

Fiscal impact reports (FIRs) are prepared by the Legislative Finance Committee (LFC) for standing finance committees of the Legislature. LFC does not assume responsibility for the accuracy of these reports if they are used for other purposes.

## FISCAL IMPACT REPORT

<b>SPONSOR</b> <u>Reps. Dixon, Chatfield, and Small/Sens. Sharer and Lanier</u>	<b>LAST UPDATED</b> <u>3/10/2025</u> <b>ORIGINAL DATE</b> <u>2/20/2025</u>	<b>BILL NUMBER</b> <u>House Bill 457/aHENRC/aHC EDC</u>
<b>SHORT TITLE</b> <u>Geologic Carbon Dioxide Sequestration Act</u>	<b>ANALYST</b> <u>Davidson</u>	

### ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT\*

(dollars in thousands)

Agency/Program	FY25	FY26	FY27	3 Year Total Cost	Recurring or Nonrecurring	Fund Affected
EMNRD		\$244.0	\$244.0	\$488.0	Recurring	General Fund
SLO		\$236.0	\$236.0	\$472.0	Recurring	General Fund
<b>Total</b>		\$480.0	\$480.0	\$960.0	Recurring	General Fund

Parentheses ( ) indicate expenditure decreases.

\*Amounts reflect most recent analysis of this legislation.

Is a companion to House Bill 458

### Sources of Information

LFC Files

#### Agency Analysis Received From

Energy, Minerals and Natural Resources Department (EMNRD)

New Mexico Attorney General (NMAG)

State Land Office (SLO)

Public Regulation Commission (PRC)

#### Agency Declined to Respond

New Mexico Environment Department (NMED)

## SUMMARY

### Synopsis of HCEDC Amendment to House Bill 457

The House Commerce and Economic Development Committee amendment to House Bill 457 adds in specific language requiring tribal consultation in regards to the possible interest in surface and subsurface impacts associated with sequestration projects.

### Synopsis of HENRC Amendment to House Bill 457

The House Energy, Environment and Natural Resource Committee amendment to House Bill 457 adds language related to pore space—the space between particles of soil and rock—and ownership rights, codifying that pore space ownership is separate from the mineral estate, resides with the owner and may be severed from the surface state. The amendment also specifies all sequestration project applications must include a specific and actionable community benefit plan

and include all of the necessary documents required under state or federal law for carbon dioxide injection or sequestration.

### **Synopsis of House Bill 457**

House Bill 457 (HB457) creates a regulatory framework for carbon sequestration under the jurisdiction of the Oil Conservation Division (OCD) of the Energy, Minerals and Natural Resources Department (EMNRD). The bill also creates within OCD the oil conservation division systems and hearings fund, the repository for the fees the bill also creates regarding annual regulation and application processing.

The bill proposes updated definitions of carbon dioxide, geologic sequestration, sequestration facility, and sequestration unit. The bill codifies the new authority OCD would have over sequestration activities and provides requirements for the rights and lands necessary to form a sequestration unit.

The bill also defines ownership of pore space as subsurface space that can be used as storage space for carbon dioxide or other substances and includes the voids, microscopic or otherwise, in the earth. The bill declares that ownership of all pore space in all strata below the surface lands and waters of the state is vested in the several owners of the surface above the strata or formations. As such, a conveyance of surface ownership of real property shall include the pore space below the surface, unless it has been previously severed.

The bill mirrors the practice of the oil and gas industry, which typically has the oil and gas industry pool its oil and gas permits together for permits within a designated area to “pool” their interests to allow the drilling of one or more wells. The bill will use this practice when pooling together participation in a project for all affected surface/pore space owners, ensuring collective participation and buy in is achieved for projects.

This bill does not contain an effective date and, as a result, would go into effect 90 days after the Legislature adjourns if enacted, or June 20, 2025.

### **FISCAL IMPLICATIONS**

EMNRD notes implementation of HB457 would require 2 additional FTE, for a total of \$244 thousand in increased recurring spending. This analysis is unable to provide an estimate for potential fee revenue as the bill does not establish a fee level for regulation and application processing.

Analysis from the State Land Office (SLO) notes the agency does not have the leasing instruments, financial assurances, or other instruments necessary to perform the leasing activity the bill discusses and that, subsequently, the office would need additional personnel and resources. SLO did not provide an estimate as to the quantity of additional personnel or resources the agency would need. This analysis assumes the office would need 2 additional FTE at the agency’s average salary of \$118 thousand to implement the provisions of the bill.

## SIGNIFICANT ISSUES

House Bill 458, the companion bill to HB457, enumerates the regulation of stewardship of sequestered CO<sub>2</sub>, while HB457 enumerates the framework for the undergoing of sequestration projects. The vast amount of CO<sub>2</sub> sequestered in projects requires a significant amount of pore space for proper storage. This space requirement has meant that previous attempts at CO<sub>2</sub> sequestration have required prospective project operators to negotiate individual agreements with each potentially impacted landowner, a potentially cost prohibitive process.

EMNRD notes the bill clarifies that pore space (the “empty” space between soil, rock, sand, or sediment) is owned, unless previously severed, by the owner of the surface estate. EMNRD further notes the new framework for developing sequestration projects is modeled off the compulsory pooling process (a legal process where landowners combine their land for oil and gas drilling), meaning once minimum thresholds of participation are met, other landowners are compelled to participate in projects. Depending on if a participant voluntarily enters or is compelled, the bill also maps out compensation for each instance.

