



www.lsc.ohio.gov

# OHIO LEGISLATIVE SERVICE COMMISSION

Office of Research  
and Drafting

Legislative Budget  
Office

H.B. 358  
(1\_135\_1956-6)  
135<sup>th</sup> General Assembly

## Bill Analysis

**Version:** As Introduced

**Primary Sponsor:** Rep. Robb Blasdel

Kathleen A. Luikart, Research Analyst

### SUMMARY

#### Authority to regulate carbon sequestration

- Declares that the regulation of carbon dioxide sequestration activities is a matter of general statewide interest that requires uniform statewide regulation.
- States that the bill and rules adopted under it constitute a comprehensive plan with respect to all aspects of carbon sequestration, including storage facility operations and related permitting.
- Generally grants the Division of Oil and Gas Resources Management within the Department of Natural Resources sole and exclusive authority to regulate carbon sequestration.
- Allows the Chief of the Division of Oil and Gas Resources Management to enter into cooperative agreements with other state agencies regarding carbon sequestration projects.
- States that any cooperative agreements do not dilute or diminish the Division's sole and exclusive authority.

#### Rules for carbon sequestration related activities

- Requires the Chief to adopt rules for the administration, implementation, and enforcement of the bill's carbon sequestration provisions and requires them to include provisions regarding applications for UIC Class VI permits and their issuance and the terms and conditions for the permits.
- Defines "UIC Class VI permit" as an underground protection control program permit that allows the operation of a carbon dioxide well, which is issued by the Chief.

- Requires the rules to address inspections, examination of records, maintenance of information through monitoring, recordkeeping, and reporting, and other provisions in furtherance of the bill's goals and the federal Safe Water Drinking Act.
- Specifies that the rules must establish a requirement that an applicant for a UIC Class VI permit (1) attest that the applicant has the legal right to inject carbon dioxide in the underground formation proposed in the application and (2) attest to the proposed extents that the carbon dioxide will migrate.
- Requires the rules to establish the costs estimated to "implement the closure plan of the carbon dioxide well and associated facilities and any post injection site care and site closure."
- Specifies that the rules include an identification of subjects that the Chief must address when attaching terms and conditions to a UIC Class VI permit.
- Specifies that those subjects include, for example, requirements for the operation and monitoring of a carbon dioxide well, spacing and setbacks, financial assurance and surety bonds, and safety concerning the drilling and operation of a carbon dioxide well.

### **Carbon sequestration projects**

- Authorizes carbon sequestration projects in Ohio for the purposes of injecting carbon dioxide into the "pore space" of a "storage facility" through at least one carbon dioxide injection well under a UIC Class VI permit.
- Defines "pore space" to mean subsurface cavities and voids, whether natural or artificially created, that are suitable for use as a sequestration space for carbon dioxide.
- Defines "storage facility" to generally mean the pore space in the subsurface area consisting of the extent of a carbon dioxide plume and the geological seals that confine the carbon dioxide plume that are required to be delineated on an approved UIC Class VI permit.
- Allows a storage operator (i.e., the entity that operates a carbon sequestration project) to operate a project if the operator obtains at least (1) a UIC Class VI permit, which is issued by the Chief and (2) any additional permits required by law, rules, and regulations.
- Defines, for the purposes of a carbon sequestration project, such terms as "carbon dioxide," and "carbon dioxide plume."
- Allows the Chief, prior to carbon sequestration and periodically during carbon sequestration operations, to require a storage operator to deploy a seismicity monitoring system.
- Requires a storage operator, prior to operating a carbon sequestration project, to design the project to isolate any existing future production of oil and gas from the carbon dioxide plume.

- Specifies that current oil and gas law applies to carbon sequestration projects to the extent that those provisions of current law are consistent with, and not specifically excepted from, the bill's provisions.

### **Statutory consolidation application**

- Allows a storage operator to submit to the Chief a statutory consolidation application for the operation of an entire proposed storage facility if the operator has obtained the consent of owners of at least 70% of the pore space proposed to be used in a storage facility.
- Establishes procedures for identifying pore space owners, determining the amount of the fee for processing an application for statutory consolidation, providing notice to pore space owners (including unknown owners), and conducting a hearing on an application.
- Requires the Chief to issue an order approving the application for statutory consolidation and operation of a proposed storage facility if the Chief finds that the operation is reasonably necessary to facilitate the underground storage of carbon dioxide.
- Requires an order approving an application to (1) be upon terms and conditions that are just and reasonable and (2) prescribe a plan for operations that must include certain information such as a description of the pore space and storage facility proposed to be operated.
- Includes other requirements and declarations regarding an order approving an application.

### **Certificates of project completion**

- After carbon dioxide injection into a storage facility ceases and upon application by the storage operator, permits the Chief to issue a certificate of project completion for the facility.
- Specifies that the certificate may be issued only upon satisfaction of certain conditions and after providing public notice of the certificate application, an opportunity for public comment, and if deemed necessary, a public hearing.
- Prohibits a certificate from being issued until at least 50 years after carbon dioxide injections cease or until an established alternative timeline approved by the Chief has elapsed.
- Specifies that no certificate may be issued until the storage operator establishes to the Chief's satisfaction that certain circumstances apply, including that the storage operator is in full compliance with all laws governing the injection and storage of the carbon dioxide.
- Specifies that the former storage operator is released from all regulatory requirements associated with continued storage and maintenance of the injected carbon dioxide upon issuance of the certificate.

