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## FISCAL IMPACT REPORT

ORIGINAL DATE 02/24/09

SPONSOR Giannini LAST UPDATED \_\_\_\_\_ HB 790

SHORT TITLE Carbon Dioxide Sequestration Enabling Act SB \_\_\_\_\_

ANALYST Woods

### APPROPRIATION (dollars in thousands)

Appropriation		Recurring or Non-Rec	Fund Affected
FY09	FY10		
NFI	NFI		

(Parenthesis ( ) Indicate Expenditure Decreases)

### REVENUE (dollars in thousands)\*

Estimated Revenue			Recurring or Non-Rec	Fund Affected
FY09	FY10	FY11		
NFI	NFI	\$150.0	Recurring	Carbon Dioxide Facilities Fund (new)

(Parenthesis ( ) Indicate Expenditure Decreases)

### ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)\*

	FY09	FY10	FY11	3 Year Total Cost	Recurring or Non-Rec	Fund Affected
<b>Total</b>	None	None	\$150.0	\$150.0	Recurring	Carbon Dioxide Facilities Fund (new)

(Parenthesis ( ) Indicate Expenditure Decreases)

Relates to SB 208

### SOURCES OF INFORMATION

LFC Files

#### Responses Received From

Office of the State Engineer (OSE)

Energy, Minerals and Natural Resources Department (EMNRD)

Department of Finance and Administration (DFA)

Administrative Office of the Courts (AOC)

\* Fiscal estimates provided in 2-18-09 EMNRD response.

## SUMMARY

### Synopsis of Bill

As noted by EMNRD, the proposed Carbon Dioxide Sequestration Enabling Act (the Act) will establish a legislative framework for geologic (underground) sequestration of anthropogenic carbon dioxide (CO<sub>2</sub>). “Anthropogenic” CO<sub>2</sub> is CO<sub>2</sub> generated by human activity, and includes, specifically, CO<sub>2</sub> that may be extracted from power plant waste and other fluid streams. The purpose of geologic sequestration of CO<sub>2</sub> is to remove this “greenhouse gas” from the atmosphere, so that it will not contribute to global climate change. The bill declares that public policy favors CO<sub>2</sub> sequestration, defines property rights in underground storage space and in injected CO<sub>2</sub>, provides for permitting of underground injection of CO<sub>2</sub> for the purpose of sequestration and for permitting of withdrawal of CO<sub>2</sub> from such reservoirs, authorizes the Oil Conservation Division (OCD) of the Energy, Minerals and Natural Resources Department (EMNRD) to administer the CO<sub>2</sub> sequestration program, provides for the consequences of “excursion” of sequestered CO<sub>2</sub> outside the area where storage is authorized (“permitted storage interval”), authorizes compulsory unitization of oil and gas rights in the permitted storage interval of a reservoir to be used for CO<sub>2</sub> sequestration, and distinguishes between CO<sub>2</sub> sequestration projects and enhanced oil recovery (EOR) projects authorized by existing law.

## FISCAL IMPLICATIONS

EMNRD indicates that administration of the CO<sub>2</sub> sequestration program will eventually require that OCD have additional resources, including at least one additional full-time employee to administer the permitting program for CO<sub>2</sub> sequestration facilities and to monitor compliance. However, the bill provides for permitting fees to cover these costs, and, accordingly, is expected to be revenue neutral. It is not anticipated, however, that the permitting process will commence before FY 2011.

Estimated costs for FY 2011 are premised on:

One additional FTE @ \$100	\$100
Miscellaneous administrative costs	<u>50</u>
	\$150

AOC notes that there will be a minimal administrative cost for statewide update, distribution and documentation of statutory changes. Any additional fiscal impact on the judiciary would be proportional to the enforcement of this law. New laws, amendments to existing laws and new hearings have the potential to increase caseloads in the courts, thus requiring additional resources to handle the increase.

## SIGNIFICANT ISSUES

As background, EMNRD advises that carbon sequestration is among the strategies being studied to forestall global climate change. The United States Environmental Protection Agency (EPA) has proposed regulations under the federal Safe Drinking Water Act to govern carbon sequestration, and recognizes a state role in implementing that program, and also in regulating aspects of carbon sequestration outside the ambit of existing federal statutes. The Interstate Oil and Gas Conservation Commission (IOGCC) has studied both technical and legal aspects of

carbon sequestration, and has proposed a model state statute. Three states have recently enacted statutes addressing aspects of this issue. EMNRD further indicates:

Carbon sequestration is needed because, as is widely recognized, conversion to alternative fuels will take many years, and there are reservoirs beneath the earth's surface, where CO<sub>2</sub> can be permanently stored, preventing release of the CO<sub>2</sub> to the atmosphere, where it could contribute to further climate change. Technology for extracting CO<sub>2</sub> from industrial waste streams is advancing. When expected state or federal requirements for reduction of greenhouse gas emissions from power plants and other industrial facilities become operative, economic incentives will exist for private parties to develop necessary physical infrastructure (pipelines, injection wells, monitoring wells, etc.) to transport and sequester CO<sub>2</sub> extracted from waste streams. The purpose of this bill is to establish the necessary *legal* infrastructure.

