Class VI wells. Louisiana has applied to EPA for primacy, three additional states are in the pre-application phase, and additional states have expressed interest.

The Need to Invest in Federal Class VI Permitting Capacity:

- Increasing the capacity at EPA to both permit Class VI wells and review Class VI primacy applications in a timely manner will be critical to achieving economywide scale of carbon capture technologies and to meet midcentury climate goals. Already, EPA is taking steps to increase capacity to respond to the anticipated need, thanks in part to a $3 million increase to the Class VI program for FY21, but additional appropriations are needed to increase capacity at EPA.

- Of the nearly 40 carbon capture projects that have been publicly announced, half have declared their intent to store in saline formations and will require Class VI well permits. Additionally, the EPA reports that they have received more than 50 inquiries regarding Class VI well permits.

- Recently introduced legislation recognizes the need to increase the capacity and pace of Class VI permitting at EPA. The bipartisan, bicameral SCALE Act (H.R. 1992, S. 799) would increase funding for permitting Class VI wells at EPA and provide grants for states to establish their own Class VI permitting programs.