- Further specifies that responsibility and liability for the stored or injected carbon dioxide is transferred to the state unless certain conditions apply, including:
  - The storage operator violated a duty imposed on the storage operator by state law or rule prior to approval of site closure and any applicable statutes of limitations have not run out;
  - The Chief determines either (1) the storage operator provided deficient or erroneous information that was material and relied upon by the Chief or (2) there is carbon dioxide migration that threatens public health or safety or the environment or underground sources of drinking water;
  - The balance of the Carbon Dioxide Storage Facility Fund is insufficient to cover costs arising from storage facilities and associated carbon dioxide wells after site closure.

### **Fees and funds**

- Requires a storage operator to pay the Department of Natural Resources a fee of \$0.0525 per ton of carbon dioxide injected for storage in a storage facility, which must be deposited in the Carbon Dioxide Storage Facility Fund (to be used to defray the Division's post-closure care program costs).
- Establishes a fee, determined by the Chief by rule, to be paid by an owner of a carbon dioxide well for each ton of carbon dioxide injected into a carbon dioxide well for deposit in the Carbon Capture Administrative Fund (used by the Division to pay for carbon sequestration program costs).

### **Conveyance and ownership interest in pore space**

- Specifies that the ownership of all pore space in all strata below the surface lands and waters is vested in the owner of the surface directly above the pore space.
- Specifies that a conveyance of the surface ownership of real property is a conveyance of the pore space in all strata below the surface of the real property.
- Establishes specifications regarding the conveyance of pore space.
- Specifies that the bill does not alter, amend, diminish, or invalidate rights to pore space that were acquired by deed, contract, or lease prior to the bill's effective date.
- Requires an instrument that transfers the rights to pore space to include a specific description of the location of the pore space being transferred and establishes certain other requirements regarding transfers of pore space and the surface above pore space.
- Generally specifies that pore space owners do not have any liability relating to the injection of carbon dioxide.
- Declares that all carbon dioxide injected into a storage facility for carbon sequestration, are presumed to be owned by the storage operator, unless rebutted by a preponderance of the evidence in an action to establish ownership.

## Claims

- Specifies that a claim for damages due to injection or migration of carbon dioxide is not recoverable against a storage operator unless the claimant makes certain proofs, including that the injection or migration has caused direct physical injury to an individual, animal, or real or personal property.
- Allows a surface or subsurface property interest owner asserting a claim under the bill for injury to personal or real property to recover monetary damages due to injection or migration of carbon dioxide only for the diminution in real or personal property value resulting from the injection or migration of carbon dioxide beyond the storage facility.
- Prohibits a surface or subsurface property interest owner from seeking punitive damages.
- Specifies that provisions described above do not apply to any claims asserted by owners of oil and gas interests or owners of class II disposal wells.

---

## TABLE OF CONTENTS

Background: carbon sequestration .....	6
Authority to regulate carbon sequestration.....	7
Definitions .....	8
Rules for carbon sequestration related activities.....	9
Carbon sequestration project authorized with permit.....	10
Carbon sequestration project definitions .....	10
Seismicity monitoring system and project isolation .....	11
Application of other provisions of oil and gas law .....	11
Statutory consolidation application .....	11
Application requirements.....	12
Processing fee requirements .....	12
Notice requirement .....	12
Notice provided by Chief .....	12
Notice provided by storage operators .....	13
Application hearing .....	13
Order to approve an application .....	13
Allocation of separately owned interests .....	14
Other order requirements .....	15
Order prohibitions .....	15
Certificates of project completion.....	15
Requirements following issuance of certificate.....	16
Exceptions to declarations upon issuance of certificate.....	17
Fees.....	17

Storage operator fee .....	17
Carbon dioxide well owner fee .....	17
Funds .....	17
Carbon Dioxide Storage Facility Fund .....	17
Carbon Capture Administrative Fund .....	18
Conveyance and ownership interest in pore space.....	18
Transfer of rights to pore space and to surface above pore space .....	19
Pore space owners not liable for carbon dioxide injection.....	19
Carbon dioxide ownership .....	20
Claims.....	20
Carbon dioxide injection or migration .....	20
Surface or subsurface property interest owner claims.....	20
Applicability of claims.....	21

