

THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

No. 2408 Session of
2024

INTRODUCED BY KINKEAD, HILL-EVANS, PROBST, BELLMON AND
SCHLOSSBERG, JUNE 11, 2024

REFERRED TO COMMITTEE ON ENVIRONMENTAL RESOURCES AND ENERGY,
JUNE 11, 2024

AN ACT

1 Amending Title 58 (Oil and Gas) of the Pennsylvania Consolidated
2 Statutes, providing for geologic sequestration and
3 establishing the Geologic Sequestration Special Revenue
4 Account.

5 The General Assembly of the Commonwealth of Pennsylvania
6 hereby enacts as follows:

7 Section 1. Title 58 of the Pennsylvania Consolidated
8 Statutes is amended by adding a chapter to read:

9 CHAPTER 37

10 GEOLOGIC SEQUESTRATION

11 Sec.

12 3701. Scope of chapter.

13 3702. Declaration of policy.

14 3703. Definitions.

15 3704. Ownership of pore space underlying surfaces.

16 3705. Oil and gas activities at geologic sequestration sites.

17 3706. Carbon dioxide sequestration and permit requirements.

18 3707. Geologic Sequestration Special Revenue Account.

1 § 3701. Scope of chapter.

2 This chapter relates to the regulation of geologic
3 sequestration.

4 § 3702. Declaration of policy.

5 The General Assembly finds and declares as follows:

6 (1) The enactment of this chapter is an exercise of the
7 authority of the Commonwealth to safeguard the vital
8 interests of the residents of this Commonwealth.

9 (2) This chapter is intended to advance the significant
10 and legitimate public purpose of ensuring clarity, legal use
11 and department oversight of geologic sequestration activities
12 and sites.

13 § 3703. Definitions.

14 The following words and phrases when used in this chapter
15 shall have the meanings given to them in this section unless the
16 context clearly indicates otherwise:

17 "Account." The Geologic Sequestration Special Revenue
18 Account established under section 3707 (relating to Geologic
19 Sequestration Special Revenue Account).

20 "Cumulative environmental impact." The totality of existing
21 and imminent or anticipated environmental impacts and pollution
22 in a defined geographic area to land and waters of this
23 Commonwealth or ambient air regardless of whether the pollution
24 has been authorized under the laws of this Commonwealth.

25 "Department." The Department of Environmental Protection of
26 the Commonwealth.

27 "Environmental justice area." A geographic area identified
28 or designated by the department that is characterized by
29 increased pollution burden and vulnerable populations based on
30 demographic, economic, health and environmental data.

1 "Excursion." The detection of migrating carbon dioxide at or
2 beyond the boundary of the geologic sequestration site.

3 "Geologic sequestration." The injection of carbon dioxide
4 and associated constituents into subsurface geologic formations
5 intended to prevent its release into the atmosphere.

6 "Geologic sequestration facility." The surface equipment
7 used for transport, storage and injection of carbon dioxide.

8 "Geologic sequestration site." The underground geologic
9 formations where carbon dioxide is intended to be stored.

10 "Pore space." Subsurface space which can be used as storage
11 space for carbon dioxide or other substances.

12 § 3704. Ownership of pore space underlying surfaces.

13 (a) General rule.--Notwithstanding any other provision of
14 law, the ownership of all pore space in all strata below the
15 surface lands and waters of this Commonwealth is declared to be
16 vested in the several owners of the surface above the strata.

17 (b) Conveyances.--A conveyance of the surface ownership of
18 real property shall be a conveyance of the pore space in all
19 strata below the surface of the real property unless the
20 ownership interest in the pore space previously has been severed
21 from the surface ownership or is explicitly excluded in the
22 conveyance. The ownership of pore space in strata may be
23 conveyed in the manner provided by law for the transfer of
24 mineral interests in real property. No agreement conveying
25 mineral or other interests underlying the surface shall act to
26 convey ownership of any pore space in the stratum unless the
27 agreement explicitly conveys that ownership interest.

28 (c) Public notice, hearing and public comment.--No
29 conveyance of pore space under all or any part of land owned by
30 a public or governmental agency, authority or body may be made

1 without public notice, hearing and reasonable opportunity for
2 public comment.

3 (d) Notice not required.--No provision of law, including a
4 lawfully adopted rule or regulation, requiring notice to be
5 given to a surface owner, to an owner of the mineral interest,
6 or to both, shall be construed to require notice to a person
7 holding ownership interest in any pore space in the underlying
8 strata unless the law specifies that notice to the person is
9 required.

