THE GENERAL ASSEMBLY OF PENNSYLVANIA

SENATE BILL

No. 831

Session of 2023

INTRODUCED BY YAW, ROBINSON, STEFANO AND VOGEL, JUNE 20, 2023

AS AMENDED ON SECOND CONSIDERATION, HOUSE OF REPRESENTATIVES, JUNE 28, 2024

AN ACT

1 2 3 4 5 6 7 8	Providing for the injection of carbon dioxide into an underground reservoir for the purpose of carbon sequestration, for the ownership of pore space in strata below surface lands and waters of the Commonwealth, for conveyance of the surface ownership of real property; imposing duties on the Department of Environmental Protection AND THE ENVIRONMENTAL HEARING BOARD; and establishing the Carbon Dioxide Storage Facility Fund.						
9	The General Assembly of the Commonwealth of Pennsylvania						
10	hereby enacts as follows:						
11	Section 1. Short title.						
12	This act shall be known and may be cited as the Carbon						
13	Capture and Sequestration Act.						
14	Section 2. Findings and declarations.						
15	The General Assembly finds and declares as follows:						
16	(1) It is in the public interest to promote the geologic						
17	storage of carbon dioxide.						
18	(2) The capture and geologic storage of carbon dioxide						
19	will benefit this Commonwealth and the global environment by						

reducing greenhouse gas emissions and will help to ensure the

- 1 viability of the energy and power industries of this
- 2 Commonwealth, to the economic benefit of Pennsylvania and its
- 3 residents.
- 4 (3) Carbon dioxide is a potentially valuable commodity
- 5 and geologic storage may allow for its ready availability if
- 6 needed for commercial, industrial or other uses.
- 7 (4) The use of any subsurface stratum, formations,
- 8 cavities or voids, and any materials and fluids contained
- 9 therein, for geologic storage of carbon dioxide is a
- 10 reasonable and beneficial use.
- 11 Section 3. Definitions.
- 12 The following words and phrases when used in this act shall
- 13 have the meanings given to them in this section unless the
- 14 context clearly indicates otherwise:
- "Carbon dioxide injection well." A well that is used to
- 16 inject carbon dioxide into a reservoir for carbon sequestration
- 17 under a UIC Class VI permit.
- "Carbon dioxide plume." The physical extent underground of
- 19 the injected carbon dioxide stream.
- "Carbon sequestration." The underground storage of carbon
- 21 dioxide in a reservoir.
- "Carbon sequestration project." A project that involves the
- 23 underground storage of carbon dioxide in a reservoir pursuant to

- 24 at least one UIC Class VI permit.
- 25 "CONSERVED LAND." AS FOLLOWS:
- 26 (1) LAND THAT IS PRIVATELY OWNED OR MANAGED.
- 27 (2) THE TERM INCLUDES:
- 28 (I) LAND OWNED OR MANAGED BY A LAND TRUST.
- 29 (II) A CONSERVATION EASEMENT.
- 30 "Department." The Department of Environmental Protection of

- 1 the Commonwealth.
- 2 "ENVIRONMENTAL JUSTICE AREA." A GEOGRAPHIC AREA THAT IS

- 3 IDENTIFIED OR DESIGNATED BY THE DEPARTMENT AND CHARACTERIZED BY
- 4 INCREASED POLLUTION BURDEN AND VULNERABLE POPULATIONS BASED ON
- 5 DEMOGRAPHIC, ECONOMIC, HEALTH AND ENVIRONMENTAL DATA.
- 6 "Fund." The Carbon Dioxide Storage Facility Fund established
- 7 under section 10(a).
- 8 "MUNICIPALITY." A COUNTY, CITY, BOROUGH, INCORPORATED TOWN <--
- 9 OR TOWNSHIP OF THIS COMMONWEALTH.
- 10 "Pore space." Subsurface strata, formations, cavities or
- 11 voids, whether natural or artificially created, that can be used
- 12 as a storage space for carbon dioxide or other media.
- 13 "PUBLIC LAND." LAND THAT IS OWNED OR MANAGED BY THE
- 14 COMMONWEALTH, A MUNICIPALITY OR AN AGENCY, AUTHORITY OR OTHER
- 15 GOVERNMENTAL ENTITY OF THE COMMONWEALTH OR A MUNICIPALITY.
- 16 "Secretary." The Secretary of Environmental Protection of
- 17 the Commonwealth.
- 18 "Storage facility." The subsurface area consisting of the
- 19 extent of a carbon dioxide plume which is required to be
- 20 delineated on an approved UIC Class VI permit or an amendment to
- 21 a UIC Class VI permit of a storage operator.
- "Storage operator." An individual, corporation or other
- 23 legal entity that operates a carbon sequestration project.
- 24 "Subsurface property interest owner." A property interest
- 25 owner identified by the records of the recorder of deeds for
- 26 each county containing a portion of the proposed storage
- 27 facility who holds a fee simple interest, other freehold
- 28 interest or leasehold interest in the subsurface of the
- 29 property, which may include minerals, including coal, or oil and
- 30 gas rights. The term does not include the owner of a right-of-

