

## 97TH GENERAL ASSEMBLY State of Illinois 2011 and 2012 SB3758

Introduced 2/10/2012, by Sen. James F. Clayborne, Jr.

## SYNOPSIS AS INTRODUCED:

New Act

Creates the Carbon Dioxide Geologic Storage Act. Provides that a storage operator must have a reservoir permit issued by the Department of Natural Resources in order to operate a storage facility. Sets forth the requirements for the issuance of a reservoir permit, including the requirement that the storage operator has applied for, or has been issued, an Underground Injection Control (UIC) permit as authorized under the federal Safe Drinking Water Act's UIC Program. Provides that the Act applies only to certain carbon dioxide injections wells. Sets forth provisions concerning definitions, hearings, fees, inspections, ownership and conveyance of pore space, reservoir requirements, amalgamating property interests, mineral interests, title to carbon dioxide, liability, project completion, title transfer, enhanced recovery projects, and Memoranda of Understanding. Provides that the Department may adopt rules and issue orders to enforce the Act. Includes a severability clause.

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1 AN ACT concerning geologic storage of carbon dioxide.

## Be it enacted by the People of the State of Illinois, represented in the General Assembly:

- Section 1. Short title. This Act may be cited as the Carbon Dioxide Geologic Storage Act.
- 6 Section 5. Statement of policy. It is in the public 7 interest to promote the geologic storage of carbon dioxide. Doing so will help ensure the viability of the Illinois coal, 8 9 natural gas, power, and other industries under a spectrum of potential environmental regulations and will promote economic 10 development in Illinois. Further, geologic storage of carbon 11 dioxide, a potentially valuable commodity, may allow for its 12 ready availability if needed for commercial, industrial, or 13 14 other uses, including enhanced recovery of oil, gas, and other minerals. 15

To be practical and effective, geologic storage of carbon dioxide requires cooperative use of surface and subsurface property interests often across large areas. It is therefore in the public interest to employ procedures that promote, in a manner fair to all interests, the use of all pore space in a clearly defined reservoir to ensure comprehensive management of the reservoir and the efficient use of natural resources. It is important that rules governing the use and development of

- 1 subsurface pore space be consistent with both established
- 2 precedents and subsurface private property rights.
- 3 Section 10. Definitions. As used in this Act, unless the 4 context requires a different meaning:
- 5 "Carbon dioxide injection well" means a well that is used 6 to inject carbon dioxide into a reservoir for geologic storage.
- 7 "Department" means the Department of Natural Resources.
- "Geologic storage" means the underground storage of carbon dioxide in a reservoir.
- "Mineral owner" means any owner of a whole or fractional interest in any or all minerals in real property that has been severed from the surface estate by grant, exception, reservation, or other means.
- "Mineral lessee" means any lessee of a whole or fractional interest in any or all minerals in real property that has been severed from the surface estate by grant, exception, reservation, or other means.
- "Pore space" means subsurface cavities or voids, whether
  natural or artificially created, that can be used as storage
  space for carbon dioxide or other substances.
- "Pore space owner" means any person, trust, corporation, or other entity who has title to the pore space.
- "Pore space lessee" means any lessee or other person with the right to use, by easement or otherwise, a whole or fractional interest in any or all of the pore space.

"Reservoir" means any depleted oil or gas reservoir, saline formation, coal seam, or any natural or artificial subsurface stratum or formation with a clearly defined reservoir boundary and pore space of sufficient porosity and permeability for injection and storage of carbon dioxide. "Reservoir" does not include an underground source of drinking water or a natural gas storage facility.

"Reservoir boundary" means the area that delineates the vertical and horizontal limits of the reservoir, including buffer areas, such that any carbon dioxide injected into the reservoir is expected to remain within the boundary in perpetuity. The reservoir boundary must be established by identifying physical parameters that will constrain buoyant migration of the injected carbon dioxide such that it is expected to remain within the boundary in perpetuity. The reservoir boundary need not include the entirety of a geologic formation if it can be shown that physical parameters are expected to contain injected carbon dioxide within the reservoir boundary in perpetuity.

"Reservoir permit" means a permit issued by the Department allowing a person to establish and operate a storage facility.