---

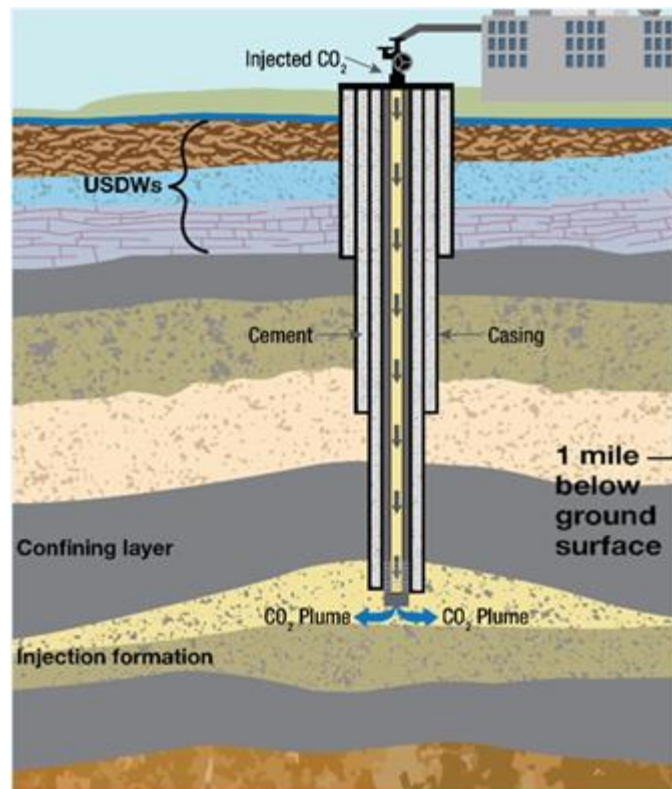
## DETAILED ANALYSIS

### Background: carbon sequestration

According to the United States Environmental Protection Agency (USEPA), carbon sequestration is “a technology that can be used to reduce carbon dioxide emissions to the atmosphere and mitigate climate change.” Possible sources of carbon dioxide include carbon dioxide captured from point source emissions, such as from an industrial facility or energy production facility, as well as carbon dioxide captured directly from the atmosphere. UIC class VI injection wells are utilized to inject carbon dioxide into underground reservoirs. According to USEPA, class VI wells are specifically designed to protect public health and underground sources of drinking water (USDW) due to the unique nature of carbon dioxide injection. USEPA may delegate the authority to regulate Class VI wells to individual states under the federal Safe Drinking Water Act. The image below provides a graphic illustration of a carbon dioxide sequestration (Class VI) well.<sup>1</sup>

---

<sup>1</sup> See, [USEPA: Carbon sequestration](#), which may be found by conducting a search of USEPA’s website entitled “Class VI – Wells used for Geologic Sequestration of Carbon Dioxide.”



To facilitate the delegation of the Class VI injection program from USEPA to the state of Ohio, the bill establishes statutory authority vested in the Division of Oil and Gas Resources Management within the Department of Natural Resources to operate a carbon sequestration program and issue Class VI permits.

### **Authority to regulate carbon sequestration**

The bill declares that the regulation of carbon sequestration activities is exclusively a matter of general statewide interest that requires uniform statewide regulation. It states further that the provisions of the bill and rules adopted under it constitute a comprehensive plan with respect to all aspects of carbon sequestration including storage facility operations and related permitting.

The bill grants the Division of Oil and Gas Resources Management within the Department of Natural Resources sole and exclusive authority to regulate carbon sequestration and the operation of storage facilities in Ohio. The only activities excepted under the bill are those activities regulated under federal laws for which oversight has been delegated to the Environmental Protection Agency, including wetland regulations under the water pollution control law.<sup>2</sup>

---

<sup>2</sup> R. C. 1509.72; R.C. 6111.01 to 6111.028, not in the bill.

The Chief of the Division of Oil and Gas Resources Management may enter into cooperative agreements with other state agencies regarding carbon sequestration projects under the bill. However, the bill specifies that the agreements do not confer on the other agencies any authority to administer or enforce the provisions of the bill or rules adopted under it. The bill specifies that the agreements are not to be construed to dilute or diminish the Division's sole and exclusive authority that the bill establishes.

The authority granted under the bill does not affect the authority granted to the Director of Transportation regarding the permitting of heavy and oversized vehicles or the authority granted to local governments under the laws governing the care, supervision, and control of public roads, grounds, and bridges. However, the bill prohibits the Director or a local government from exercising such authority "in a manner that discriminates against, unfairly impedes, or obstructs carbon sequestration projects" regulated under the bill.<sup>3</sup>

Although the bill states that its provisions and rules constitute a comprehensive carbon sequestration plan, the bill does not expressly require the Division to establish such a plan. However, it establishes a process for carbon sequestration, requires the Chief to adopt rules to implement the bill, requires the Chief to issue orders approving an application for a statutory consolidation for the operation of a storage facility, and specifies that such an order prescribe a plan for their operations. (See R.C. 1509.72(C)(2) and 1509.76(F)(2).)

## Definitions

Carbon sequestration related definitions under the bill include the following:

- "Carbon dioxide" is the "naturally occurring, geologically sourced, or anthropogenically sourced carbon dioxide including its derivatives and all mixtures, combinations, and phases, whether liquid, gaseous, solid, stripped, segregated, or divided from any other fluid stream thereof."
- "Carbon dioxide well" is a well that is used to inject carbon dioxide into a reservoir for carbon sequestration under a UIC Class VI permit.
- "Carbon sequestration" is the underground storage of carbon dioxide in a geological formation.
- "Carbon sequestration project" is a project that involves the underground storage of carbon dioxide in a geological formation pursuant to at least one UIC Class VI permit.
- "UIC Class VI permit" is an underground protection control program permit that allows the operation of a carbon dioxide well, which is issued by the Chief of the Division of Oil and Gas Resources Management.
- "Underground storage of carbon dioxide" is the injection and storage of carbon dioxide into underground strata and formations under at least one UIC Class VI permit.<sup>4</sup>

---

<sup>3</sup> R. C. 1509.72; R.C. 723.01 and 4513.34, not in the bill.