- 1 way or an easement.
- 2 "Surface property interest owner." A property interest owner
- 3 identified by the records of the recorder of deeds for each
- 4 county containing a portion of the proposed storage facility who
- 5 holds a fee simple interest or other freehold interest in the
- 6 surface of the property, which may include minerals, including
- 7 coal, or oil and gas rights. The term does not include the owner
- 8 of a right-of-way, an easement or a leasehold.
- 9 "UIC Class VI permit." A permit issued under 40 CFR Pt. 144

- 10 (relating to underground injection control program) AND
- 11 REGULATIONS PROMULGATED BY THE ENVIRONMENTAL QUALITY BOARD that
- 12 allows the operation of a carbon dioxide injection and storage
- 13 well.
- "Underground storage of carbon dioxide." The injection and
- 15 storage of carbon dioxide into underground strata and formations
- 16 under at least one UIC Class VI permit.
- 17 Section 4. Ownership of pore space.
- 18 (a) General rule. -- The ownership of all pore space in all
- 19 strata below the surface lands and waters of the Commonwealth
- 20 shall be vested in the surface property interest owner above the
- 21 pore space.
- 22 (b) Conveyance. -- A conveyance of the surface ownership of
- 23 real property shall be a conveyance of the pore space in all
- 24 strata below the surface of the real property unless the
- 25 ownership interest in the pore space previously has been
- 26 expressly excepted and reserved, conveyed or otherwise severed
- 27 from the surface ownership. The ownership of pore space in
- 28 strata may be conveyed in the manner provided by law for the
- 29 transfer of real property interests. No agreement conveying
- 30 minerals, including coal, oil and gas, or other interests

- 1 underlying the surface shall act to convey pore space in the
- 2 stratum unless the agreement expressly includes conveyance of
- 3 the pore space.

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- 4 (C) TRANSPARENCY.--A LEASE OR CONVEYANCE OF PORE SPACE UNDER <--
- 5 ANY PUBLIC LAND MAY NOT BE MADE WITHOUT PUBLIC NOTICE, HEARING
- 6 AND A REASONABLE OPPORTUNITY FOR PUBLIC COMMENT.
- 7 (c) (D) Construction.--

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- 8 (1) No provision of law or regulation requiring notice
 9 to be given to a surface property interest owner, subsurface
 10 property interest owner or both, shall be construed to
 11 require notice to individuals holding ownership interest in
 12 pore space in the underlying strata unless the applicable law
 13 specifies notice to the individuals is required.
 - (2) Nothing in this section shall be construed to change or alter the common law existing as of the effective date of this paragraph with respect to the rights belonging to, or the dominance of, the mineral, including coal, estate or oil and gas estate. For the purpose of determining the priority of subsurface uses between a mineral, including coal, or oil and gas estate and pore space, the mineral, including coal, or oil and gas estate is dominant, including the surface use necessary for the subsurface development of the mineral, including coal, or oil and gas estate, regardless of whether ownership of the pore space is vested in the surface property interest owner or is owned separately from the surface.
 - (3) Nothing in this section shall alter, amend, diminish or invalidate rights to an existing use of subsurface pore space that were acquired by contract or lease prior to the effective date of this paragraph, notwithstanding that the contract or lease was entered into with a subsurface property

- 1 interest owner or a predecessor to the subsurface property
- 2 interest owner.
- 3 (d) (E) Transfer instruments.--

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- 4 (1) Instruments that transfer the rights to pore space
- 5 under this section shall describe the scope of any right to
- 6 use the surface estate. The owner of a pore space right shall
- 7 have no right to use the surface estate beyond that set out
- 8 in a properly recorded instrument.
- 9 (2) After the effective date of this paragraph, a
- 10 transfer instrument shall include a specific description of
- 11 the location of the pore space being transferred. The
- description may include a metes and bounds description of the
- surface lying over the transferred pore space and
- 14 identification of the subsurface strata, formations or
- reservoirs. In the event only a description of the surface is
- 16 used, the transfer shall be deemed to include pore space at
- 17 all depths underlying the described surface area unless
- specifically excluded. The validity of pore space rights
- under this paragraph shall not affect the respective
- 20 liabilities of a party and liabilities shall operate in the
- 21 same manner as if the pore space transfer were valid.
- 22 Section 5. Cotenants, ownership of pore space by multiple
- 23 cotenants and collective storage.
- 24 (a) General rule. -- If a storage operator does not obtain the
- 25 consent of all persons that own the storage facility's pore
- 26 space to the construction and operation of a storage facility,
- 27 the secretary ENVIRONMENTAL HEARING BOARD may require that the
- 28 pore space owned by nonconsenting owners be included in a
- 29 storage facility and subject to geologic storage. The following
- 30 shall apply:

- (1) The permit applicant and prospective storage operator shall negotiate with the pore space owners and acquire rights needed to access the pore space.
 - If, after good-faith negotiation, the applicant or (2) storage operator cannot locate or cannot reach an agreement with all necessary pore space owners but has secured written consent or agreement from the owners of at least 60% 75% of the ownership interest in the pore space for the storage facility, all of the pore space of said interests for which an agreement has not been reached shall be declared to be included within the proposed storage facility if the secretary ENVIRONMENTAL HEARING BOARD finds that the <-requirements of this section have been met. For the purposes of this subsection, an unknown or nonlocatable owner shall be deemed to have consented or agreed to the use of the pore space, provided that the storage operator has complied with the publication requirements of this act.
- 18 (b) Collective storage.--
 - (1) The storage operator shall provide a list to the secretary ENVIRONMENTAL HEARING BOARD of all persons <-reasonably known to own an interest in pore space proposed to be collectively used in an application to the secretary <-ENVIRONMENTAL HEARING BOARD for a collective storage order. A <-collective storage order shall be made only after the secretary ENVIRONMENTAL HEARING BOARD provides notice to all <-pore space owners proposed to be included within the order.
 - (2) The secretary ENVIRONMENTAL HEARING BOARD shall set <-and collect a fee adequate to pay expenses associated with
 the conduct of administrative hearings for the collective
 storage of pore space.

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1 If the proposed collective storage order concerns 2 pore space with an unknown or nonlocatable owner, the storage 3 operator shall publish one notice in the newspaper of the largest circulation in each county in which the pore space is 4 located. The notice shall appear no more than 30 days prior 5 to the initial application for the collective storage order. 6 7 The applicant shall file proof of notice with the department <--8 ENVIRONMENTAL HEARING BOARD concurrently with the <--9 application. The notice shall:

- (i) State that an application for a collective storage order has been filed with the department <--
- (ii) Describe the pore space proposed to be collectively used.
- (iii) In the case of an unknown pore space owner, indicate the name of the last known owner.
- (iv) In the case of a nonlocatable pore space owner, identify the owner and the owner's last known address.
- (v) State that a person claiming an interest in the pore space proposed to be collectively used should notify the secretary ENVIRONMENTAL HEARING BOARD and the storage <-- operator at the published address within 20 days of the publication date.
- (4) A collective storage order shall authorize the longterm storage of carbon dioxide beneath the tract or portion. The order shall also specify, where necessary, the location of and how to access carbon dioxide injection wells, outbuildings, roads and monitoring equipment. The collective storage order shall identify the compensation to be paid to unknown, nonlocatable and nonconsenting pore space owners and

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- 1 the basis for fair market valuation of the collective
- 2 interest of the pore space owners.
- 3 (5) A certified copy of a collective storage order and a
- 4 survey of the storage field shall be recorded by the storage
- 5 operator in the office of the county clerk of the county in
- 6 which all or a portion of the collective tract is located.
- 7 The secretary ENVIRONMENTAL HEARING BOARD shall provide a
- 8 copy of the collective storage order to those required to be

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- 9 notified. For purposes of this section, an unknown or
- 10 nonlocatable owner shall be deemed to have received notice,
- 11 provided that the storage operator has complied with the
- 12 publication requirements under this subsection.
- 13 (C) NO RIGHT OF SURFACE ACCESS OR USE.--A COLLECTIVE STORAGE <--
- 14 ORDER SHALL NOT GRANT THE STORAGE OPERATOR EXPRESSED OR IMPLIED
- 15 RIGHTS OF SURFACE USE OR ACCESS.
- 16 (D) COLLECTIVE STORAGE PROHIBITION. THE ENVIRONMENTAL
- 17 HEARING BOARD MAY NOT CONSIDER OR APPROVE A COLLECTIVE STORAGE
- 18 ORDER THAT INVOLVES PUBLIC LAND OR CONSERVED LAND OPEN TO THE
- 19 PUBLIC.
- 20 (D) COLLECTIVE STORAGE PROHIBITION. -- THE ENVIRONMENTAL
- 21 HEARING BOARD MAY NOT CONSIDER OR APPROVE A COLLECTIVE STORAGE
- 22 ORDER THAT INVOLVES ANY OF THE FOLLOWING, UNLESS THE OWNER OR
- 23 MANAGER OF A PORE SPACE, AS APPLICABLE, HAS ALREADY VOLUNTARILY
- 24 AGREED TO LEASE OR CONVEY THE PORE SPACE:
- 25 (1) LAND THAT IS OWNED OR MANAGED BY THE COMMONWEALTH, A
- 26 MUNICIPALITY OR AN AGENCY, AUTHORITY OR OTHER GOVERNMENTAL
- 27 ENTITY OF THE COMMONWEALTH OR A MUNICIPALITY.
- 28 (2) LAND SUBJECT TO A CONSERVATION EASEMENT UNDER THE
- 29 ACT OF JUNE 22, 2001 (P.L.390, NO.29), KNOWN AS THE
- 30 CONSERVATION AND PRESERVATION EASEMENTS ACT.