"Storage facility" means the reservoir, underground equipment, and surface facilities and equipment used or proposed to be used in a geologic storage operation. "Storage facility" does not include pipelines used to transport carbon dioxide to the storage facility from the carbon dioxide source.

- 1 "Storage facility" also does not include a single carbon
- dioxide injection well to be used for experimental, research,
- 3 or evaluation purposes as long as the well does not inject more
- 4 than 1,000,000 tons of carbon dioxide in total and does not
- 5 operate for more than 5 years.
- 6 "Storage operator" means a person holding or applying for a
- 7 reservoir permit under this Act and holding or applying for a
- 8 UIC permit for the injection of carbon dioxide.
- 9 "Surface owners" means any owner of a whole or undivided
- 10 fee simple interest or other freehold interest, which may or
- 11 may not include mineral rights, in the surface estate, but does
- not include an owner of a right-of-way, easement, leasehold, or
- any other lesser interest in the surface estate.
- "UIC permit" means an Underground Injection Control Class
- 15 VI permit authorized under the federal Safe Drinking Water
- 16 Act's Underground Injection Control (UIC) Program that allows a
- person to operate a carbon dioxide injection well.
- 18 Section 12. Applicability. Except for carbon dioxide
- 19 storage projects in Morgan County and Macon County, this Act
- applies only to carbon dioxide injections that commence on or
- 21 after January 1, 2012. For Morgan County and Macon County, this
- 22 Act applies only to carbon dioxide injections that start
- 23 injection well construction on or after January 1, 2015.
- 24 Section 15. Reservoir permit.

- (a) A storage operator must have a reservoir permit issued by the Department to operate a storage facility in the State. A reservoir permit may be transferred or assigned from one storage operator to another upon written consent of the Department. This consent shall not be unduly withheld by the Department.
  - (b) The storage operator shall submit a plan that:
- 8 (1) satisfies the reservoir requirements of Section 9 25:
  - (2) amalgamates the pore space within the reservoir boundary and addresses the interests of non-consenting pore space owners and pore space lessees within the reservoir boundary as provided in Section 35, including procedures by which working interests and non-consenting royalty recipients will attended to; and
  - (3) addresses the interests of mineral owners and mineral lessees within the reservoir boundary as provided in Section 40.
  - (c) The storage operator shall also submit proof that it has applied for a UIC permit or has been issued a UIC permit.
    - (d) The Department shall issue a reservoir permit to the storage operator if the Department finds that:
      - (1) the requirements of Section 25 have been satisfied;
      - (2) the interests of non-consenting pore space owners and pore space lessees within the reservoir boundary have been addressed as provided in Section 35;

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- (3) the interests of mineral owners and mineral lessees 1 2 within the reservoir boundary have been addressed as 3 provided in Section 40; and (4) the storage operator has applied for a UIC permit 4 5 or has been issued a UIC permit. The Department may condition the granting of a reservoir 6 7 permit on obtaining a UIC permit, but no State agency may delay 8 the processing of the reservoir permit application on the 9 grounds that the application for another required permit is 10 pending. 11 (e) The Department shall issue only one reservoir permit 12 per reservoir. A storage operator may not apply for a reservoir 13 the reservoir permit encompasses permit where 14 reservoir that is included in a reservoir permit the storage 15 operator does not hold. A storage operator may apply to expand 16 the reservoir boundary of an existing reservoir permit it does 17 hold. (f) The Department shall hold a public hearing regarding a 18 19 reservoir permit application to ensure that the requirements of 20 subsection (b) of this Section have been satisfied. 21 (1) Notice of the public hearing shall include: 22 (A) The type of proceedings before the Department
  - (B) A description of the reservoir boundary, including a legal description of the reservoir.

general statement of purpose

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- 1 (C) A description of the proposed storage facility 2 and its operations.
  - (D) The time, date, and place of the public hearing.
  - (E) The limitations on standing provided by subsection (i) of this Section.
  - (2) Upon receipt of the reservoir permit application, the Department shall fix the time and place for the public hearing, which shall be no less than 60 days nor more than 90 days after the date of filing of the application. The Department shall give notice of the hearing at least 30 days prior to the hearing in the following manner:
    - (A) By United States first class mail directed to all local governments with jurisdiction over some portion of the proposed reservoir, and to all pore space owners, pore space lessees, mineral owners, and mineral lessees within the proposed reservoir boundary at their last-known address as shown in the tax assessor's records for each county containing some portion of the proposed reservoir. For any pore space owner, pore space lessee, mineral owner, or mineral lessee within the proposed reservoir boundary that is not identified in such records, the storage operator shall be deemed to have acted in good faith, shall not be subject to further obligations, and shall have no liability to such owners or lessees for any legal or