<sup>4</sup> R.C. 1509.71.



## Rules for carbon sequestration related activities

The bill requires the Chief to adopt, rescind, and amend rules for the administration, implementation, and enforcement of its carbon sequestration provisions. The rules must include provisions regarding the applications for UIC Class VI permits and their issuance and the terms and conditions for the permits. The rules also must address (1) the entry to conduct inspections and to examine records to ascertain compliance with the bill, rules adopted under the bill, and orders and permit terms and conditions that have been issued, (2) the provision and maintenance of information through monitoring, recordkeeping, and reporting, and (3) other provisions in furtherance of the bill's goals and the federal Safe Water Drinking Act.

Under the bill, the rules must establish a requirement that an applicant for a UIC Class VI permit must attest that the applicant has the "legal right to inject carbon dioxide in the underground formation proposed in the application and to the proposed extents that the carbon dioxide will migrate, including the pressure front associated with the injected carbon dioxide." The rules must also establish the costs estimated to "implement the closure plan of the carbon dioxide well and associated facilities and any post injection site care and site closure." Furthermore, rules adopted under the bill must include an identification of subjects that the Chief must address when attaching terms and conditions to a UIC Class VI permit. The subjects must include all of the following:

- Requirements for the operation and monitoring of a carbon dioxide well;
- Safety concerning the drilling and operation of a carbon dioxide well;
- Spacing, setback, and other provisions to prevent storage facilities and storage operators from impacting the ability of owners of oil and gas interests to develop those interests;
- Protection of the public and private water supply, including the amount of water used and the source or sources of the water;
- Fencing and screening of surface facilities of a carbon dioxide well;
- Containment and disposal of drilling and other wastes related to a carbon sequestration project;
- Construction of access roads for purposes of the drilling and operation of a carbon dioxide well;
- Noise mitigation for purposes of the drilling of a carbon dioxide well and the operation of such a well, excluding safety and maintenance operations;
- Liability insurance to pay damages for injury to persons or property caused by the construction or operation of the storage facility, to be maintained for the time beginning when construction operations commence and ending when the Chief issues a certificate of project completion;
- Liability insurance coverage of at least \$15 million to cover bodily injury and property damage caused by the construction, drilling, or operation of the owner's carbon dioxide

wells in Ohio, which must include additional coverage for an environmental endorsement; and

- A surety bond conditioned on compliance with all obligations imposed under the bill, to be maintained for the time beginning when construction operations commence and ending when the Chief issues a certificate of project completion (see below).

Under the rules, the amount of the surety bond must not be less than the cost estimate identified in the application. And, it must be sufficient to cover corrective actions, plugging, post-injection site care prior to receipt of a certificate of project completion, and emergency or remedial response.<sup>5</sup>

## **Carbon sequestration project authorized with permit**

The bill authorizes carbon sequestration projects in Ohio for the purposes of injecting carbon dioxide into the “pore space” of a “storage facility” through at least one carbon dioxide injection well under a UIC Class VI permit. (Presumably, a “carbon dioxide injection well,” a term that is not defined in the bill, is the same as the defined term, “carbon dioxide well.”)

A “storage operator” may operate a carbon sequestration project if the operator obtains at least (1) a UIC Class VI permit, which is issued by the Chief and (2) any additional permits required by law, rules, and regulations. A storage operator is not required to obtain a permit required under current oil and gas law for the drilling of a new or existing well, reopening a well, converting a well to another use, or plugging back a well.<sup>6</sup>

## **Carbon sequestration project definitions**

Regarding its carbon sequestration project provisions, the following are defined under the bill:

- “Carbon dioxide plume” is the extent of an underground carbon dioxide stream.
- “Owner” includes a person who has the right to drill a carbon dioxide well and to inject carbon dioxide in an underground geologic formation. (The bill uses the term “owner” in different ways. For example, it refers to “owner’s carbon dioxide wells,” “owners of oil and gas interests,” “pore space owners,” and “subsurface property owners,” “owners in the storage facility,” and “owner of a carbon dioxide well.” It is not clear to which of these the definition of “owner” applies. Furthermore, the term “owner” is defined in R.C. Chapter 1509, which is the Revised Code chapter in which the bill’s provisions are located. It is not clear how the bill’s definition of “owner” correlates with the existing definition in R.C. Chapter 1509.)
- “Pore space” means subsurface cavities and voids, whether natural or artificially created, that are suitable for use as a sequestration space for carbon dioxide.

---

<sup>5</sup> R.C. 1509.73.

<sup>6</sup> R.C. 1509.75(A) and (B).