- 1 (3) LAND OWNED OR MANAGED BY A CHARITABLE CORPORATION,
- 2 CHARITABLE ASSOCIATION OR CHARITABLE TRUST REGISTERED WITH
- 3 THE BUREAU OF CHARITABLE ORGANIZATIONS OF THE DEPARTMENT OF
- 4 STATE AND EXEMPT FROM TAXATION UNDER 26 U.S.C. § 501(C)(3)
- 5 (RELATING TO EXEMPTION FROM TAX ON CORPORATIONS, CERTAIN
- 6 TRUSTS, ETC.) OR OTHER FEDERAL OR STATE LAW OR REGULATION
- 7 WHICH HAS ANY OF THE FOLLOWING PURPOSES:
- 8 (I) RETAINING OR PROTECTING THE NATURAL, SCENIC,
- 9 AGRICULTURAL OR OPEN SPACE VALUES OF REAL PROPERTY.
- 10 (II) ASSURING THE AVAILABILITY OF REAL PROPERTY FOR
- AGRICULTURAL, FOREST, RECREATIONAL OR OPEN SPACE USE.
- 12 (III) PROTECTING, CONSERVING OR MANAGING THE USE OF
- 13 NATURAL RESOURCES.
- 14 (IV) PROTECTING WILDLIFE.
- 15 (V) MAINTAINING OR ENHANCING LAND, AIR OR WATER
- 16 QUALITY.
- 17 (VI) PRESERVING THE HISTORICAL, ARCHITECTURAL,
- 18 ARCHAEOLOGICAL OR CULTURAL ASPECTS OF REAL PROPERTY.
- 19 (4) LAND ACQUIRED UNDER THE ACT OF JANUARY 19, 1967
- 20 (1968 P.L.992, NO.442), ENTITLED "AN ACT AUTHORIZING THE
- 21 COMMONWEALTH OF PENNSYLVANIA AND LOCAL GOVERNMENT UNITS
- 22 THEREOF TO PRESERVE, ACQUIRE OR HOLD LAND FOR OPEN SPACE
- 23 USES."
- 24 (E) ATTORNEY FEES AND COSTS.--THE ENVIRONMENTAL HEARING
- 25 BOARD, UPON THE REQUEST OF A NONCONSENTING PORE SPACE OWNER, MAY
- 26 ORDER THE PAYMENT OF REASONABLE ATTORNEY FEES AND COSTS INCURRED
- 27 BY THE NONCONSENTING PORE SPACE OWNER FOR ADMINISTRATIVE
- 28 HEARINGS CONDUCTED BY THE ENVIRONMENTAL HEARING BOARD UNDER THIS
- 29 SECTION.
- 30 Section 5.1. Seismic exploration.

