

§47CSR13 – Underground Injection Control Rule Response to Public Comments from June 12-July 18, 2023

The WV Department of Environmental Protection (WVDEP), Division of Water and Waste Management (DWWM) commenced the public comment period for proposed legislative rule 47 C.S.R. 13 on June 12, 2023. The public comment period concluded on July 18, 2023, after satisfying the minimum 30-day period. A public hearing was held in the Coopers Rock Conference Hall, WVDEP in-person and virtually via google meet on July 18, 2023, at 5.30PM to accept oral and written comments regarding the proposed revisions to legislative rule 47 C.S.R. 13.

The comment received in the public hearing was also received by Email. The comments received and the WVDEP's responses to comments are provided in this document.

There were no changes made to 47 C.S.R. 13 because of the comments received.



July 18, 2023

Mr. Albert Barbery
601 57th Street S.E.
Charleston, WV 25304

RE: Public Comment on Underground Injection Control Rule 47 C.S.R. 13
Electronically Submitted to albert.barbery@wv.gov

Dear Mr. Barbery:

The American Petroleum Institute (API) represents all segments of America's natural gas and oil industry, which supports nearly 11 million U.S. jobs and is backed by a growing grassroots movement of millions of Americans. Our approximately 600 members produce, process, and distribute the majority of the nation's energy, and participate in *API Energy Excellence*[®], which is accelerating environmental and safety progress by fostering new technologies and transparent reporting. API was formed in 1919 as a standards-setting organization and has developed more than 800 standards to enhance operational and environmental safety, efficiency, and sustainability.

API standards are incorporated into federal regulations and state rules across the nation. API encourages and participates in the development of state regulations and other regulatory documents that are protective of public health and safety, the environment, and the industry workforce. In this context, API offers the following comments and looks forward to continuing to work with the WV Department of Environmental Protection (DEP) on this proposed rule:

§13.9. Post-injection Site Care and Site Closure

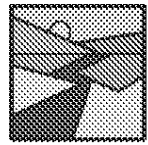
Subsection 13.9.3, relating to Demonstration of alternative post-injection site care timeframe, reads "At the Director's discretion, the Director may approve, in consultation with EPA, an alternative post-injection site care timeframe other than the 50 year default..." Alternatively, W.Va. Code 22-11B-12c, relating to Underground Carbon Dioxide Sequestration and Storage, provides that a completion certificate may not be issued until at least 10 years after carbon dioxide injections end. Accordingly, we suggest that Subsection 13.9.3 be revised as follows to provide context for the use of alternative time periods:

13.9.3. Demonstration of alternative post-injection site care timeframe. At the Director's discretion, the Director may approve, in consultation with EPA, an alternative post-injection site care timeframe not to exceed 25 years, other than the 50 year default, if an owner or operator includes a 50 year post-injection site care narrative in the Class VI UIC permit application, and can substantially demonstrate during the permitting process that an alternative post-injection site care timeframe not to exceed 25 years is appropriate, in contrast with the 50 year default, and ensures non-endangerment of USDWs... [emphasis added]

We thank you for your time and consideration of these comments. To the extent that you have questions regarding these suggestions, or would like to discuss them further, please do not hesitate to contact us.

Sincerely,

Stephanie Catarino Wissman
Executive Director, API Pennsylvania
Appalachia Region



WEST VIRGINIA RIVERS

July 18, 2023

WV Department of Environmental Protection

601 57th St. S.E.,

Charleston, WV 25304

Submitted electronically to Johnsely.Cyrus@wv.gov and albert.barbery@wv.gov

RE: Proposed amendments to Underground Injection Control, 47CSR13

West Virginia Rivers Coalition supports WVDEP's proposed amendments to this rule that update and formalize current requirements to better ensure consistency with federal regulations.

Though there are no substantive revisions proposed for Class 6 wells for carbon capture and sequestration, the notice on this rule recognizes West Virginia intends to apply for primacy over Class 6 wells. We are concerned that WVDEP remains understaffed and underfunded and the additional responsibility over the Class 6 well program would only further strain state regulatory capacity.

We have questions about WVDEP's plans for building the capacity and technical expertise to manage such a new and highly complex program. Our questions about Class 6 primacy implementation include:

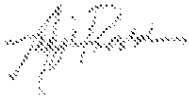
What is WVDEP's plan, timeline and funding mechanisms for increasing staffing to manage the program?