- A “storage facility” is the pore space in the subsurface area consisting of the extent of a carbon dioxide plume and the geological seals that confine the carbon dioxide plume that are required to be delineated on an approved UIC Class VI permit or an amendment to a UIC Class VI permit issued to a storage operator.
- A “storage operator” is an individual, corporation, or other legal entity that operates a carbon sequestration project, regardless of whether an owner that has the right to drill and store carbon dioxide in the project area contracts, retains, or allows an individual, corporation, or other legal entity to conduct operations or provide other services at the carbon sequestration project.<sup>7</sup>

### **Seismicity monitoring system and project isolation**

The bill allows the Chief, prior to carbon sequestration, to require a storage operator to deploy a seismicity monitoring system. The operator must use the system to determine, to the best of the operator’s ability, the presence or absence, magnitude, and the hypocenter location of seismic activity within the vicinity of the storage facility as may be necessary to perform an array and a risk analysis and as the Chief requires. The Chief also may periodically require the storage operator to utilize the seismicity monitoring system during carbon sequestration operations.<sup>8</sup>

A storage operator, prior to operating a carbon sequestration project under the bill, must design the project to isolate any existing or future production of oil and gas from the carbon dioxide plume. The Chief must issue a “permit” only if the Chief is satisfied that the interests of the owners of the oil and gas will not be adversely affected.<sup>9</sup> Although the bill does not expressly state the type of permit at issue in these provisions of the bill, presumably the term “permit” in these provisions likely refers to a UIC Class VI permit.

### **Application of other provisions of oil and gas law**

The bill specifies that current oil and gas law under R.C. Chapter 1509 applies to carbon sequestration projects under the bill to the extent that those provisions of current law are consistent with, and not specifically excepted from, the bill’s provisions.<sup>10</sup>

### **Statutory consolidation application**

A storage operator may submit to the Chief a statutory consolidation application for the operation of an entire proposed storage facility, if the operator has obtained the consent of owners of at least 70% of the pore space proposed to be used in a storage facility. In calculating that percentage, a pore space owner’s entire interest in the proposed storage facility (including

---

<sup>7</sup> R.C. 1509.71.

<sup>8</sup> R.C. 1509.75(C).

<sup>9</sup> R.C. 1509.75(D).

<sup>10</sup> R.C. 1509.75(E).

any divided, undivided, partial, fee, or other interest in the pore space) must be included to the fullest extent of that interest.<sup>11</sup>

### **Application requirements**

An applicant (a storage operator that submits a statutory consolidation application) must include the following with the application:

- A list of all persons reasonably known to own an interest in the pore space proposed to be used for the storage facility;
- A processing fee based on actual application processing costs incurred by the Division;
- Proof of notice provided, if applicable (see “**Notice requirement**” below);
- Any additional information reasonably requested by the Chief.<sup>12</sup>

### **Processing fee requirements**

The bill requires the Division to prepare and submit to an applicant an estimate of a statutory consolidation application processing fee and a payment billing schedule. This must be done promptly after the Division receives the application.

The Division must maintain a record of all application processing costs incurred. After its work on the application has concluded, the Division must send a final statement to the applicant. The applicant must pay the full processing fee before the Division issues its final decision on an application and must pay the processing fee regardless of whether a permit is issued or denied, or whether the application is withdrawn. The bill requires the Division to return to the applicant any unused funds paid as part of the processing fee estimate.<sup>13</sup>

### **Notice requirement**

#### **Notice provided by Chief**

Under the bill, for each application, the Chief must provide notice to all pore space owners located within the proposed storage facility and all subsurface owners located within the proposed storage facility of the proposed carbon sequestration project, as identified by the applicant in the application. The Chief must not rule on an application until after the notice has been provided.

If, upon receipt of the notice, the subsurface property owner expresses an objection to the Chief regarding the design of the carbon sequestration project, the storage operator must address the objection to the satisfaction of the Chief. Under the bill, objections are based on the potential adverse effect to a commercially valuable mineral, including, without limitation, a coal or oil and gas estate. Objections are not required to be submitted in the timeframe required for

---

<sup>11</sup> R.C. 1509.76(A).

<sup>12</sup> R.C. 1509.76(B).

<sup>13</sup> R.C. 1509.76(B)(2).

notifications to the Chief but must be made in accordance with requirements the Chief establishes.<sup>14</sup>

### **Notice provided by storage operators**

Under the bill, if the proposed storage facility contains pore space for which the owner is unknown or unlocatable, the storage operator must publish one notice in a newspaper of the largest circulation in each county in which the carbon sequestration project is located. The notice must appear not more than 30 days prior to the date the application is submitted to the Chief.

The bill requires that the notice:

- State that an application for statutory consolidation has been filed with the Division;
- Describe the proposed storage facility;
- In the case of an unknown pore space owner, state the owner's interest in the proposed storage facility, and the name of the last known owner of that interest; and
- State that a person claiming an interest in the pore space proposed to be consolidated must notify the Chief and the applicant at the published address within 20 days of the notice's publication date.

Within seven days of receiving notice of a claim, the applicant must provide information to the claimant, in a form and manner prescribed by the Chief, regarding the right of the claimant to file an objection and participate in the application proceeding before the Division.<sup>15</sup>

### **Application hearing**

The Chief must hold a hearing regarding an application. If the Chief determines that an application is materially incomplete before the required hearing date, the Chief must notify the applicant. Under the bill, a hearing date may be rescheduled by the Chief if the applicant does not timely correct the application. At the hearing, the Chief must consider whether the application is reasonably necessary to facilitate the underground storage of carbon dioxide.<sup>16</sup>

### **Order to approve an application**

The bill requires the Chief to issue an order approving the application and thereby providing for the operation of the proposed storage facility if the Chief finds that the operation is reasonably necessary to facilitate the underground storage of carbon dioxide. The bill establishes a 60-day period during which the Chief may approve or deny an application. An order to approve an application must be issued not later than 60 days after the date of the hearing. The Chief must make the order publicly available. Under the bill, that requirement may be met by posting the order on the Division's website.<sup>17</sup>

---

<sup>14</sup> R.C. 1509.76(C).