- 1 (a) Seismic activity review.--A storage operator shall
- 2 prepare a seismic activity review in accordance with existing
- 3 requirements for a UIC Class VI permit.
- 4 (b) Seismic survey or assessment. -- Prior to application for
- 5 a UIC Class VI permit developed by the department, a storage
- 6 operator may conduct a seismic survey or assessment across the
- 7 vicinity of a potential storage facility.
- 8 (C) SEISMICITY MONITORING SYSTEM.--A STORAGE OPERATOR SHALL <--
- 9 DEPLOY AND MAINTAIN A SEISMICITY MONITORING SYSTEM TO DETERMINE
- 10 THE PRESENCE OR ABSENCE, MAGNITUDE AND THE HYPOCENTER LOCATION
- 11 TO THE BEST OF THE STORAGE OPERATOR'S ABILITY OF SEISMIC
- 12 ACTIVITY WITHIN THE VICINITY OF THE STORAGE FACILITY OF A
- 13 RICHTER SCALE MAGNITUDE AS MAY BE NECESSARY TO PERFORM A RISK
- 14 ANALYSIS FOR UNACCEPTABLE INDUCED SEISMICITY LEVELS. IF SEISMIC
- 15 MONITORING DETECTS UNACCEPTABLE INDUCED SEISMICITY LEVELS, THE
- 16 STORAGE OPERATOR SHALL NOTIFY THE SECRETARY NO LATER THAN A TIME
- 17 PERIOD SPECIFIED BY THE SECRETARY OF THE DETERMINATION OF
- 18 UNACCEPTABLE INDUCED SEISMICITY LEVELS AND THE REQUIRED
- 19 MITIGATION. IF, BASED ON CARBON SEQUESTRATION PROJECT-SPECIFIC
- 20 RISK ANALYSIS, THE SECRETARY DETERMINES THAT SEISMIC MONITORING
- 21 DOES NOT NEED TO BE PERMANENT FOR A PARTICULAR PROJECT, THE
- 22 DEPARTMENT MAY PERMIT THE LOCAL SEISMICITY MONITORING TO BE
- 23 DISCONTINUED AND DEFER INSTEAD TO NATIONAL OR STATE ARRAYS FOR
- 24 LONG-TERM SEISMICITY MONITORING.
- (c) (D) Entry onto lands.--If a storage operator is unable
- 26 to reasonably negotiate with a surface owner for the right to
- 27 conduct a seismic survey on lands owned by the surface owner,
- 28 the secretary may issue an order for the entry onto the lands by
- 29 the storage operator. In this instance, the storage operator
- 30 shall pay the surface owner just and reasonable compensation as

- 1 established by the secretary.
- 2 (d) (E) Limitations and claims. -- A seismic survey shall be <--
- 3 limited to geologic storage and shall remain confidential and
- 4 proprietary. The storage operator shall defend, indemnify and
- 5 hold harmless the property owner for all claims arising out of
- 6 entry onto the property by the storage operator, its contractors
- 7 and its agents.
- 8 Section 6. Authorization of projects.
- 9 (a) Carbon sequestration.—Carbon sequestration projects are 10 authorized in this Commonwealth for the purposes of:
- 11 (1) Injecting carbon dioxide into the pore space of an 12 underground storage facility through at least one carbon 13 dioxide injection well under a UIC Class VI permit.
- 14 (2) Employing the underground storage of carbon dioxide.
- 15 (b) Conditions for authorization.--
- 16 To operate a carbon sequestration project under this 17 section, a storage operator must obtain, and must be in-<-compliance with, a UIC Class VI permit and all other permits 18 19 as required by applicable statutes and regulations. Upon-20 submission of a UIC Class VI permit application, the storage 21 operator shall provide notice of application to the surface 22 property interest owners and subsurface property interest 23 owners in the vicinity of the storage facility. THE FOLLOWING <--24 APPLY:
 - (I) THE ENVIRONMENTAL QUALITY BOARD SHALL PROMULGATE REGULATIONS AND PERMITTING CRITERIA NECESSARY TO PROTECT THE COMMONWEALTH'S NATURAL RESOURCES AND PUBLIC HEALTH, SAFETY AND WELFARE. THE FOLLOWING APPLY:
- 29 (A) THE REGULATIONS SHALL INCORPORATE AND
 30 CONSIDER COMMUNITY AND CUMULATIVE IMPACTS ANALYSES IN

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1	PERMITTING	FOR	CARBON	SEOUES	STRATION	PROJECTS.

- (B) THE DEPARTMENT MAY CONDITION OR DENY A
 PERMIT BASED ON THE CRITERIA SPECIFIED IN THE
 REGULATIONS.
- (II) IN A PERMITTING DECISION IMPACTING AN ENVIRONMENTAL JUSTICE AREA, THE DEPARTMENT MAY REQUIRE ADDITIONAL IMPACT ASSESSMENTS, PUBLIC PARTICIPATION, TRANSPARENCY AND REPORTING MEASURES AS PART OF A PERMIT REVIEW OR APPROVAL.
- (III) THE DEPARTMENT MAY CHARGE A PERMIT OR PERIODIC MANAGEMENT FEE SUFFICIENT TO MAINTAIN OVERSIGHT AND ENFORCEMENT OF CARBON SEQUESTRATION PROJECTS IN THIS COMMONWEALTH.
- (2) UPON SUBMISSION OF A UIC CLASS VI PERMIT

 APPLICATION, THE STORAGE OPERATOR SHALL PROVIDE NOTICE OF

 APPLICATION TO THE SURFACE PROPERTY INTEREST OWNERS AND

 SUBSURFACE PROPERTY INTEREST OWNERS IN THE VICINITY OF THE

 STORAGE FACILITY.
 - (2) (3) The following apply to seismic monitoring:
- A storage operator shall deploy prior to carbon sequestration, and periodically operate during carbon sequestration, a seismicity monitoring system to determine the presence or absence, magnitude and the hypocenter location to the best of the storage operator's ability of seismic activity within the vicinity of the storage facility as may be necessary to perform an array and a risk analysis and as required by the department. A storage operator may apply to the department for a waiver of this requirement if the storage operator presents a geohazard assessment and historical injection data

demonstrating that induced seismicity does not pose significant risk.