The New Mexico Institute of Mining and Technology’s (NMIMT) Petroleum Recovery Research Center notes the primary goal of storage is to sequester CO<sub>2</sub> in the earth rather than have it emitted to the atmosphere, or in the case of direct air capture, to remove CO<sub>2</sub> already emitted. NMIMT provides a breakdown of when CO<sub>2</sub> is sequestered in the earth:

When CO<sub>2</sub> is put into the earth, it is put into pores that contain very salty water (in New Mexico, at least as salty as the ocean and as much as 6 times saltier). When CO<sub>2</sub> meets this salty water in the pores, roughly 1/3 of it soon becomes dissolved into the water, effecting a dramatic reduction in mobility of the CO<sub>2</sub>. Over decades and centuries, another 1/3 of the CO<sub>2</sub> will mineralize and turn into rocks, also removing its mobility. The remaining free CO<sub>2</sub> is what could potentially leak during stewardship. In order for free CO<sub>2</sub> to move, an opening to the surface, or another formation must form. The most likely way this could occur is a well failure while the well is actively injecting. This risk is moderated by comprehensive monitoring of well-bore health, and if a failure were to occur during operations it would be the responsibility of the operator to repair the well.

OCD would be required to gain Class VI Underground Injection Control Primacy to administer a CO<sub>2</sub> sequestration project; OCD would need to apply to the U.S. Environmental Protection Agency (EPA) for this primacy. OCD currently has an application under review by the EPA, so in the interim OCD will mirror its process with the current federal review process. Once OCD’s application for Class VI is approved, OCD anticipates review of CO<sub>2</sub> sequestration projects will be faster.

EMNRD analysis notes HB457 also clarifies any sequestration project will not interfere with oil production, Class II underground injection control projects, or any other previous correlative rights.

The State Land Office (SLO) analysis notes HB457’s codifying of pore space would be a first for the state and would therefore have implications for the over 4 million acres of state trust mineral estate. SLO analysis notes the best practice for regulation of sequestration units would be to:

Have sequestration units follow a process similar to oil and gas units and, if the U.S. Bureau of Land Management and/or SLO lands are included, require preliminary and final approval from those agencies, while also requiring OCD approval of the unit itself.

SLO analysis notes the bill does not require operators of sequestration facilities to create or provide emergency response places in their applications. SLO notes plans of that nature are standard practice applications for acid gas injection wells which OCD reviews; the office notes such a requirement should be included in the bill. SLO further notes pipeline ruptures have the potential to cause serious injury.

SLO analysis advises the bill should increase its proposed one-half mile buffer zone to two miles. Additionally, SLO analysis recommends applications for sequestration projects should include “all wells, by American Petroleum Institute number, and list each formation from which the wells are producing.” SLO provides an example as to why such disclosure could be necessary:

The Illinois Archer Daniels Midland carbon sequestration facility is already leaking after CO<sub>2</sub> ate away the pipes in new project monitoring wells, and there is concern the CO<sub>2</sub> could reach old, surrounding wells and the CO<sub>2</sub> could migrate upwards into water.<sup>1</sup>

SLO further notes for any sequestration projects all surface lessees within a two mile radius of the project should receive notice of the project and the Bureau of Land Management notice language in the bill should be amended to say “State Director, Bureau of Land Management.”

The New Mexico Attorney General (NMAG) notes the language for OCD’s systems and hearings fund may be too open-ended and further clarity on usage could improve implementation. Further, NMAG analysis notes the bill does not clearly address the rights of owners of land within a sequestration project to appeal orders issued by OCD.

## **CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP**

HB457 is a companion to House Bill 458 (HB458), which creates the geologic carbon dioxide long-term stewardship fund and further codifies the rules and authority OCD and other agencies would have over CO<sub>2</sub> sequestration.

HB457 relates to House Joint Memorial 4, which requests New Mexico Institute of Mining and Technology to study the costs and benefits of CO<sub>2</sub> capture and sequestration.

HB457 relates to Senate Bill 215 from the 2024 legislative session, with both bills aiming to create a framework for sequestration projects.

## **TECHNICAL ISSUES**

SLO notes further definition of pore space should be considered in the bill due to possible confusion the current definition could create with regards to oil and gas industry activity:

Pore space that does not exist in its natural form and is manufactured (e.g., through blasting, drilling, etc.) is not naturally occurring pore space. Thus, the definition of pore space in Section 2 could be further revised to state pore space shall be naturally occurring within the formations, voids, and fractures. Without such further definition, the

---

<sup>1</sup> <https://www.epa.gov/newsreleases/epa-announces-proposed-order-requiring-archer-daniels-midland-co-take-actions-ensure>

distinction between a pore space agreement and a subsurface easement (where the void occurs due to manufactured activity) would be impossible to distinguish under the proposed definition of “pore space.”

SLO notes the bills current framework for payment of severed formations within the buffer or monitoring zones has some conflict with SLO current practice:

State Land Office leases cannot be depth severed and no payment may be made to SLO for severed formations of state trust lands. A separate lease for any formation where sequestration is proposed or for impacted lands must be obtained from the State Land Office...[the bill] discusses payment for the pore space to each owner and people within the buffer zone. The bill should make clear SLO is not required to accept the proposed compensation and can set its own rate for the pore space. Further, it should be clear that the lessee of record does not own the pore space and only the Commissioner can enter any agreement for the pore space as to state trust lands.

NMAG analysis notes there are minor formatting and/or grammatical differences between the definitions of carbon dioxide and geologic sequestration used in HB457 and HB458. The companionship status of the two bills means ensuring definitional consistency between the two would improve implementation. NMAG analysis further notes HB457 and HB458 have key differences between the bills’ definition of sequestration facility. In particular, HB457’s definition excludes class II wells, while HB458’s definition excludes stratigraphic wells.

## **ALTERNATIVES**

SLO analysis recommends that a separate bill defining pore space, a term and legal realm utilized by multiple entities and industries in the state, may increase transparency and provide further clarity.

AD/rl /hg/sgs