10 (e) Limitations.--Nothing in this section shall be construed
11 to change or alter the common law as of the effective date of
12 this subsection as it relates to the rights belonging to, or the
13 dominance of, the mineral estate. For the purpose of determining
14 the priority of subsurface uses between a severed mineral estate
15 and pore space, the severed mineral estate is dominant
16 regardless of whether ownership of the pore space is vested in
17 the several owners of the surface or is owned separately from
18 the surface.

19 (f) Requirements.--All instruments which transfer the rights
20 to pore space under this section shall describe the scope of any
21 right to use the surface estate. The owner of any pore space
22 right shall have no right to use the surface estate beyond that
23 set out in a properly recorded instrument.

24 (g) Transfers.--Transfers of pore space rights made after
25 the effective date of this subsection are null and void at the
26 option of the owner of the surface estate if the transfer
27 instrument does not contain a specific description of the
28 location of the pore space being transferred. The description
29 may include a subsurface geologic or seismic survey or a metes
30 and bounds description of the surface lying over the transferred

1 pore space. In the event a description of the surface is used,
2 the transfer shall be deemed to include pore space at all depths
3 underlying the described surface area unless specifically
4 excluded. The validity of pore space rights under this
5 subsection may not affect the respective liabilities of any
6 party and the liabilities shall operate in the same manner as if
7 the pore space transfer were valid.

8 (h) Acquired rights.--Nothing in this section shall alter,
9 amend, diminish or invalidate rights to the use of pore space
10 that were acquired by contract or lease prior to the effective
11 date of this subsection.

12 § 3705. Oil and gas activities at geologic sequestration sites.

13 Nothing in this chapter shall be deemed to affect the
14 otherwise lawful right of a surface or mineral owner to drill or
15 bore through a geologic sequestration site if permitted by the
16 department and done in accordance with department rules for
17 protecting the geologic sequestration site against the escape of
18 carbon dioxide.

19 § 3706. Carbon dioxide sequestration and permit requirements.

20 (a) Prohibited.--The geologic sequestration of carbon
21 dioxide is prohibited unless authorized by a permit issued by
22 the department.

23 (b) Enhanced recovery.--The injection of carbon dioxide for
24 purposes of a project for enhanced recovery of oil or other
25 minerals approved by the department shall not be subject to this
26 chapter.

27 (c) Transfer.--If an oil and gas operator desires to convert
28 a well to geologic sequestration upon the cessation of oil and
29 gas recovery operations, the oil and gas operator must first
30 obtain approval from the department subject to the rules and

1 performance standards authorized by this chapter and the
2 department. If the oil and gas operator does not convert to
3 geologic sequestration, the well shall be plugged and abandoned
4 according to the rules of the department.

5 (d) Time limited permits.--Temporary time limited permits
6 for pilot scale testing of technologies for geologic
7 sequestration shall be issued by the department based upon
8 established rules and regulations.

9 (e) Permit requirements.--Permit requirements for geologic
10 sequestration of carbon dioxide shall be determined by the
11 department.

12 (f) Regulations.--The department and the Environmental
13 Quality Board shall promulgate regulations and permitting
14 criteria necessary to protect this Commonwealth's natural
15 resources and public health, safety and welfare. At a minimum,
16 the regulations shall address the following:

17 (1) The creation of subclasses of wells within the
18 existing Underground Injection Control Program administered
19 by the United States Environmental Protection Agency under 42
20 U.S.C. Ch. 6A Subch. XII Pt. C (relating to protection of
21 underground sources of drinking water) to protect human
22 health and safety and the environment and allow for the
23 permitting of the geologic sequestration of carbon dioxide.

24 (2) Requirements for the content of applications for
25 geologic sequestration permits. Each application shall
26 include all of the following:

27 (i) A description of the general geology of the area
28 to be affected by the injection of carbon dioxide,
29 including geochemistry, structure and faulting,
30 fracturing and seals, stratigraphy and lithology,

1 including petrophysical attributes.

2 (ii) A characterization of the injection zone and
3 aquifers above and below the injection zone which may be
4 affected, including applicable pressure and fluid
5 chemistry data to describe the projected effects of
6 injection activities.

7 (iii) The identification of all other drill holes,
8 orphaned, abandoned and operating wells or other natural
9 or human-made features or hazards that exist within or
10 adjacent to the proposed geologic sequestration site and
11 underground storage area.

12 (iv) An assessment of the impact on fluid resources
13 on subsurface structures and the surface of lands that
14 may reasonably be expected to be impacted and the
15 measures required to mitigate the impacts.

16 (v) A cumulative environmental impact report
17 assessing the environmental impact of the geologic
18 sequestration site, together with the cumulative impacts
19 on any environmental justice area.