<sup>15</sup> R.C. 1509.76(D).

<sup>16</sup> R.C. 1509.76(E).

<sup>17</sup> R.C. 1509.76(F)(1) and (3).

An order approving an application must be upon terms and conditions that are just and reasonable. It also must prescribe a plan for operations that must include the following:

- A description of the pore space and storage facility proposed to be operated;
- The location of and means to access carbon injection wells, outbuildings, roads, and monitoring equipment;
- A statement of the nature of the operations contemplated;
- An allocation to the separately owned interests in the storage facility of all economic benefits derived from operation of the storage facility (see “**Allocation of separately owned interests**” below);
- A provision describing how the credits and charges must be made in the adjustment among the owners in the storage facility for their respective investments in wells, machinery, materials, and equipment contributed to the operations;
- A provision describing how the expenses of operations, including capital investment, must be determined and charged to the separately owned interests and how the expenses must be paid;
- A provision, if necessary, for carrying or otherwise financing any person who does not meet the person’s financial obligations in connection with the storage facility, allowing a reasonable interest charge for such service;
- A provision for the supervision and conduct of the storage facility operations, in respect to which each person must have a vote with a value corresponding to the percentage of the expenses of operations chargeable against the interest of that person. (The bill does not specify who would conduct the supervision and conduct of the facility operations.);
- The time when the storage facility operations must commence and the manner in which, and the circumstances under which, the operations must terminate;
- Any additional provisions as are found to be appropriate for carrying on the operations, and for the protection or adjustment of correlative rights.<sup>18</sup>

### **Allocation of separately owned interests**

Under the bill, an allocation of separately owned interests in the storage facility must be in accord with the agreement, if any, of the interested parties. If there is no agreement between the parties, the Chief must determine the value of each separately owned interest, exclusive of physical equipment, for development of the storage facility. The economic benefits allocated to each interest must be the proportion that the determined value of each interest bears to the value of all interests in the storage facility.<sup>19</sup>

---

<sup>18</sup> R.C. 1509.76(F)(2).

<sup>19</sup> R.C. 1509.76(F)(2)(d)(ii).

### **Other order requirements**

The bill requires the storage operator to file a certified copy of the order and a survey of the storage facility in the office of the county recorder of the county in which all or a portion of the storage facility is located.<sup>20</sup>

The bill specifies that storage facility operations conducted pursuant to an order issued under the bill constitute a fulfillment of all the express or implied obligations of each lease or contract covering lands in the storage facility to the extent that compliance with such obligations cannot be had because of the Chief's order.

And, under the bill, economic benefits allocated to any interest are the property and income of the several persons to whom, or to whose credit, they are allocated or payable under the order providing for storage facility operations.<sup>21</sup>

### **Order prohibitions**

The bill prohibits an order providing for storage facility operations from terminating any order of the Chief or other contract relating to the pore space and the storage of carbon dioxide from a separately owned interest. The latter must remain in force until terminated in accordance with the provisions of that order or contract.

Except to the extent that the parties affected so agree, the bill prohibits any order providing for storage facility operations to be construed to result in a transfer of any person's title to all or any part of the pore space in the storage facility. All property, whether real or personal, that may be acquired for the account of the owners within the storage facility must be the property of such owners in the proportion that the expenses of operations are charged.<sup>22</sup>

### **Certificates of project completion**

Under the bill, after carbon dioxide injection into a storage facility ceases, the Chief may issue a certificate of project completion upon application by the storage operator. The Chief must issue a certificate only upon satisfaction of the conditions imposed under the bill and after providing public notice of the certificate application, an opportunity for public comment, and if deemed necessary by the Chief, a public hearing on the certificate application.

The bill prohibits a certificate from being issued until at least 50 years after carbon dioxide injections cease or until an established alternative timeline has elapsed. An alternative timeline must be approved by the Chief.<sup>23</sup> In addition, no certificate may be issued until the storage operator establishes with a degree of certainty to the satisfaction of the Chief that all of the following apply:

---

<sup>20</sup> R.C. 1509.76(F)(3).

<sup>21</sup> R.C. 1509.76(G).

<sup>22</sup> R.C. 1509.76(H).

<sup>23</sup> R.C. 1509.77(A) and (B).

- The storage operator is in full compliance with all laws governing the injection and storage of the carbon dioxide.
- The following apply to the carbon dioxide that has been injected underground for storage:
  - It is not expected to extend or migrate outside of the storage facility and poses no threat to public health or safety or the environment or underground sources of drinking water;
  - It is not likely to cross any boundary vertically from the storage facility and is not expected to endanger public health or safety or the environment or underground sources of drinking water.
- All carbon dioxide wells and associated equipment and facilities to be used in maintaining and managing the stored carbon dioxide are in good condition and will retain mechanical integrity.
- The storage operator has plugged all carbon dioxide wells not used in maintaining and managing the stored carbon dioxide and has completed all reclamation required by the Division.<sup>24</sup>

### **Requirements following issuance of certificate**

Except for criminal and contractual liability and unless an exception applies, the bill requires the following to occur upon the issuance of a certificate:

- The former storage operator is released from all regulatory requirements associated with continued storage and maintenance of the injected carbon dioxide, and financial assurance required under rules adopted under the bill must be released to the former storage operator.
- Any bond or financial assurance submitted to the Division must be released. (Presumably this requirement would be subject to the exceptions under “**Exceptions to declarations upon issuance of certificate,**” but the bill does not clearly state this.)
- The storage operator and all individuals who generated, injected, or stored carbon dioxide are forever released from all regulatory requirements associated with the continued storage and maintenance of the injected carbon dioxide, except as provided in “**Exceptions to declarations upon issuance of certificate**” below.
- Primary responsibility and liability for the stored or injected carbon dioxide is transferred to the state.<sup>25</sup>

---

<sup>24</sup> R.C. 1509.77(C).

