

COMMISSION SHIFT

LEGISLATIVE BRIEFING



HB 4557 — Relating to liability for capturing and storing CO₂.

Version: House Committee Report

Summary: Prevents most claims from Texans affected or injured by carbon capture, use, and storage (CCUS) infrastructure, requiring a high burden of proof from the claimant.

1. The bill prevents claims on the grounds that captured CO₂ is a pollutant or a nuisance, or caused a nuisance-related injury.
2. The bill allows claims for noneconomic damages only under a very narrow set of circumstances that would prevent operators from being held accountable when things go wrong, endangering people, water, or land.
3. Similarly, operators will not be held responsible for noneconomic damages if CO₂ storage restricts landowner access to underground minerals and water. Economic damages may only be recovered to a limited extent.

Sec. 100B.002: Prevents claims on the basis CO₂ is a pollutant, nuisance, or caused an injury.

Background: Concentrated CO₂ is an asphyxiant, and prolonged exposure can cause long-term neurological damage, convulsions, coma, and even death. Injecting CO₂ increases subsurface pressures and can have lasting impacts on land and water. Nuisance claims in tort (civil suits) are one of the few remedies available for environmental damages or injury when regulations fail to prevent damages or injury.



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Captured, transported, and stored CO₂ presents dangers to people and the environment.

- **Underground injection induces seismicity, blowouts, and water contamination.**
Studies have demonstrated links between subsurface pressure from injection wells and localized geohazards.¹ Sinkholes and earthquakes are becoming more common.² Blowouts of unplugged wells near injection sites can contaminate groundwater.
- **CO₂ + water is highly corrosive to steel.**
Carbonic acid is formed when CO₂ mixes with water. In a March testimony, an oil and gas operators reported that his 5-inch heavy-duty drill bit was completely eaten through after 12 hours when they drilled through a CO₂ acid gas plume.³ A recent suit related to this event demonstrated that CO₂ plume models can be wrong.

Sec. 100B.003: Requires a high burden of proof for claims to recover noneconomic damages.

Background: When pressurized for transport and storage, CO₂ is extremely dangerous. Operators will have limited liability when CO₂ plume migration harms people, contaminates water supplies, damages property, prevents access to minerals, or harms livestock.

Unplanned CO₂ migration or release could harm Texans.

- **CO₂ pipeline ruptures can cause serious injuries.** (*Right: Denbury Gulf Coast CO₂ Pipeline rupture in Mississippi*)

Denbury's 2020 pipeline rupture (*image at right*) evacuated a town of 300 people and sent more than 40 to the hospital, some of whom have still not fully recovered.



¹ Jin-Woo Kim and Zhong Lu, "Association between Localized Geohazards in West Texas and Human Activities, Recognized by Sentinel-1A/B Satellite Radar Imagery," *Scientific Reports* 8, no. 1 (March 16, 2018): 4727, <https://doi.org/10.1038/s41598-018-23143-6>.

² Scott Staniewicz et al., "InSAR Reveals Complex Surface Deformation Patterns Over an 80,000 Km² Oil-Producing Region in the Permian Basin," *Geophysical Research Letters* 47, no. 21 (November 16, 2020).
Yixiao Sheng, Karissa S. Pepin, and William L. Ellsworth, "On the Depth of Earthquakes in the Delaware Basin: A Case Study along the Reeves–Pecos County Line," *The Seismic Record* 2, no. 1 (January 27, 2022): 29–37.

³ Testimony against SB 2107 (88R) by Bruce Gates, CEO of Agron Energy. March 29, 2023. <https://youtu.be/k8kFru3tBjl>

- **CO₂ plume migration can acidify water**

In west Texas, where water scarcity is a growing concern, aquifers and reservoirs may be threatened by migrating CO₂. Considering the number of unplugged and/or undocumented wells throughout the state, unpredicted plume migration represents a serious risk.

A high burden of proof for claims could encourage operators to cut corners.

- **Texas Civil Practice and Remedies Code defines "noneconomic damages" as follows:**

"damages awarded for the purpose of compensating a claimant for physical pain and suffering, mental or emotional pain or anguish, loss of consortium, disfigurement, physical impairment, loss of companionship and society, inconvenience, loss of enjoyment of life, injury to reputation, and all other nonpecuniary losses of any kind other than exemplary damages."

- **Claims for noneconomic damages would be allowed only in three narrow circumstances.**

1. The company concealed, withheld, or misrepresented information relevant to a permitting authority's decision to grant the company a permit.
2. The company was not in compliance with a legal requirement that governs an aspect of the defendant's conduct and the legal requirement was intended to protect a person or property from the kind of damage that occurred -otherwise, the damage would not have happened.
3. If there wasn't a permitting process, the company didn't follow standard industry practice. (Note that these technologies are nascent, and industry practices are not standardized at this point.)

Sec. 100B.004: Limits liability for preventing access to water & minerals

Background: Claims for economic or noneconomic damages be allowed only in narrow circumstances when CO₂ plume migration restricts access to underground water or minerals.

Inaccurate plume models could be protected if this bill becomes law.

- **Fluid Dynamic Modeling is Not an Exact Science**

In a recent \$42M lawsuit against an Energy Transfer subsidiary, the defendant's experts admitted that "their models do not reflect the real world."⁴ Migrating CO₂ plumes can interfere with a water or mineral owners' rights to access their own resources.

⁴ Cassidy, Michelle. "Energy Transfer Hit With \$42M Jury Verdict." *The Texas Lawbook*, Feb. 2, 2023. <https://texaslawbook.net/energy-transfer-hit-with-42m-jury-verdict/>