The New Mexico Oil Conservation Division (OCD) convened a working group on the subject of carbon sequestration, pursuant to an Executive Order from the Governor. The working group, which included representatives of the oil and gas industry, the electric power industry, the environmental community and other interested persons, convened on March 20, 2007, and held additional meetings on April 25, May 23, October 4 and November 29, 2007.

The proposals in this bill were developed from the working group's comments, consultation with other state agencies, analysis of the IOGCC proposal, statutes enacted in other states and New Mexico's Underground Storage of Natural Gas Act and Statutory Unitization Acts. The following is a section-by-section summary of the proposed Act.

**Sections 1 and 2** of the Act are, respectively, entitled "Short Title" and "Definitions."

**Section 3** declares that public policy favors CO<sub>2</sub> sequestration.

**Section 4** addresses property rights. It provides that a transfer of the mineral estate does not convey any right to the pore space except to the extent that it is necessary to facilitate the production of those minerals, unless specifically provided in the conveying document. It also states, however, that the Act does not change existing law regarding the rights of mineral owners to use the land, including the pore space, for mineral production, or existing law concerning the appropriation, storage or recovery of underground waters. It allows severance of the storage rights in a reservoir from the surface ownership by express conveyance (thereby facilitating transfer of these rights to the operator of a CO<sub>2</sub> storage facility). However, it also provides that the owner of severed storage rights does not thereby acquire rights to enter or use the surface of the land. These provisions are intended only to clarify existing law in order to make it easier for CO<sub>2</sub> storage operators to acquire the necessary property rights.

**Subsection E of Section 4** limits claims for subsurface trespass resulting from excursion of stored CO<sub>2</sub> into other lands to cases where CO<sub>2</sub> physically invades pore space under an owner's land.

*Subsection F of Section 4* clarifies that the storage operator and its assignees retain ownership of the stored CO<sub>2</sub>, thus negating the common law “rule of capture,” under which title would pass to anyone underneath whose land the CO<sub>2</sub> was found.

**Section 5** authorizes OCD to permit storage projects and to define their boundaries. Recognizing that CO<sub>2</sub> is a valuable commodity with economic uses, especially in the production of oil and natural gas, it also authorizes OCD to permit the withdrawal of CO<sub>2</sub>. Recognizing the need to protect fresh or potentially useable waters, the bill limits storage projects to reservoirs that are not underground sources of drinking water as defined by EPA.

Two paramount considerations militate in favor of OCD administering the CO<sub>2</sub> sequestration program. First, OCD has expertise in underground injection as a result of its history of studying underground reservoirs and regulating underground injection related to oil and gas production. Second, it is expected that the first CO<sub>2</sub> sequestration projects will utilize oil and gas reservoirs where extensive information about the reservoirs is available from oil or gas wells, and injection of the CO<sub>2</sub> will serve the dual purpose of sequestration and enhancement of oil or gas production. Additionally, permitting of a storage reservoir will require evaluation of the reservoir’s potential for oil and gas production and may require “unitization” of oil and gas ownership in the reservoir, both functions within the existing jurisdiction of OCD. Assignment of other aspects of permitting to another agency would result in duplication of effort.

**Section 6** grants to OCD the power to administer the Act, including the powers to promulgate rules and orders, hold hearings, establish a permitting fee schedule, assess penalties for violations and establish conditions for permits. Since this is a new authorizing statute this foundation of authority is needed.

**Section 7** requires the operator of a storage facility, prior to commencement of injection, to acquire the necessary storage rights in the portion of the underground reservoir to be utilized, and necessary surface access rights, from owners of the surface, and to obtain the consent, via unitization or otherwise, of the mineral estates. Rights to oil and gas production during storage operation need not be acquired since the owners of this production can be compensated through unitization of their interests as authorized in Section 9. However, rights to residual oil and gas production that would be possible after injection into the reservoir ceases, as well as rights to non-fluid minerals in the reservoir, must be acquired from the mineral owners. In event of excursion of CO<sub>2</sub> outside the permitted confinement zone, OCD is authorized to require the storage operator to acquire additional storage rights, or to undertake remedial measures, as the circumstances require.

**Section 8** provides that the mineral owners of lands who have consented to a storage project retain the right to drill through the storage reservoir in accordance with Division rules, provided that communications between the wellbore and the reservoir is prevented, and surface owners who have transferred pore space right to a storage operator retain all rights to use the surface that are not inconsistent with operation of the storage reservoir.