What technical expertise will be needed to properly manage the program, and how does WVDEP plan to develop and/or access that expertise?

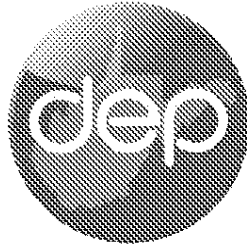
How does WVDEP plan to integrate environmental justice protections into the program?

Injected carbon varies in purity, allowing for the presence of impurities, co-pollutants, and other contaminants that pose risks to water resources. This risk is significantly increased when considering the volume of orphan and abandoned wells in West Virginia. How does WVDEP plan to analyze and mitigate risk through the potential migration of carbon dioxide into water resources?

Thank you for your consideration and response to these comments,

A handwritten signature in black ink, appearing to read "Angie Rosser". The signature is stylized and cursive.

Angie Rosser
Executive Director



west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street, SE
Charleston, WV 25304
Phone: 304-926-0495 / Fax: 304-926-0463

Harold Ward, Cabinet Secretary
dep.wv.gov

July 24, 2023

Stephanie Catarino Wissman,
American Petroleum Institute (API)
Angie Rosser,
WV Rivers Coalition

Re: Proposed Rule changes to 47CSR13
Underground Injection Control Rule

Dear Commenters,

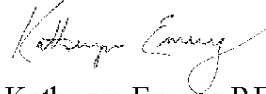
As you are aware the West Virginia Department of Environmental Protection (WV DEP) prepared a proposed rule change for 47CSR13, the Underground Injection Control (UIC) Rule, which was filed with the Office of the Secretary of State and posted on their website. The WV DEP, Division of Water and Waste Management (DWWM) commenced the public comment period for proposed legislative rule on June 12, 2023. The public comment period concluded on July 18, 2023, after satisfying the minimum 30-day period. A public hearing was held in the Coopers Rock Conference Hall, WVDEP in-person and virtually via google meet on July 18, 2023, at 5.30PM to accept oral and written comments regarding the proposed revisions to 47CSR13.

The Agency would like to thank each commenter who reviewed the proposed Rule changes, participated in the hearing, and who submitted comments for the benefit of the citizens of the state. Comments were received and WV DEP's response to each is contained below. There were no changes made to 47CSR13 based on the comments.

Promoting a healthy environment.

If you have any questions or comments, please contact Albert Barbery, of my staff, at 304-926-0499 extension 43769.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kathryn Emery".

Katheryn Emery, P.E.
Director

KDE/amb

cc: Yogesh Patel, WVDEP – DWWM

Commenter: Stephanie Catarino Wissman - American Petroleum Institute

Comment 1:

API standards are incorporated into federal regulations and state rules across the nation. API encourages and participates in the development of state regulations and other regulatory documents that are protective of public health and safety, the environment, and the industry workforce. In this context, API offers the following comments and looks forward to continuing to work with the WV Department of Environmental Protection (DEP) on this proposed rule:

§13.9. Post-injection Site Care and Site Closure

Subsection 13.9.3, relating to Demonstration of alternative post-injection site care timeframe, reads “At the Director's discretion, the Director may approve, in consultation with EPA, an alternative post-injection site care timeframe other than the 50 year default...” Alternatively, W.Va. Code 22-11B-12c, relating to Underground Carbon Dioxide Sequestration and Storage, provides that a completion certificate may not be issued until at least 10 years after carbon dioxide injections end.

Accordingly, we suggest that Subsection 13.9.3 be revised as follows to provide context for the use of alternative time periods: 13.9.3. Demonstration of alternative post-injection site care timeframe. At the Director's discretion, the Director may approve, in consultation with EPA, an alternative post-injection site care timeframe not to exceed 25 years, other than the 50 year default, if an owner or operator includes a 50 year post-injection site care narrative in the Class VI UIC permit application, and can substantially demonstrate during the permitting process that an alternative post-injection site care timeframe not to exceed 25 years is appropriate, in contrast with the 50 year default, and ensures non-endangerment of USDWs... [emphasis added]

We thank you for your time and consideration of these comments. To the extent that you have questions regarding these suggestions, or would like to discuss them further, please do not hesitate to contact us.

Response 1:

This section of the UIC Rule was adopted to be consistent with federal requirements. Further, requirements of a 25 year timeframe are considered limiting to the applicant. There is a 10 year minimum for a completion certificate and an alternative timeframe can be approved as long as it is demonstrated that the alternative post-injection site care timeframe is appropriate, in contrast with the 50 year default, and ensures non-endangerment of USDWs.

