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FEATURED

University of Texas Researcher Professors field Carbon Capture questions

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Editor

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DR. SUSAN "SUE" HOVORKA IS A SENIOR RESEARCH SCIENTIST AT THE BUREAU OF ECONOMIC GEOLOGY, PART OF THE JACKSON SCH
TEXAS AT AUSTIN.



NEWTON, Texas — Residents gathered Monday afternoon in Newton for a second public meeting focused on carbon capture and sequestration (CCS), as the Gulf Coast CCS Alliance continued its community outreach effort to provide information and answer questions about the developing technology.

The meeting featured presentations from University of Texas, Senior Research Scientist at Jackson School of Geosciences Dr. Susan Hovorka and Research Professor at the Bureau of Economic Geology Katherine Romanak, who discussed the science behind underground carbon dioxide storage, federal permitting requirements and groundwater protection.

Hovorka told attendees that underground carbon dioxide sequestration projects are subject to the federal Class VI permitting process, which she described as one of the most stringent underground injection permit programs. She said Class VI wells are designed to protect underground sources of drinking water by requiring carbon dioxide to be injected into deep geologic formations that are isolated from freshwater aquifers.

Hovorka said she was initially skeptical of carbon sequestration but became more supportive after studying the regulatory framework and scientific data. She encouraged residents to ask project developers detailed questions about the regulated depth of proposed storage formations and the protections in place for groundwater.

Romanak presented research examining approximately 800 wells, saying the studies found no evidence of carbon dioxide migrating into drinking water aquifers at those sites. She also discussed research regarding the movement of carbon dioxide in groundwater.

Presenters encouraged residents to ask project developers about topics including brine water hazards, whether the injected carbon dioxide would be pure CO₂ or if it would contain any H₂S such as the Jackson Dome formation, Underground Sources of Drinking Water (USDW), lease agreements, the Area of Review (AOR), and the projected underground carbon dioxide plume.

Residents from Newton County raised questions throughout the meeting, with many expressing concerns about groundwater protection, potential contamination and long-term monitoring of underground storage sites.

While Hovorka could not give a 100% guarantee that CO₂ could migrate into the water aquifers, she said, “I’m not worried about that for you all.”

The Gulf Coast CCS Alliance said the public meetings are intended to educate residents and provide an opportunity for citizens to ask questions as carbon capture and sequestration projects continue to be evaluated across Southeast Texas.

According to their website, The Gulf Coast CCS Alliance is a coordinated effort among some of the world’s most innovative energy, petrochemical, and power generation companies to advance the development of carbon capture and storage from the greater Houston industrial area and along the Gulf Coast. Noted companies on the website include Calpine, Chevron and ExxonMobil.