

- SUBJECT:** Implementing projects involving the capture and storage of carbon dioxide
- COMMITTEE:** Environmental Regulation — committee substitute recommended
- VOTE:** 8 ayes — Cook, Burnam, Dunnam, Farrar, Hancock, Legler, Veasey, Weber  
0 nays  
1 absent — Chisum
- WITNESSES:** For — Darrick Eugene, Michael Moore, Texas Carbon Capture and Storage Association; Greg Kunkel, Tenaska, Inc.; (*Registered, but did not testify*: Shannon Lucas, Texas Mining and Reclamation Association; Jerry Valdez, Greater Houston Partnership; Shayne Woodard, Spectra Energy)  
Against — None  
On — Scott Anderson, Environmental Defense Fund; Jerry Patterson, General Land Office; Andy Wilson, Public Citizen; (*Registered, but did not testify*: Leslie Savage, Railroad Commission)
- BACKGROUND:** The Railroad Commission of Texas (RRC) regulates the injection of carbon dioxide (CO<sub>2</sub>) for purposes of enhanced oil recovery. There is currently no regulatory framework in Texas for the storage and sequestration of CO<sub>2</sub>.
- DIGEST:** CSHB 2660 would provide the RRC jurisdiction over the injection of CO<sub>2</sub> into reservoirs that were or could be productive of oil or gas, as well as requirements for studies regarding storing CO<sub>2</sub> in reservoirs not productive of oil and gas. CSHB 2660 also would provide for a permitting process and conversion of use and ownership of stored CO<sub>2</sub>, and definitions.  
**RRC jurisdiction over storage and injection of CO<sub>2</sub> in geologic formations productive of oil and gas.** CSHB 2669 would provide the Railroad Commission (RRC) jurisdiction over injection of CO<sub>2</sub> into a reservoir that was initially or could be productive of oil, gas, or geothermal resources or for storage into a saline formation directly above

or below that reservoir. The RRC would have jurisdiction over a well used for that purpose regardless of the initial purpose of that well. The jurisdiction of the RRC would be subject to review of the Legislature. The RRC would have jurisdiction over the extraction of CO<sub>2</sub> stored in a geologic storage facility and would develop rules to govern the extraction.

The RRC would be required to adopt rules and procedures for collection and administration of fees and penalties, enforcement, and requirements pertaining to the injection and geologic storage of CO<sub>2</sub>, including: geologic site characterization, area of review and corrective action, well construction, operation, mechanical integrity testing, monitoring, well plugging, post-injection site care, site closure, and long-term stewardship. These rules would have to be consistent with any federal rules or regulations. The state would have the authority to seek primary enforcement authority.

**Permit for storage and injection of CO<sub>2</sub>.** A permit would be required from the RRC before drilling or operation of a CO<sub>2</sub> injection well for geologic storage or before construction or operation of a geologic storage facility could begin. The RRC could impose fees to cover the cost of permitting, monitoring, and inspecting the injection wells and facilities, and for enforcing and implementing the rules adopted by the RRC. These fees would be required to be deposited in an anthropogenic carbon dioxide storage trust fund to be used for training, technology transfer, inspection, investigation, remediation, and enforcement.

A permit application would have to include a letter from the executive director of the Texas Commission on Environmental Quality (TCEQ) stating that drilling and operating a CO<sub>2</sub> injection well or operating a geologic storage facility would not injure any freshwater strata in the area or that the stratum to be used for the geologic storage facility was not freshwater sand. The TCEQ would have rulemaking authority to implement these provisions.

The RRC could issue a permit if there was a finding of non-endangerment of oil, gas, or other mineral formations, as well as of human health and safety, and both groundwater and fresh water. It would also have to find that the reservoir into which the carbon dioxide was being injected was suitable to protect against escape and the applicant met all other statutory and regulatory requirements.

A permittee would be required to demonstrate evidence of financial responsibility annually to ensure that the injection well was properly plugged and that funds were available for plugging, post-injection care, and closure.

**Conversion of use.** The RRC would be required to adopt rules to allow those using existing wells to convert those wells from their authorized purpose to a new or additional purpose, including use as a CO<sub>2</sub> injection well, or to authorize a well for multiple purposes. This would apply to a well that was authorized as or converted to a CO<sub>2</sub> injection well for geologic storage.

A conversion of a CO<sub>2</sub> injection well from use for enhanced recovery operations to use for geologic storage would not be considered a change in purpose of the well.

**Ownership of stored CO<sub>2</sub>.** CO<sub>2</sub> stored in a geologic storage facility would be considered property of the storage operator unless willfully abandoned, administratively transferred, or transferred or conveyed by operation of some other law or legal document. The owner would have the authority to recover the stored CO<sub>2</sub> at some point in the future.

**Reports to the Legislature on the storage of CO<sub>2</sub> in geologic formations not productive of oil and gas.** The General Land Office commissioner would be required to issue a report, in coordination with the Bureau of Economic Geology of the University of Texas at Austin, the RRC, and the TCEQ, on a framework for managing geological carbon storage activities on state-owned land.

The TCEQ and RRC would be required to issue a joint report, in consultation with the Bureau of Economic Geology regarding injection wells and geologic storage facilities that are used for the injection and storage of CO<sub>2</sub> in saline formations not productive of oil and gas. The report would have to include the status of permit applications received, an update on the exchange of information between the RRC and TCEQ, status of any requests for primary jurisdiction, and recommendations for additional legislation, rules or changes to the existing memorandum of understanding between the RRC and TCEQ.

Both reports would have to be filed with the Legislature no later than December 1, 2010.

The bill would take effect September 1, 2009.

**SUPPORTERS  
SAY:**

CSHB 2669 would provide a regulatory framework for the storage and sequestration of CO<sub>2</sub> in Texas so that entities wanting to capture and sequester CO<sub>2</sub> for long-term storage would have clear legal guidelines by which to operate.

Texas is approaching a crossroads of a growing demand for energy and the need for sound environmental policy. The adoption of federal mandates to regulate greenhouse gases is more likely today than ever before. Carbon capture and storage (CCS) technology is one of the most promising new developments to address these issues. Under the guidance of the Railroad Commission, the enhanced oil recovery industry has been injecting CO<sub>2</sub> underground safely since 1972. Texas leads the world in the use of CCS technology with more than 480 million tons of CO<sub>2</sub> captured, transported, injected, and stored in connection with enhanced oil recovery in Texas.

CSHB 2669 also would have a positive environmental impact on global warming. The provisions of this bill are agreed to not only by the industry, but also environmental groups.

**OPPONENTS  
SAY:**

No apparent opposition.

**NOTES:**

According to the fiscal note, TCEQ will need two additional FTEs for rulemaking and regulation of CO<sub>2</sub> injection wells at a cost of \$203,319 in fiscal 2010 and \$190,319 in subsequent years. Also, the Railroad Commission would need an additional FTE in fiscal 2010 and fiscal 2011 to assist in interagency coordination and establishment of the permitting process. This would be a cost of \$93,458 in fiscal 2010 and \$91,448 in fiscal 2011. These amounts would be paid out of the General Revenue Fund. An additional two FTEs would be needed by the Railroad Commission in fiscal 2012 to administer the permitting program at a cost of \$138,729 in fiscal 2012 and \$136,728 in subsequent years. These amounts would be paid out of the Anthropogenic Carbon Dioxide Trust Fund.

The companion bill, SB 1387 by Seliger, passed the Senate by 30-0 on April 22 and has been referred to the House Environmental Regulation Committee