- (ii) If a storage operator is unable to reasonably negotiate with a surface property interest owner for the right to conduct seismic monitoring on lands owned by the surface property interest owner, the secretary may issue an order for the entry onto the lands by the storage operator. In this instance, the storage operator shall pay the surface property interest owner just and reasonable compensation as established by the secretary.
- (iii) The storage operator shall defend, indemnify and hold harmless the surface property interest owner and subsurface property interest owner for all claims arising out of entry onto the property by the storage operator, its contractors and its agents.
- (iv) A storage operator shall provide for the submission to the department of any seismic data above a seismic threshold or frequency determined by the department in a manner provided for by the department.
- (3) To operate a carbon sequestration project under this section, a storage operator shall design the carbon sequestration project to isolate any existing or future production from the mineral, including of the coal, or oil and gas estate, from the carbon dioxide plume and shall indicate-whether the storage facility contains commercially valuable-mineral, including the coal, or oil and gas estates, and, if itdoes, a permit may be issued only if the department is satisfied that the interests of the mineral, including coal, or oil and gas estate, will not be adversely affected and have been addressed in an agreement entered into by the storage operator

1 and the subsurface property interest owners.

- 2 (4) TO OPERATE A CARBON SEQUESTRATION PROJECT UNDER THIS <--
- 3 SECTION, A STORAGE OPERATOR SHALL DESIGN THE CARBON
- 4 SEQUESTRATION PROJECT TO ISOLATE ANY EXISTING OR FUTURE
- 5 PRODUCTION FROM THE COMMERCIALLY VALUABLE MINERAL, INCLUDING
- 6 OF THE COAL, OR OIL AND GAS ESTATE, FROM THE CARBON DIOXIDE
- 7 PLUME AND SHALL INDICATE WHETHER THE STORAGE FACILITY
- 8 CONTAINS COMMERCIALLY VALUABLE MINERAL, INCLUDING THE COAL,
- 9 OR OIL AND GAS ESTATES, AND, IF IT DOES, A PERMIT MAY BE
- 10 ISSUED ONLY IF THE DEPARTMENT IS SATISFIED THAT THE INTERESTS
- OF THE MINERAL, INCLUDING COAL, OR OIL AND GAS ESTATE, WILL
- 12 NOT BE ADVERSELY AFFECTED AND THE SUBSURFACE PROPERTY
- 13 INTEREST OWNERS HAVE BEEN NOTIFIED BY THE STORAGE OPERATOR.
- 14 IF A SUBSURFACE PROPERTY INTEREST OWNER IS A PRODUCER OF A
- 15 COMMERCIALLY VALUABLE MINERAL, INCLUDING COAL OR OIL AND GAS,
- 16 THE STORAGE OPERATOR SHALL NOTIFY THE SUBSURFACE PROPERTY
- 17 INTEREST OWNER IN WRITING AND SUBMIT A COPY OF THE NOTICE TO
- 18 THE DEPARTMENT. IF, UPON RECEIPT OF THE NOTICE, THE
- 19 SUBSURFACE PROPERTY INTEREST OWNER EXPRESSES AN OBJECTION TO
- THE DEPARTMENT TO THE DESIGN OF THE CARBON SEQUESTRATION
- 21 PROJECT BASED ON THE POTENTIAL ADVERSE EFFECT TO A
- 22 COMMERCIALLY VALUABLE MINERAL, INCLUDING THE COAL OR OIL AND
- 23 GAS ESTATE, THE STORAGE OPERATOR SHALL ADDRESS THE OBJECTION
- TO THE SATISFACTION OF THE DEPARTMENT.
- 25 Section 7. Ownership of material injected into storage
- 26 facilities and liability for holding interests
- 27 related to a storage facility or giving consent to
- 28 allow carbon sequestration activities.
- 29 (a) General rule. -- All carbon dioxide, and other substances
- 30 injected incidental to the injection of carbon dioxide, injected

- 1 into a storage facility for the purpose of carbon sequestration
- 2 shall be presumed to be owned by the storage operator of the
- 3 material and all rights, benefits, burdens and liabilities of
- 4 the ownership shall belong to the storage operator. This
- 5 presumption may be rebutted by an individual claiming contrary
- 6 ownership by a preponderance of the evidence in an action to
- 7 establish ownership.
- 8 (b) Liability.--No owner of pore space, other individual
- 9 holding any right to control pore space or other surface
- 10 property interest owner or subsurface property interest owner,
- 11 shall be liable for the effects of injecting carbon dioxide for
- 12 carbon sequestration activities, or for the effects of injecting
- 13 other substances for the purpose of carbon sequestration which
- 14 substances are injected incidental to the injection of carbon
- 15 dioxide, solely by virtue of their interest in the pore space or
- 16 surface or subsurface rights.
- 17 Section 8. Liability of storage operator.
- 18 (a) General rule. A claim for damages due to injection or <--
- 19 migration of carbon dioxide shall not ONLY be actionable against <--
- 20 a storage operator conducting carbon sequestration in accordance
- 21 with a valid UIC Class VI permit unless WHEN the claimant proves <--

