A Significant First Step For Pa. Carbon Capture Programs

By Craig Wilson, Ankur Tohan and Maureen O'Dea Brill (April 5, 2023)

Pennsylvania has submitted a letter of intent to the U.S. Environmental Protection Agency indicating its interest in a new \$50 million grant program established through the Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law, to support states, tribes and territories in taking primary regulatory authority of Underground Injection Control Class VI programs.

These programs regulate the geologic sequestration of carbon dioxide and are viewed by many as critical to reducing CO2 emissions to the atmosphere. Following the March 20 deadline for submitting letters of intent, the EPA is now examining the amount of interest expressed in the grant program and will determine funding allocations and award the full \$50 million in a one-time distribution.

While the application process for obtaining Class VI primacy is iterative and the time frame can be long, the benefits of state control of the program are meaningful, and include the potential for more efficient permit application processing times and the ability to address regional issues of concern.

Pennsylvania's significant first step appears to be a positive development for those involved with, or who will benefit from, carbon capture utilization and storage within the commonwealth.

Background on Class VI and the UIC Program

In order to protect underground sources of drinking water, the Safe Drinking Water Act requires that the EPA regulates the underground injection of fluids for storage or disposal.

In fulfilling this requirement, the EPA has established minimal federal requirements for six classes of injection wells under its UIC program. The EPA developed each of the six well classes based on the type and depth of the injection activity and the potential for that injection activity to result in endangerment of an underground drinking water source.

In 2010, in anticipation of the role of geologic sequestration in reducing CO2 emissions to the atmosphere, the EPA established Class VI to regulate wells used to inject CO2 in deep underground geologic formations for long-term storage or use.[1]

The EPA's minimum requirements for Class VI wells are comprehensive and include technical criteria for the permitting, geologic site characterization, area of review and corrective action, financial responsibility, well construction, operation, mechanical integrity testing, monitoring, well plugging, post-injection site care and site closure.

Since promulgating the Class VI rule in 2010, the EPA has approved only six Class VI wells. Of the six permits issued, only two wells were constructed before the applicable permits expired. Both wells are located at an ethanol plant in Illinois. At present, nearly 50 Class VI



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well applications are pending before the EPA.

The Primacy Application Process

Pennsylvania can apply for primary enforcement responsibility to implement all or a portion of the UIC program. This is called primacy. Specifically, Pennsylvania can apply for primacy of all well classes, only Classes I through V, or only Class VI.

If Pennsylvania is awarded funding and follows its intent to pursue primacy, it would need to submit a formal application including the following six core elements, all of which still need to be developed:

1. A letter from the governor requesting approval for UIC program primacy;

2. A narrative description of the scope, structure, coverage and processes of the state program;

3. A certification by the attorney general asserting that the state's statutes, regulations and judicial decisions demonstrate adequate authority to administer the UIC program;

4. A memorandum of agreement between the state and the EPA describing the administration, implementation, and enforcement of the state's UIC program;

5. A copy of the state's UIC statutes and regulations; and

6. Documentation of the public participation process the state used to notify the public of its intent to apply for primacy.

The process for incorporating the federal minimal requirements for Class VI wells into Pennsylvania law, an essential step to obtaining primacy, will require Gov. Josh Shapiro and the Pennsylvania Department of Environmental Protection to work closely with a divided Pennsylvania General Assembly.

Certain nongovernmental organizations, opposed to industrial operations within the commonwealth, may attempt to undermine the required statutory and regulatory updates during this process or bring other challenges.

The EPA's ultimate review of an application for primacy under the UIC program would be detailed and time-consuming, and it would involve a process for public comment and potentially public hearings.

States With Primacy of Class VI and Those Seeking Primary

While a majority of states, excluding Pennsylvania, have primacy programs for some or all types of wells in Classes I through V, currently only two states, North Dakota and Wyoming, have primacy programs for Class VI wells.

Also, only North Dakota has issued Class VI permits. Those permits, issued in 2021 and 2022, authorize UIC wells for geologic storage of CO2 at an ethanol facility and a coal-based power plant respectively.

Four other states have commenced the primacy application process, but they do not have primacy programs for Class VI yet. These states are Arizona, Louisiana, Texas and West

Virginia. Other states, such as Colorado, are actively considering whether to begin the application process.

Time Frame for Obtaining Primacy for Class VI

When Pennsylvania ultimately submits a primacy application, it is not clear how long the EPA will take to approve the application.

The EPA took five years to approve North Dakota's primacy application and one year to approve Wyoming's application. Louisiana, the third state to seek primacy of Class VI, initiated the application process in April 2021, and is still awaiting a decision from EPA more than 650 days later.

While Pennsylvania should benefit from the EPA's prior experience considering primacy applications and from the current administration's commitment to addressing climate change, Pennsylvania will nevertheless enter the queue behind Arizona, Louisiana, Texas and West Virginia, all of which have already commenced the primacy application process.

What This Means for Pennsylvania

By achieving primacy, Pennsylvania could develop a regulatory framework that streamlines the permitting process. While the EPA's prior permit approvals have taken more than three years, North Dakota has demonstrated that the process can take as little as eight months.

Achieving primacy would also eliminate the need for a CO2 sequestration project applicant to obtain both a Class VI permit from EPA and a conventional well permit under the state's Oil and Gas Act from the Pennsylvania Department of Environmental Protection, and it would limit any appeal of a permit to the state permit appeal process.

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[1] See 40 C.F.R. §§ 146.81–.95; Federal Requirements Under the Underground Injection Control (UIC) Program for Carbon Dioxide (CO2) Geologic Sequestration (GS) Wells, 75 Fed. Reg. 77,230 (Dec. 10, 2010).