



June 17, 2022

Mr. Chairman and Commissioners,

Denbury Carbon Solutions, LLC ("DCS") greatly appreciates the opportunity to comment on the Texas Railroad Commission's Proposed Amendments to 16 Texas Administrative Code Chapter 5 and Pre-Application for Class VI Primacy from EPA. DCS supports the Commission's application for primacy from the EPA for the Class VI program. After reviewing the proposed amendments, DCS submits the following comments for the Commission's consideration.

§5.202(d)(2)(A)(ii) – Changes in CO₂ stream chemical composition as a cause for permit modification or reissuance

DCS requests that the clause "change in chemical composition of the CO₂ stream" be clarified. DCS notes that if the CO₂ stream is supplied by numerous captured emission sources, there is potential for minor or insignificant fluctuations in CO₂ stream composition to occur as the volume delivered by the various emitters fluctuates and as new emitters are added to the system. While DCS does not believe the Commission intended for such minor fluctuations to constitute a "change," DCS requests that a reasonable threshold of molar percentage change in chemical composition be adopted.

§5.203(d)(1)(A)(i)(III) – Delineation of AOR

DCS recommends changing the clause "until the plume ceases" to "until the plume stabilizes" to better express the delineation of the AOR. Wyoming law takes this approach; plume stabilization is defined as being "achieved when the carbon dioxide stream that has been injected subsurface essentially no longer expands vertically or horizontally and poses no threat to underground sources of drinking water, human health, safety, or the environment, as demonstrated by a minimum of three (3) consecutive years of monitoring data."

§5.203(e)(1)(B)(v) – Long string requirements for injection well construction

DCS recommends changing the requirement that the long string "must extend through the injection zone" to "must extend to the injection zone". This change would allow for the potential use of a chrome liner to be run through the injection interval which could reduce cost and improve the quality of the cement job. DCS notes that Wyoming law uses similar language.



§5.206(b)(1) – Endangerment of existing or prospective mineral resources

DCS recommends that the word “injure,” found in the clause “the injection and geologic storage of anthropogenic CO₂ will not endanger or injure any existing or prospective oil, gas, geothermal, or other mineral resource, or cause waste” be clarified. DCS recommends that “injure” be more clearly defined to reduce the scope of potential interpretations.

§5.206(d)(2)(D) – Annulus pressure

DCS recommends changing the clause “maintain on the annulus a pressure that exceeds the operating injection pressure” to “maintain on the annulus a *bottom hole* pressure that exceeds the operating injection pressure.” Given the density gradient difference between packer fluid and CO₂, applying a higher annulus pressure at the surface would result in a significant pressure differential downhole.

§5.206(i) – Commission witnessing of testing and logging

DCS recommends that the requirement of a 30 day notice to the Commission prior to any planned testing or logging be reduced to a 7 day notice. The rules currently require no more than 48 hours’ notice. DCS believes providing 7 days’ notice would allow operators to have scheduling flexibility and limit downtime while still providing the Commission with the opportunity to witness the activity.

Sincerely,

A handwritten signature in black ink, appearing to read "Kris Roberson", written over a horizontal line.

Kris Roberson
Director of CCUS Operations