20 (vi) Plans and procedures for environmental
21 surveillance and excursion detection, prevention and
22 control programs.

23 (vii) A site and facilities description, including a
24 description of the proposed geologic sequestration
25 facilities and documentation sufficient to demonstrate
26 that the applicant has all legal rights, including the
27 right to surface use, necessary to sequester carbon
28 dioxide and associated constituents into the proposed
29 geologic sequestration site.

30 (viii) Proof that the proposed injection wells are

1 designed, at a minimum, to the construction standards
2 promulgated by the department.

3 (ix) A plan for periodic mechanical integrity
4 testing of all wells.

5 (x) A monitoring plan to assess the migration of the
6 injected carbon dioxide and to ensure the retention of
7 the carbon dioxide in the geologic sequestration site.

8 (xi) Proof of bonding or financial assurance to
9 ensure that geologic sequestration sites and geologic
10 sequestration facilities will be constructed, operated
11 and closed in accordance with the purposes and provisions
12 of this chapter and the rules and regulations promulgated
13 under this title.

14 (xii) A detailed plan for postclosure monitoring,
15 verification, maintenance and mitigation.

16 (xiii) Proof of notice to surface owners, mineral
17 claimants, mineral owners, lessees and other owners of
18 record of subsurface interests as to the contents of the
19 notice. Notice requirements shall, at a minimum, require
20 all of the following:

21 (A) The publishing of the notice of the
22 application in a newspaper of general circulation in
23 each county of the proposed operation at weekly
24 intervals for four consecutive weeks.

25 (B) A copy of the notice shall be mailed to each
26 surface owner, mineral claimant, mineral owner,
27 lessee and other owner of record of subsurface
28 interests that is located within one mile of the
29 proposed boundary of the geologic sequestration site.

30 (xiv) A certificate issued by an insurance company

1 authorized to do business in the United States certifying
2 that the applicant has a public liability insurance
3 policy in force for the geologic sequestration operations
4 for which the permit is sought or evidence that the
5 applicant has satisfied other Federal or State self-
6 insurance requirements. The policy shall provide for
7 personal injury and property damage protection in an
8 amount and for a duration as established by regulation.

9 (xv) Requirements for the operator to provide
10 immediate verbal notice to the department of any
11 excursion after the excursion is discovered, followed by
12 written notice to all surface owners, mineral claimants,
13 mineral owners, lessees and other owners of record of
14 subsurface interests within 30 days of when the excursion
15 is discovered.

16 (xvi) Procedures for the termination or modification
17 of any applicable Underground Injection Control permit
18 issued under 42 U.S.C. Ch. 6A Subch. XII Pt. C if an
19 excursion cannot be controlled or mitigated.

20 (xvii) Requirements for bonding and financial
21 assurance for geologic sequestration sites and geologic
22 sequestration facilities, including:

23 (A) Procedures to establish the type and amount
24 of the bond or financial assurance instrument to
25 ensure that the operator faithfully performs all
26 requirements of this chapter, complies with all rules
27 and regulations and provides adequate financial
28 resources to pay for mitigation or reclamation costs
29 that the Commonwealth may incur as a result of a
30 default by the permit holder. If any insurance

1 instruments submitted for financial assurance
2 purposes include the Commonwealth as an additional
3 insured, the inclusion may not be deemed a waiver of
4 sovereign immunity.

5 (B) Annual or other periodic reporting by the
6 permittee during geologic sequestration and
7 reclamation activities to allow the department to
8 confirm or adjust the amount or type of the bond or
9 other financial assurance requirements consistent
10 with the site, facility and operation specific risks
11 and conditions.

12 (C) Procedures to require proof of compliance
13 from a permittee ordered by the department to adjust
14 a bond or other financial assurance, including
15 procedures for permit suspension or termination
16 procedures following notice and an opportunity for a
17 hearing if adequate bonding or financial assurance
18 cannot be demonstrated.

19 (D) Procedures for replacement of a bond or
20 financial assurance instrument if notice of
21 cancellation is provided or notice that the license
22 to do business in this Commonwealth of the surety or
23 insurance company issuing a bond or other financial
24 assurance under this chapter is suspended or revoked.

25 (E) Procedures for the department to forfeit the
26 bond or to make a claim against an insurance
27 instrument providing financial assurance, including
28 the right of the Attorney General to bring suit to
29 recover costs if the bond or financial assurance is
30 inadequate, to pay for closure, mitigation,

1 reclamation, measurement, monitoring, verification
2 and pollution control, where recovery is deemed
3 possible.