- 22 that the injection or migration of carbon dioxide:
- 23 (1) is injurious to health, or an obstruction to the
- 24 free use of property so as essentially to interfere with the
- 25 comfortable enjoyment of life or property; or
- 26 (2) has caused injury to an individual, animal or real-
- 27 or personal property. DIOXIDE WAS PERFORMED WITHOUT
- 28 **REASONABLE CARE.**
- 29 (A) ACTIONABLE CLAIMS.--A CLAIM FOR DAMAGES DUE TO INJECTION <--
- 30 OR MIGRATION OF CARBON DIOXIDE SHALL NOT BE ACTIONABLE AGAINST A

- 1 STORAGE OPERATOR CONDUCTING CARBON SEQUESTRATION IN ACCORDANCE
- 2 WITH A VALID UIC CLASS VI PERMIT UNLESS THE CLAIMANT PROVES THAT
- 3 THE INJECTION OR MIGRATION OF CARBON DIOXIDE WAS PERFORMED
- 4 WITHOUT REASONABLE CARE AND HAS CAUSED INJURY TO AN INDIVIDUAL,
- 5 ANIMAL OR REAL OR PERSONAL PROPERTY.
- 6 (b) Redress and damages.--

relief.

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- 7 (1) A surface property interest owner or subsurface 8 property interest owner or lessee who incurs injury or damage 9 or loss of property value as a result of the injection or 10 migration of carbon dioxide described in subsection (a) shall 11 have a right of action against the storage operator for 12 injunction, damages or other appropriate civil or equitable
- 14 (2) A surface property interest owner, subsurface
 15 property interest owner or lessee may seek recovery for any
 16 of the following:
- (i) General and special damages, including actual
 damages, for the diminution in property value resulting
 from the injection and migration of carbon dioxide beyond
 the storage facility.
 - (ii) Punitive damages.
 - (iii) Reasonable attorney fees and costs.
- 23 (iv) Injunctive and other equitable relief.
- 24 (v) Other relief which the court deems necessary and 25 proper.
- 26 (3) A surface property interest owner, subsurface
 27 property interest owner or lessee may not seek punitive
 28 damages due to injection or migration of carbon dioxide if
 29 the storage operator is determined to have had a reasonable
 30 basis for believing that the carbon sequestration project

- 1 would not result in migration of carbon dioxide beyond the
- 2 storage facility.
- 3 Section 9. Operation and storage fee.
- 4 (a) Requirement. -- Storage operators shall pay the department
- 5 a fee on each ton of carbon dioxide injected for storage.
- 6 (b) Amount. -- The fee under this section shall be in an
- 7 amount set by the Environmental Quality Board. The following
- 8 apply:
- 9 (1) The fee shall be based on the department's
- 10 anticipated expenses associated with:
- 11 (i) Regulating storage facilities during their
- 12 construction, operation and preclosure phases.
- 13 (ii) Long-term monitoring and management of the
- 14 storage facility following issuance of the certificate of
- project completion under section 11.
- 16 (2) The department shall transmit to the Legislative
- 17 Reference Bureau for publication in the next available issue
- of the Pennsylvania Bulletin a schedule of the fee set under
- 19 this section.
- 20 (c) Deposit. -- The fee imposed by the department under this
- 21 section shall be deposited as follows:
- 22 (1) Fifty percent of the fee shall be deposited into the
- fund.
- 24 (2) Fifty percent of the fee shall be deposited into the
- 25 restricted account within the fund established under section
- 26 10(a)(2).
- 27 (d) Penalties.--Penalties imposed for violations of this act
- 28 or regulations promulgated under this act and funds received by
- 29 the department from financial responsibility mechanisms shall be
- 30 remitted to the fund.