<sup>25</sup> R.C. 1509.77(D).



## Exceptions to declarations upon issuance of certificate

The bill establishes certain exceptions to the declarations that apply when a certificate is issued. The following circumstances qualify as exceptions under the bill:

- The storage operator violated a duty imposed on the storage operator by state law or rule prior to approval of site closure and any applicable statutes of limitations have not run out;
- After notice and a hearing, the Chief determines either of the following:
  - The storage operator provided deficient or erroneous information that was material and relied upon by the Chief to support approval of site closure; and
  - There is carbon dioxide migration that threatens public health or safety or the environment or underground sources of drinking water.
- The balance of the Carbon Dioxide Storage Facility Fund is insufficient to cover costs arising from storage facilities and associated carbon dioxide wells after site closure.<sup>26</sup>

## Fees

### Storage operator fee

Under the bill, a storage operator must pay the Department of Natural Resources a fee of \$0.0525 per ton of carbon dioxide injected for storage in a storage facility. The fee must be deposited in the Carbon Dioxide Storage Facility Fund.<sup>27</sup>

### Carbon dioxide well owner fee

In addition to the storage operator fee, the bill establishes a fee that an owner of a carbon dioxide well must pay. For each ton of carbon dioxide injected into a carbon dioxide well, the owner must pay a fee in an amount the Chief establishes by rule. The fee must be deposited in the Carbon Capture Administrative Fund.<sup>28</sup>

## Funds

### Carbon Dioxide Storage Facility Fund

The bill creates the Carbon Dioxide Storage Facility Fund in the state treasury. The fund consists of the per ton fee imposed on storage operators in relation to a Class VI well and money received by the Department from (1) financial responsibility mechanisms described above in **“Order to approve an application,”** (2) penalties imposed for violations under the bill, and (3) orders and terms and conditions of a permit issued under the bill. All interest earnings are to be credited to the fund.

---

<sup>26</sup> R.C. 1509.77(D)(2).

<sup>27</sup> R.C. 1509.79 (A).

<sup>28</sup> R.C. 1509.79(C)(1).

The Chief must use the money in the fund to defray Division expenses that are associated with post-closure care of sequestered carbon dioxide in a storage facility, including the maintenance of carbon dioxide wells, associate surface facilities, remediation of any environmental impacts from the injected carbon dioxide, and plugging of monitoring wells associated with the injection of carbon dioxide in a carbon dioxide well.

As specified in the bill, the existence, management, and expenditure of money from the fund do not constitute a waiver of governmental immunity or an assumption of any liability by the state for carbon dioxide storage.<sup>29</sup>

The bill requires money received from penalties imposed for violations under the bill to be deposited in the fund. However, because the bill does not establish specific penalties for violations of its provisions, it is not clear what money would be deposited as a result of a violation or whether any penalties in existing law under Chapter 1509 would apply.

### **Carbon Capture Administrative Fund**

The bill creates the Carbon Capture Administrative Fund in the state treasury. The fund consists of money collected from the per ton fee imposed on owners of carbon dioxide wells as described under “**Carbon dioxide well owner fee.**” The Chief must use the funds to administer the provisions of the bill and the rules adopted under them that are associated with the injection and sequestration of carbon dioxide in a carbon dioxide well and for other purposes determined by the Chief. All interest earnings are to be credited to the fund.<sup>30</sup>

### **Conveyance and ownership interest in pore space**

The bill modifies Ohio real property law to address the conveyance and ownership of pore space. The definitions of carbon dioxide for “carbon dioxide,” “carbon dioxide well,” “carbon sequestration,” “owner,” “pore space,” “storage operator,” and “storage facility” for the bill’s provisions regarding the injection and sequestration also apply to the bill’s conveyance and ownership provisions.<sup>31</sup>

Under the bill, the ownership of all pore space in all strata below the surface lands and waters is vested in the owner of the surface directly above the pore space. And, a conveyance of the surface ownership of real property is a conveyance of the pore space in all strata below the surface of the real property. However, it is not a conveyance of the pore space if the ownership interest in the pore space previously has been expressly excepted and reserved, conveyed, or otherwise severed from the surface ownership.

The bill specifies that ownership of pore space in the strata may be conveyed in the manner provided by law for the transfer of real property interests. The bill prohibits an agreement conveying mineral, oil and gas, coal, limestone or similar resource, or other interests

---

<sup>29</sup> R.C. 1509.79(B).

<sup>30</sup> R.C. 1509.79(C)(2).