4 (F) Procedures, including public notice and a
5 public hearing if requested, for the release of bonds
6 or the termination of insurance instruments no less
7 than 10 years after the date when all wells excluding
8 monitoring wells have been appropriately plugged and
9 abandoned, all subsurface operations and activities
10 have ceased and all surface equipment and
11 improvements have been removed or appropriately
12 abandoned, or so long thereafter as necessary to
13 obtain a completion and release certificate from the
14 department certifying that plume stabilization has
15 been achieved without the use of control equipment
16 based on a minimum of three consecutive years of
17 monitoring data, and that the operator has completed
18 site reclamation and all required monitoring and
19 remediation sufficient to show that the carbon
20 dioxide injected into the geologic sequestration site
21 will not harm or present a risk to human health and
22 safety or the environment, including drinking water
23 supplies, consistent with the purposes of this
24 chapter and the rules and regulations adopted by the
25 department.

26 (G) Requirements for the operator to record an
27 affidavit in the office of the county clerk of the
28 county or counties in which a geologic sequestration
29 site is located. The affidavit shall be reasonably
30 calculated to alert a person researching the title of

1 a particular tract that the tract is underlain by a
2 site permitted for geologic sequestration.

3 (xviii) Requirements for fees to be paid by all
4 permittees of geologic sequestration sites and geologic
5 sequestration facilities, which may include a per ton
6 injection fee or a closure fee, during the period of
7 injection of carbon dioxide and associated constituents
8 into subsurface geologic formations, which fees shall be
9 deposited into the account.

10 (xix) Any other conditions and requirements as
11 necessary to carry out this section.

12 (g) Bond amounts.--For purposes of establishing bonding
13 amounts or any other type of financial assurance mechanism, the
14 department and the Environmental Quality Board shall not be
15 limited by classification of geologic sequestration wells under
16 this title as either conventional or unconventional. The
17 department and the Environmental Quality Board shall have the
18 discretion to set bonding amounts at levels deemed reasonable
19 and necessary to protect the public and environment of this
20 Commonwealth.

21 (h) Environmental justice areas.--In any permitting decision
22 impacting an environmental justice area, the department may
23 require additional impact assessments, public participation and
24 reporting measures as part of any permit review or approval.

25 (i) Permit denial.--The department shall deny a permit
26 application if it determines, in its sole discretion, that the
27 application would fail to comply with applicable rules and
28 regulations, or if existing or anticipated subsurface uses would
29 interfere with the storage integrity of the proposed geologic
30 sequestration site.

1 (j) Fee.--At the time a permit application is filed, an
2 applicant shall pay a fee to be determined by the department
3 based upon the estimated costs of reviewing, evaluating,
4 processing, serving notice of an application and holding any
5 hearings. The fee shall be credited to a separate account and
6 shall be used by the department as required to complete the
7 tasks necessary to process, publish and reach a decision on the
8 permit application. Unused fees shall be returned to the
9 applicant.

10 (k) Jurisdiction.--The department shall have jurisdiction
11 over any subsequent extraction of sequestered carbon dioxide
12 that is intended for commercial or industrial purposes.

13 (l) Liability limited.--Nothing in this section shall be
14 construed to create any liability by the Commonwealth for
15 failure to comply with this section.

16 § 3707. Geologic Sequestration Special Revenue Account.

17 (a) Establishment.--The Geologic Sequestration Special
18 Revenue Account is established as a separate account within the
19 State Treasury.

20 (b) Administration.--

21 (1) The account shall be administered by the department
22 and all money in the account shall be transmitted to the
23 State Treasurer for credit to the account.

24 (2) Any interest earned on the investment or deposit of
25 money into the account shall remain in the account and may
26 not be credited to the General Fund.

27 (3) Money in the account shall be appropriated on a
28 continuing basis to the department for use by the department
29 as provided under this section.

30 (c) Funding.--The account shall consist of all money

1 collected by the department to measure, monitor and verify
2 geologic sequestration sites following site closure
3 certification, release of all financial assurance instruments
4 and termination of the permit. The department shall promulgate
5 rules necessary to collect money in an amount reasonably
6 calculated to pay the costs of measuring, monitoring and
7 verifying the sites.

8 (d) Restrictions.--Money in the account shall be used only
9 for the measurement, monitoring and verification of geologic
10 sequestration sites following site closure certification,
11 release of all financial assurance instruments and termination
12 of the permit.

13 (e) Liability.--The existence, management and expenditure of
14 money from the account may not constitute a waiver by the
15 Commonwealth of its immunity from legal liability and does not
16 constitute an assumption of any liability for geologic
17 sequestration sites or the carbon dioxide and associated
18 constituents injected into those sites.

19 Section 2. This act shall take effect in 60 days.