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equitable remedy or relief arising from, in connection with, or otherwise relating to the storage facility, provided the published notice required by subparagraph (B) of paragraph (2) of this subsection (d) is given. The storage operator shall not be liable for any errors in records. omissions such The Department's certificate that it has mailed the notices is sufficient evidence that it has done so.

- (B) By publication of such notice in a newspaper of general circulation published in each county containing some portion of the reservoir at least once each week for 3 successive weeks. The first publication shall be at least 30 days prior to the date of the public hearing. If there is no newspaper published in a county containing some portion of the reservoir, then the publication shall be in a newspaper published in an adjoining county in this State, having circulation in the county in which that portion of the reservoir is located.
- (g) If the Department does not complete the review of a reservoir permit application within 120 days after receipt, including the public notice and hearing as described in subsection (d) of this Section, then the reservoir permit shall be issued. If the Department does not find the storage operator to have met the requirements detailed in subsection (b) of this Section, then the Department may either decline the application

- or require amendment to the application before granting the reservoir permit. If the Department requires amendment to the application, then the Department shall have 30 days after the storage operator amends its application to either grant or decline to grant the reservoir permit.
  - (h) The Department may charge a fee to the storage operator for review of the reservoir permit application. The fee must be in the amount set by Department rule. The amount must be based on the Department's anticipated expenses that it will incur in reviewing the reservoir permit application.
  - (i) The Department may include conditions in the reservoir permit to carry out the reservoir permit requirements. The reservoir permit shall contain a description of the reservoir boundary and shall authorize the storage operator to use all pore space within the reservoir as a storage facility.
  - (j) The Department shall have the right at all times to go upon and inspect a storage facility for the purpose of ascertaining compliance with the provisions of this Act.
  - (k) Only the storage operator and any pore space owner, pore space lessee, mineral owner, or mineral lessee within the proposed reservoir boundary who participated, in writing or orally on the record, in the public hearing shall have standing to seek judicial review of the Department's issuance of a reservoir permit.
  - (1) Upon issuance of a reservoir permit, the Department shall record a notice of the reservoir permit in each county

- 1 under the names of the pore space owners or pore space lessees
- 2 and the storage operator that included any part of the
- 3 reservoir for which the reservoir permit has been granted. The
- 4 notice shall include a legal description of the reservoir and a
- 5 description of the proposed storage facility and its
- 6 operations.
- 7 Section 20. Ownership and conveyance of pore space.
- 8 (a) Title to pore space is vested in the surface owner.
- 9 (b) A conveyance of title of the surface estate conveys the
- 10 pore space in all strata underlying the surface estate.
- 11 (c) Title to pore space may not be severed from the surface
- 12 estate.
- 13 (d) Grants of easement to use or leasing of pore space is
- 14 not a severance prohibited by this Section.
- 15 (e) The grants of easement or leasing of pore space shall
- 16 confer carbon dioxide storage rights but shall not confer any
- 17 right to enter upon or otherwise use the surface of the land
- 18 unless the grant of easement or lease expressly so provides.
- 19 Section 25. Reservoir requirements.
- 20 (a) A reservoir permit may not be issued unless:
- 21 (1) the reservoir has a clearly defined reservoir
- 22 boundary;
- 23 (2) the reservoir is suitable for carbon dioxide
- injection and storage, including the presence of physical

- parameters to ensure injected carbon dioxide is expected to remain within the reservoir boundary in perpetuity;
  - (3) the reservoir boundary encompasses an area of at least 2,500 acres;
  - (4) the storage operator has made a good-faith effort to identify all pore space owners and pore space lessees at their last-known addresses as identified in the tax assessor's records for each county containing some portion of the proposed reservoir;
  - (5) the storage operator has made a good-faith effort to obtain carbon storage rights through ownership, grants of easement, or leaseholds from all pore space owners and pore space lessees, as applicable, within the reservoir boundary; and
  - (6) the storage operator owns or has obtained carbon dioxide storage rights to at least 51% of the proposed reservoir's pore space based upon the number of surface acres within the reservoir boundary.
- Section 35. Amalgamating property interests.
  - (a) If a storage operator has not obtained carbon dioxide storage rights to all of the pore space within the reservoir boundary, then the Department shall require that the remaining pore space be included in a storage facility and subject to geologic storage for the purposes of administering the reservoir permit. Any amalgamation of pore space shall not