Commenter: WV Rivers Coalition

Comment 1:

We are concerned that WVDEP remains understaffed and underfunded and the additional responsibility over the Class 6 well program would only further strain state regulatory capacity.

We have questions about WVDEP's plans for building the capacity and technical expertise to manage such a new and highly complex program. Our questions about Class 6 primacy implementation include:

What is WVDEP's plan, timeline and funding mechanisms for increasing staffing to manage the program?

Response 1:

The DWWM will consider additional staffing, if or when, justifications can be made. Currently, all Groundwater/UIC Program employees contribute to the operations of the UIC Program, thanks to cross-training. The group is led by a program manager and one new position has been added. The new position has been classified by the Department of Personnel as an Environmental Resources Analyst and will be devoted to Class 1 and Class 6 program development and implementation. That position has been filled by a Geologist who holds a master's degree. The field staff visit any facility that has the potential to contaminate groundwater but prioritize UIC sites.

There are two full-time field staff responsible for overseeing the 55 counties in our state. UIC is the priority and, until recently, the strategy has been focused on Class 5 Wells. The inspection strategy gives attention to all counties with the goal of visiting each county, twice per year, and the inspection strategy has been updated to emphasize inspecting future Class 1 and 6 Wells.

DWWM plans to determine demand for Class 6 Wells before justifying the addition of UIC staff. The cost of running the program will be adjusted based on the need for additional technical reviewers and field staff. DWWM's UIC Program is supported from permit and groundwater protection fees, along with grants from the EPA. Permit Application Fees are authorized by 47 CSR 9. Annual permit fees are due on the anniversary date of the initial permit issuance. Class 1 fees are set at a standard annual rate and Class 6 fees are planned to be at a fixed annual rate as well.

Comment 2:

What technical expertise will be needed to properly manage the program, and how does WVDEP plan to develop and/or access that expertise?

Response 2:

Technical expertise including background or training in geology and well construction will be needed to develop and manage the program. DWWM has geologists, individuals with well construction knowledge, and received training on UIC Inspections. The DWWM plans to have employees attend training programs on Class 6 injection wells provided by EPA, or third parties. The DWWM has a working relationship with the West Virginia Geological and Economic Survey (WVGES) that includes consulting on injection well permit applications.

Comment 3:

How does WVDEP plan to integrate environmental justice protections into the program?

Response 3:

The DWWM recognizes that environmental justice (EJ) considerations are an important part of the Class 6 permitting process. As a potential screening tool for pre-decisional use, EJSCREEN can be used as a starting point for conducting further analysis. However, EJSCREEN will not be the definitive tool for a screening-level analysis. Peer-reviewed literature, stakeholder input, and other available forms of data may be used to evaluate the need for the applicant to conduct a more in depth EJ analysis.

EJ reviews will be required for communities within the region surrounding the geologic sequestration project where underground sources of drinking water (USDWs) may be endangered by injection activity, known as the area of review (AoR). Injection wells are regulated under the DWWM's UIC Program. Surface facilities not associated with injection operations such as pipelines and facilities in other states are beyond the regulatory scope of the UIC Program. As such, the EJ review as part of the Class 6 injection well application will be limited to the geographic extent of the AoR.

Comment 4:

Injected carbon varies in purity, allowing for the presence of impurities, co-pollutants, and other contaminants that pose risks to water resources. This risk is significantly increased when considering the volume of orphan and abandoned wells in West Virginia. How does WVDEP plan to analyze and mitigate risk through the potential migration of carbon dioxide into water resources?

Response 4:

The DWWM Class 6 UIC program's primary objective is to protect USDWs, groundwater, and surface water sources from any and all potential contaminants. The AoR which includes, but is not limited to; target injection zone, reservoir cap lithology, faults, fractures, monitoring wells, groundwater wells, oil and gas wells etc., will be reviewed and modeled using state of the art reservoir modeling software for injectate plume assessment and projection before permit issuance. After permit issuance additional projection modeling and assessment will be utilized to track and assess injectate activities throughout the life of the project to ensure that no carbon dioxide, or any associated trace materials, migrate beyond the target injection strata or trapping lithology to create potential contamination of USDWs, groundwater, or surface water sources.