- 1 Section 10. Fund.
- 2 (a) Establishment.--
- 3 (1) The Carbon Dioxide Storage Facility Fund is
- 4 established as a separate fund within the State Treasury.
- 5 (2) A restricted account is established within the fund
- for the purpose provided under subsection (c)(2).
- 7 (b) Administration. -- The department shall administer the
- 8 fund.
- 9 (c) Use of fund and restricted account.--
- 10 (1) The fund shall be used only for defraying the
- 11 department's expenses associated with:
- 12 (i) Processing permit applications.
- 13 (ii) Regulating storage facilities during
- 14 construction, operational and preclosure phases.
- 15 (iii) Making storage amount determinations.
- 16 (2) The restricted account shall be used only for
- 17 defraying the costs associated with long-term monitoring and
- 18 management of a closed storage facility following the
- issuance of the certificate of project completion under
- 20 section 11.
- 21 (d) Interest.--
- 22 (1) Interest earned by the fund shall be deposited into
- the fund.
- 24 (2) Interest earned by the restricted account shall be
- deposited into the restricted account.
- 26 (e) Transfer.--Money in the fund may not be transferred to
- 27 the General Fund or another fund.
- 28 (f) Appropriation. -- Money in the fund and restricted account
- 29 shall be annually appropriated by the General Assembly.
- 30 Section 11. Certificate of project completion.

- 1 (a) Issuance. -- After all carbon dioxide injections
- 2 underground or into pore space are completed and upon
- 3 application by the storage operator, the department may issue a
- 4 certificate of project completion. The department shall issue a
- 5 certificate upon satisfaction of the conditions imposed under
- 6 this section and after providing public notice of the
- 7 application, an opportunity for public comment and a public
- 8 hearing on the application.
- 9 (b) Timing.--A certificate of project completion shall not
- 10 be issued until at least $\frac{10}{10}$ 50 years after carbon dioxide
- 11 injections end OR UNTIL AN APPROVED ALTERNATIVE PERIOD OF TIME. <--

- 12 (c) Conditions. -- A certificate of project completion shall
- 13 not be issued until the storage operator establishes with a
- 14 degree of certainty that satisfies the department that:
- 15 (1) The storage operator is in full compliance with all
- laws governing the injection and storage of the carbon
- 17 dioxide.
- 18 (2) The storage operator has addressed pending claims
- 19 regarding the injection and storage of the carbon dioxide.
- 20 (3) The carbon dioxide that has been injected
- 21 underground for storage is not expected to expand vertically
- or horizontally and poses no threat to human health, human
- safety, the environment or underground sources of drinking
- 24 water.
- 25 (4) The carbon dioxide that has been injected
- 26 underground for storage is unlikely to cross any underground
- or pore space boundary and is not expected to endanger any
- underground source of drinking water or otherwise endanger
- 29 human health, human safety or the environment.
- 30 (5) All wells, equipment and facilities to be used in

- maintaining and managing the stored carbon dioxide are in good condition and will retain mechanical integrity.
- 3 (6) The storage operator has plugged injection wells and 4 has completed all reclamation required by the department.
- 5 (d) After issuance.--Upon the issuance of a certificate of 6 project completion under this section:
- 7 (1) In exchange for assuming responsibility and
 8 liability for the stored carbon dioxide as provided in this
 9 section, title to the stored or injected carbon dioxide, and
 10 any facilities used to inject or store the carbon dioxide,
 11 without payment of compensation, shall be transferred to the
 12 Commonwealth.
 - (2) Title acquired by the Commonwealth includes all rights, and interests in, and all responsibilities associated with, the stored or injected carbon dioxide, subject to limitations provided within this subsection.
 - (3) Except in situations provided below, and except for criminal and contractual liability, primary responsibility and liability for the stored or injected carbon dioxide shall be transferred to the Commonwealth:
 - (i) situations in which the operator violated a duty imposed on the operator by Pennsylvania law or regulation prior to approval of site closure and any applicable statutes of limitation have not run;
 - (ii) situations in which the department determines, after notice and hearing, that the operator provided deficient or erroneous information that was material and relied upon by the department to support approval of site closure;
- 30 (iii) situations in which the department determines,

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- after notice and hearing, that there is carbon dioxide
 migration for which the operator is responsible that
 causes or threatens imminent and substantial endangerment
 to an underground source of drinking water; or
 - (iv) the balance of the escrow or the fund is insufficient to cover costs arising from storage facilities and associated carbon dioxide injection wells after site closure.
 - (4) The storage operator and all individuals who generated, injected or stored carbon dioxide shall be forever released from all regulatory requirements associated with the continued storage and maintenance of the injected carbon dioxide, except as provided in paragraph (3).
 - (5) A bond or financial assurance submitted to the department shall be released.
- 16 (6) The department shall assume responsibility to manage
 17 and monitor the stored carbon dioxide until a time when the
 18 Federal Government assumes responsibility for the long-term
 19 monitoring and management of stored carbon dioxide.
- 20 (e) Construction.--Nothing in this section shall be
 21 construed as a waiver of sovereign immunity by the Commonwealth.
 22 Section 12. Effective date.
- 23 This act shall take effect immediately.

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