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- include the right to use the surface of the land above the pore space.
  - (b) Each non-consenting pore space owner or pore space lessee may elect to exercise a working interest in the storage facility on the condition that the party exercising the working interest shall:
    - (1) be subject to agreements entered into by the storage operator necessary to operate the storage facility for which the storage operator, and all working interests, will be jointly and severally liable;
    - (2) be jointly and severally liable with the storage operator and any other party electing to exercise a working interest for any and all expenses, liabilities, or other costs associated with the storage facility, including but limited to costs stemming from construction. operation, and closure of the storage facility, compensating mineral owners or mineral lessees for any losses associated with the loss of production or business interruption, and any direct damage the carbon dioxide may demonstrably cause;
    - (3) pay a proportionate share of the capital and operating expenses of the storage facility, which shall be calculated using a fraction, with the number being the surface acres over that party's pore space within the reservoir boundary and the denominator being the number of surface acres within the reservoir boundary; and

- (4) be entitled to a proportionate share of the revenue of the storage facility, which shall be calculated using a fraction, with the numerator being the number of surface acres over that party's pore space within the reservoir boundary and the denominator being the number of surface acres within the reservoir boundary.
- (c) If a non-consenting pore space owner or pore space lessee does not elect to exercise a working interest pursuant to subsection (b), they shall be entitled to a royalty for the use of their pore space that is fair, reasonable, and equitable
- (d) If a party electing to exercise a working interest fails to satisfy any of the conditions of subsection (b), their working interest shall immediately terminate and they shall be entitled to a royalty under subsection (c).
- (e) The Department shall have the authority to commit State-owned pore space within the reservoir boundary to the storage facility.
- 18 Section 40. Mineral interests.
  - (a) A reservoir permit may not be issued if the interests of mineral owners or mineral lessees within the proposed reservoir boundary would be adversely affected. For purposes of this Section, "adversely affected" means that the Department finds that:
- 24 (1) the reservoir contains a commercially valuable 25 mineral for which a verifiable plan to extract exists and

that such extraction would be precluded by operation of the reservoir;

- (2) the cost of mineral extraction of a commercially valuable mineral for which a verifiable plan to extract exists would be significantly increased by the operation of the reservoir; or
- (3) the extraction rate of a commercially valuable mineral for which a verifiable plan to extract exists would be significantly reduced by the operation of the reservoir.
- (b) Mineral owners or mineral lessees may drill through or near a reservoir to explore for or extract minerals, provided the drilling, extraction, and related activities are conducted in cooperation with the storage operator and comply with Department requirements that preserve the storage facility's integrity.
- (c) A storage operator may drill through or near a mineral producing area to operate the storage facility, provided the drilling, carbon dioxide storage, and related activities are conducted in cooperation with the mineral owners or mineral lessees within the proposed reservoir boundary and comply with Department requirements that ensure no adverse effect on mineral extraction.
- (d) Mineral owners or mineral lessees shall provide the storage operator reasonable access to wells and other equipment, as necessary, to ensure that mineral production equipment does not provide a leakage pathway for stored carbon

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- dioxide. Storage operators and parties exercising a working interest according to subsection (b) of Section 35 of this Act shall compensate mineral owners or mineral lessees for any losses associated with loss of production or business interruption due to such activities.
  - Section 45. Title to carbon dioxide; liability. The storage operator has title to the carbon dioxide injected into and stored in a reservoir and holds title until the Department issues a certificate of completion. While the storage operator holds title, the storage operator and parties exercising a working interest under subsection (b) of Section 35 of this Act are liable for any direct damage the carbon dioxide may demonstrably cause, including direct damage caused by carbon dioxide that escapes from the storage facility. The pore space owner shall have no liability associated with operation of a storage facility, unless the storage operator is the pore space owner or the pore space owner has exercised a working interest under subsection (b) of Section 35 of this Act.
  - Section 55. Project completion and title transfer.
    - (a) After carbon dioxide injections at a storage facility cease, the storage operator may apply for a certificate of completion. Before issuing a certificate of completion, the Department, in consultation with the issuer of the UIC permit, must find that:

1	(1) the storage operator is in full compliance with all
2	laws governing the storage facility, including any ongoing
3	UIC permit requirements;

- (2) the storage operator has addressed all pending claims, if any, regarding the storage facility's operation;
- (3) all carbon dioxide injection wells have been plugged, equipment and facilities has been removed, and reclamation work has been completed as required by the UIC permit issuer or the Department;
- (4) the carbon dioxide in the reservoir has become stable; stored carbon dioxide is stable if it is essentially stationary or, if it is migrating or may migrate, that any migration will be unlikely to cross the reservoir boundary;
- (5) all monitoring wells, equipment, and facilities to be used in the post-closure period are in good condition and retain mechanical integrity; and
- (6) the storage operator has transferred to the Department a carbon storage project fund that contains sufficient funds to carry out the site care and monitoring activities required by the UIC permit, if applicable.
- (b) If the Department does not complete the review of a certificate of completion application within 120 days after receipt, including the public notice and input deemed appropriate by the Department, then the certificate of

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- completion shall be issued. If the Department does not find 1 2 that the requirements detailed in subsection (a) of this 3 Section have been met, then it may either decline the application or require amendment to the application before 5 granting the certificate of completion. If the Department 6 amendment to the application, then the storage days to amend the 7 operator shall have 30 application. Thereafter, the Department shall have 30 days to either grant 8 9 or decline to grant the certificate of completion or the 10 certificate of completion shall be issued.
- 11 (c) The Department may charge a fee to the storage operator
  12 for reviewing the certificate of completion application. The
  13 fee must be in the amount set by Department rule. The amount
  14 must be based on the Department's anticipated expenses that it
  15 shall incur in reviewing the certificate of completion
  16 application.
- 17 (d) Once a certificate of completion is issued the following occurs:
- 19 (1) Title to the stored carbon dioxide transfers,
  20 without compensation, to the State.
  - (2) Title acquired by the State includes all rights and interests in, and all future responsibilities and liabilities associated with, the stored carbon dioxide.
  - (3) The storage operator is released from all regulatory requirements associated with the storage facility.

- (4) Monitoring and managing the storage facility is the State's responsibility to be overseen by the Department until such time as the federal government assumes responsibility for the long-term monitoring and management of storage facilities.
- (5) If the federal government has not assumed responsibility for the long-term monitoring and management of storage facilities, then the carbon storage project fund shall be used for the purposes of monitoring and managing the storage facility. If the federal government has assumed responsibility for the long-term monitoring and management of storage facilities, then the carbon storage project fund shall be refunded to the storage operator.

Section 60. Enhanced recovery projects.

- (a) This Act does not apply to applications filed with the Department proposing to use carbon dioxide for an enhanced oil or gas recovery project. Such applications shall be processed pursuant the Illinois Oil and Gas Act.
- (b) Nothing in this Act serves to limit the ability of an enhanced oil and gas project to meet a carbon dioxide storage requirement or incentive. This includes, but is not limited to, an enhanced oil and gas project meeting the sequestration requirements of a clean coal SNG facility or clean coal brownfield SNG facility as defined in the Illinois Power Agency Act.

- Section 65. Memorandum of Understanding. The Department and the Illinois Environmental Protection Agency shall enter into a Memorandum of Understanding with respect to their respective roles under this Act and the UIC program, if applicable. The Memorandum of Understanding shall provide for procedures to ensure a streamlined and concurrent permitting process for storage facilities.
- Section 70. Department; home rule. The Department may adopt rules and issue orders to enforce this Act. The Department may authorize its employees, qualified by training and experience, to perform the powers and duties set forth in this Act. No agency of State government or political subdivision of the State may regulate a storage facility except as expressly authorized under this Act.
- Section 75. Restraint of trade. None of the rights and responsibilities pursuant to this Act shall be held or construed to violate any of the statutes of this State relating to trusts, monopolies, or contracts and combinations in the restraint of trade.
- Section 97. Severability. The provisions of this Act are severable under Section 1.31 of the Statute on Statutes.