

Captured Carbon and Pore Space - What Are They and Who Owns Them?

By Marc Mignault, Esq.

As the energy industry and manufacturers across the United States are looking for new ways to decarbonize operations, maintain business while combatting climate change, and trying to meet new regulations, powerplant operators are looking to carbon capture, utilization, and sequestration (or storage) ("CCUS"). As with any new technology, operators will need to know how begin such operations, what their jurisdiction requires for permitting and regulation, and how the various rights involved are to be protected.

West Virginia has created a comprehensive statutory and regulatory regime for CCUS in the state. However, there remains areas likely to be very contentious amongst land and mineral owners as operators begin utilizing this technology. Questions likely to arise are: where is the carbon being stored, who owns the carbon, who owns that subterranean space, and how are other subterranean and surface rights affected by such storage?

First and foremost, CCUS is a technology where carbon gases are separated from manufacturing processes including oil & gas production and powerplant operations. Rather than burning and releasing those gases into the atmosphere, they now can be captured and stored in deep geologic formations where the harmful gases can be kept permanently or until pulled out of storage for use in other commercial or industrial purposes, such as making fertilizer, hydrogen, or other useful substances.

Once the carbon gases are separated out of processes, operators need somewhere to put them and maintain them in a safe and environmentally friendly way. That is where "pore space" comes into play. "Pore space" means a cavity or void, whether naturally or artificially created, in a subsurface stratum and is also known as container space or storage rights. In more basic terms, pore space is microscopic space between particles of rock or sand. Pores are actually where oil and natural gas occur, and once minerals are produced from formations, the pores remain empty. This is what makes a developed oil or gas field an excellent space full of safe and empty pore space. However, pore space is present in all formations, regardless of whether there has been oil and gas exploration so long as other geological features remain. This opens the door to salt deposits, brine deposits, and other mineral formations being used as storage spaces for carbon gases.

With the gas separated and pore space identified, now comes the task of determining who owns that space and how are the various rights involved protected. Under West Virginia's current statutes and regulations, title to pore space in all strata underlying the surface of lands and waters is vested in surface estate owner. As such, any conveyance of title to the surface of real property thereby conveys the pore space in all strata underlying the surface of that real property.

INDUSTRY ANALYSIS

Unlike a mineral estate, title to pore space may not be severed from title to the surface of the real property overlying the pore space. Any instrument or agreement seeking to sever title to the pore space from title to the surface estate is deemed void and unenforceable as to such severance.

However, West Virginia's CCUS statutes do not affect transactions before May 30, 2022, but the terms of those transactions must be clear and unambiguous on their face which severed pore space from title to the surface estate. Even if such a transaction occurred, there remains a rebuttable presumption that in all transactions prior to May 30, 2022, the pore space remains vested with the surface owner unless the transactional document has a clear and unambiguous reservation, conveyance, and/or severance of the pore space from the surface upon its face.

West Virginia's CCUS statutes do not change the common law as it relates to the rights belonging to, or the dominance of, the mineral estate associated with a storage facility. Mineral owners retain the right to drill or bore through a carbon storage facility if done in accordance with the WVDEP's underground injection control permit rules or other legal requirements intended to protect the storage facility against the escape of carbon gases.

The carbon gas which is separated during operation processes is owned by the operator, and if they are also the owner of the storage facility, then they own the carbon gas injected into and stored in the approved storage reservoir. The storage operator maintains ownership and control of the carbon gas until a Completion Certificate is issued by the Secretary of the West Virginia Department of Environmental Protection ("WVDEP"). While the storage operator has ownership of the carbon gas, they remain liable for any damage the gas may cause, including damage caused by gas that escapes from the storage facility.

Once a Completion Certificate is issued and becomes effective, the ownership of the stored carbon gas is automatically transferred to the owner of the pore space. This transfer occurs without payment of any compensation. The pore space owner's rights include all rights and interests in the stored carbon gas and any associated leasing rights therewith. The liability and regulatory requirements associated with the stored carbon gas are the responsibility of the state. The state will defend, indemnify, and hold harmless the pore space and surface owners against all claims, but the state may only use funds from the created Carbon Dioxide Storage Facility Trust Fund for such purposes.

The storage operator and others who transported and/or generated the stored carbon gas retain no liability and regulatory requirements associated with the storage facility. Any bonds posted by the storage operator are released following the issuance and effective date of a Completion Certificate.

Following a Completion Certificate, monitoring and managing the storage facility becomes the state's responsibility, and is overseen by the Secretary of the WVDEP utilizing only funds from the created Carbon Dioxide Storage Facility Trust Fund until the federal government assumes responsibility for the long-term monitoring and management of facilities.

INDUSTRY ANALYSIS

If there are multiple pore space owners involved in a proposed storage facility, then the storage operator must try to obtain consent of all pore space owners. If consent from all owners cannot be obtained, then the Oil and Gas Conservation Commission (“Commission”) may require nonconsenting owners to be included in the storage facility against their wishes. The storage operator must negotiate with the pore space owners, and if the operator obtains at least 75% of the pore space interests, then all nonconsenting pore space will be declared included in the storage facility if the Commission finds requirements met. Any unknown or unlocatable pore space owners are deemed to have consented or agreed to be included in the storage facility, provided that the storage operator has complied with publication requirements.

Except for temporary access for seismic studies and in cases of emergency, the Commission or the Secretary of the WVDEP may not allow any surface disturbance on any surface tract or tracts overlying the pore space of a nonconsenting owner.

The Office of Oil and Gas has jurisdiction to review and approve any subsequent extraction of sequestered carbon gas from a permitted underground storage facility that is intended for commercial or industrial purposes.

CONCLUSION

As these projects and operations come to fruition here in the Mountain State, issues and ownership disputes are bound to arise, but hopefully this has provided some insight into this helpful technology and how ownership interests might be affected.

ABOUT THE AUTHOR



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