<sup>31</sup> R.C. 5301.57.

underlying the surface from conveying pore space in the strata unless the agreement expressly includes conveyance of the pore space.<sup>32</sup>

The bill also prohibits a provision of law or rule requiring notice to be given to a surface owner, owner of the mineral or oil and gas interest, or both to be construed to require notice to individuals holding ownership interests in pore space in the underlying strata unless (1) the applicable law specifies notice to the individuals is required or (2) the owner of the pore space also owns an interest in the surface or in the mineral or oil and gas interests.<sup>33</sup>

The bill states that for the purpose of determining the priority of surface and subsurface uses between a severed mineral or oil and gas estate and pore space, the severed mineral or oil and gas estate is dominant regardless of whether ownership of the pore space is vested in the owner of the surface or is owned separately from the surface. However, if pore space is severed from the surface ownership, the pore space estate is considered to be dominant over the surface estate unless the conveyance specifically provides otherwise.

With respect to the rights belonging to, or the dominance of, the mineral estate or oil and gas estate, the bill expressly states that no provisions of its conveyance and ownership provisions may be construed to change or alter the common law existing as of the bill's effective date. In addition, nothing in the bill's conveyance and ownership provisions may alter, amend, diminish, or invalidate rights to the pore space that were acquired by deed, contract, or lease prior to the bill's effective date.<sup>34</sup>

### **Transfer of rights to pore space and to surface above pore space**

The bill requires an instrument that transfers the rights to pore space to include a specific description of the location of the pore space being transferred. According to the bill, if the instrument uses only a description of the surface, the transfer is considered to include pore space owned by the transferor at all depths underlying the described surface area unless specifically excluded. The owner of the pore space has no right to use the surface estate beyond that set out in a properly recorded instrument due solely to its ownership in the pore space.

Under the bill, an instrument that conveys the surface directly above the pore space, but otherwise seeks to except or reserve the rights to the pore space, must include a specific reference to the pore space in the instrument. Under such an exception or reserved rights, the reserved rights to the pore space includes pore space owned by the transferor at all depths underlying the described surface area unless otherwise specifically excluded.<sup>35</sup>

### **Pore space owners not liable for carbon dioxide injection**

No owner of pore space, other individual holding any right to control pore space, or other surface or subsurface property interest owner, has any liability relating to the injection of carbon

---

<sup>32</sup> R.C. 5301.58(A).

<sup>33</sup> R.C. 5301.58(B).

<sup>34</sup> R.C. 5301.58(C).

<sup>35</sup> R.C. 5301.58(D).

dioxide, or any other substances injected incidental to the injection of carbon dioxide, for carbon sequestration activities solely by virtue of their interest in the pore space or their surface or subsurface rights.<sup>36</sup>

Under the bill, a “subsurface property interest owner” is a property interest owner identified by the records of the recorder of deeds for each county in which a portion of a proposed storage facility is located who holds a fee simple interest, other freehold interest, or leasehold interest in the subsurface of the property, which may include mineral rights, such as coal or oil and gas rights. “Subsurface property interest owner” does not include an owner who holds an interest in property consisting solely of an easement or right-of-way.<sup>37</sup>

## **Carbon dioxide ownership**

As specified by the bill, all carbon dioxide injected into a storage facility for carbon sequestration, and all other substances injected incidental to the injection of carbon dioxide, are presumed to be owned by the storage operator. The bill allows this presumption to be rebutted by an individual claiming contrary ownership by a preponderance of the evidence in an action to establish ownership.<sup>38</sup>

## **Claims**

### **Carbon dioxide injection or migration**

Under the bill, a claim for damages due to injection or migration of carbon dioxide is not recoverable against a storage operator conducting carbon sequestration in accordance with a valid UIC Class VI permit unless the claimant proves that the injection or migration of carbon dioxide:

- Is injurious to health, or an obstruction to the free use of property so as essentially to interfere with the comfortable enjoyment of life or property; or
- Has caused direct physical injury to an individual, animal, or real or personal property.<sup>39</sup>

### **Surface or subsurface property interest owner claims**

A surface or subsurface property interest owner asserting a claim under the bill for injury to personal or real property may recover monetary damages due to injection or migration of carbon dioxide only for the diminution in real or personal property value resulting from the injection or migration of carbon dioxide beyond the storage facility. However, the bill prohibits a surface or subsurface property interest owner from seeking punitive damages due to injection or

---

<sup>36</sup> R.C. 5301.59.

<sup>37</sup> R.C. 5301.57(B).

<sup>38</sup> R.C. 5301.59.

<sup>39</sup> R.C. 5301.60(A).

migration of carbon dioxide if the storage operator acts in compliance with the requirements of the UIC Class VI permit.<sup>40</sup>

### Applicability of claims

The bill specifies that claims described under “**Carbon dioxide injection or migration**” and “**Surface or subsurface property interest owner claims**” do not apply to any claims that may be asserted by owners of oil and gas interests or owners of class II disposal wells for damages or injuries related to the injection or migration of carbon dioxide, construction or operation of a storage facility, or a carbon sequestration project.<sup>41</sup>

---

## HISTORY

Action	Date
Introduced	12-06-23

---

ANHB0358IN (L-1956-6)-135/ar

---

<sup>40</sup> R.C. 5301.60(B) and (C).

<sup>41</sup> R.C. 5301.60(D).