**Section 9** authorizes OCD to implement compulsory unitization of oil and gas production from the permitted storage interval. This provision is needed because owners of oil and gas rights in different parts of the storage area may be differently affected by changes in oil and gas production resulting from CO<sub>2</sub> injection. Unitization will allow allocation of oil and gas production from the storage interval among the owners of the oil and gas rights on an equitable basis determined by OCD.

**Section 10** distinguishes between EOR projects allowed under the Oil and Gas Act and CO<sub>2</sub> sequestration projects, but allows for conversion of EOR projects to sequestration projects.

**Section 11** allows cooperative agreements with other governmental agencies, including those of other states and tribes.

**Section 12** creates a special fund for permitting fees collected under the Act, analogous to the Water Quality Fund for permitting fees under the Water Quality Act.

OSE states, “The bill is clearly aimed at sequestration of carbon dioxide in pore space, but, unless amended, may have unintended consequences regarding other fluids, such as groundwater. The bill states that it is “not intended to change the law of the state ... with respect to underground waters”. However the definition of pore space is very broad, encompassing all voids that do or could contain fluids, from the land surface downward, thus including the drinking water aquifers of the State. Provision for ownership of the pore space in these drinking water aquifers might effect aquifer storage and recovery (ASR) programs under the Ground Water Storage and Recovery Act, §§ 72-5A-1 through -17 NMSA 1978, which authorizes the injection of water into an aquifer for storage for future withdrawal. The bill might provide incentive for property owners to utilize or transfer pore space rights in drinking water aquifers underlying their surface lands for commercial purposes.”

AOC notes that: (1) In June 2007, the Oil Conservation Division of the NM Energy, Minerals and Natural Resources Department published a report titled, “Carbon Dioxide Sequestration: Interim Report on Statutory and Regulatory Issues. The report provides an in-depth analysis of the following identified statutory issues: Authority to Regulate Carbon Sequestration; Protection of Surface Owner Interests; Ownership of Geologic Formation/Pore Space; Unitization of Recoverable Hydrocarbons; Condemnation of Pore Space & Transportation Corridors by Eminent Domain; Authority to Transfer Liability/Ownership to State; Authority to Impose Sequestration Fee on Injected CO<sub>2</sub> Volumes and Exemptions; Authority to Bond Injection Projects and Facilities; and Authority to Enter Land for Inspection. And, (2) HB 790 does not provide for appeal of OCD or OCC decisions to the court. Section 6(B) provides that Section 70-2-13 NMSA 1978, within the Oil and Gas Act, and rules adopted pursuant to that section shall apply to all hearings required or authorized under the CDSEA. Applicable provisions of Section 70-2-13 govern hearings before an examiner and hearings *de novo* before the OCC. There is no direction within the CDSEA to apply additional provisions of the Oil and Gas Act concerning rehearings or appeals to the district court as permitted under Sections 70-2-25 and 70-2-26 NMSA 1978.

## RELATIONSHIP

EMNRD states that SB 208 and this bill both relate to the subject of pore space ownership. The provisions of SB 208 are generally similar to this bill's pore space provisions. Under either bill, a mineral deed or lease does not convey pore space ownership to the mineral owner or lessee, leaving the pore space as a part of the residual surface estate. Although the intent of both bills is generally the same, *i.e.* to provide that a surface owner, as distinguished from a mineral owner, is the owner of pore space where minerals have been severed from the surface, this bill, unlike SB 208, clearly distinguishes the situation where the surface estate only has been conveyed, reserving all other title to the land, including, but not limited to the pore space. This distinction may be significant with respect to some State trust lands, where the State has conveyed the surface only. Both bills provide that pore space ownership can be severed from the surface estate only by an instrument containing an express provision to that effect, and that a person who acquires title to pore space only, unlike a mineral owner, has no right to enter upon, or to use, the surface of the land. SB 208 does not address other aspects of carbon sequestration that are addressed in this bill.

## WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL

New Mexico will not have a legal framework in place for geologic sequestration of CO<sub>2</sub>.

## AMENDMENTS

OSE suggests the following:

1. On page 3, line 10, after "is" insert "located in a reservoir and is".
2. On page 7, line 3, strike "this section" and insert in lieu thereof "the Carbon Dioxide Sequestration Enabling Act".
3. On page 7, between lines 17 and 18, insert the following new material:  

"A. No person shall inject carbon dioxide or other gases into any underground source of drinking water, and no provision of the Carbon Dioxide Sequestration Enabling Act shall be construed to authorize any such injection."

AOC suggests, "Provide for the appeal of OCD or OCC decisions to the court or, alternatively, make additional provisions of the Oil and Gas Act concerning rehearings and appeals to the district court (Sections 70-2-25 and 70-2-26 NMSA 1978, specifically), applicable under the CDSEA."

BW/mt