

By: Seliger

S.B. No. 1387

A BILL TO BE ENTITLED

AN ACT

relating to the injection and geologic storage of anthropogenic carbon dioxide.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Section 27.002, Water Code, is amended by adding Subdivisions (19) through (25) to read as follows:

(19) "Anthropogenic carbon dioxide" means carbon dioxide that would otherwise have been released to the atmosphere that has been:

(A) stripped, segregated, or divided from any other fluid stream; or

(B) captured from an emission source, such as:

(i) an advanced clean energy project as defined by Section 382.003, Health and Safety Code, or another type of electric generation facility;

(ii) an industrial source of emissions, together with any incidental associated substance derived from the source material for, or from the process of capturing, the carbon dioxide; and

(iii) any substance added to the carbon dioxide to enable or improve the process of injecting the carbon dioxide.

(20) "Anthropogenic carbon dioxide injection well" means an artificial excavation or opening in the ground made by

1 digging, boring, drilling, jetting, driving, or another method and
2 used to inject or transmit anthropogenic carbon dioxide into a
3 reservoir.

4 (21) "Enhanced recovery operation" means the use of
5 any process for the displacement of hydrocarbons from the reservoir
6 other than primary recovery and includes the use of an immiscible,
7 miscible, chemical, thermal, or biological process. The term does
8 not include pressure maintenance or a water disposal project.

9 (22) "Geologic storage" means underground storage of
10 anthropogenic carbon dioxide in a reservoir.

11 (23) "Geologic storage facility" means the
12 underground reservoir, underground equipment, and surface
13 buildings and equipment used or to be used for the geologic storage
14 of anthropogenic carbon dioxide and all surface and subsurface
15 rights and appurtenances necessary to the operation of a facility
16 for the geologic storage of anthropogenic carbon dioxide. The term
17 includes any reasonable and necessary areal buffer and subsurface
18 monitoring zones required to ensure the safe and efficient
19 operation of the facility. The term does not include a pipeline
20 used to transport carbon dioxide from the facility at which the
21 carbon dioxide is captured to the injection and geologic storage
22 facility site.

23 (24) "Oil or gas" means oil, natural gas, or gas
24 condensate.

25 (25) "Reservoir" means a natural or artificially
26 created subsurface sedimentary stratum, formation, aquifer, or
27 cavity or void, including an oil or gas reservoir, saline

1 formation, or coal seam, that is suitable for or capable of being
2 made suitable for protecting against the escape or migration of
3 anthropogenic carbon dioxide from the reservoir.

4 SECTION 2. Subchapter B, Chapter 27, Water Code, is amended
5 by amending Section 27.022 and adding Section 27.0221 to read as
6 follows:

7 Sec. 27.022. JURISDICTION OVER ANTHROPOGENIC CARBON
8 DIOXIDE INJECTION. (a) The commission has jurisdiction over the
9 injection of anthropogenic carbon dioxide except as provided by
10 Subchapter C-1.

11 (b) The commission shall adopt rules and procedures
12 reasonably required for the performance of its powers, duties, and
13 functions under this section [~~produced by a clean coal project, to~~
14 ~~the extent authorized by federal law, into a zone that is below the~~
15 ~~base of usable quality water and that is not productive of oil, gas,~~
16 ~~or geothermal resources by a Class II injection well, or by a Class~~
17 ~~I injection well if required by federal law].~~

18 Sec. 27.0221. LETTER FROM RAILROAD COMMISSION. (a) A
19 person making application to the commission for a permit to drill
20 and operate an anthropogenic carbon dioxide injection well or
21 operate a geologic storage facility shall submit with the
22 application a letter from the railroad commission concluding that
23 drilling or using the anthropogenic carbon dioxide injection well
24 and injecting anthropogenic carbon dioxide into the subsurface
25 stratum will not endanger or injure any known oil or gas reservoir.

26 (b) In a hearing on an application for a permit under this
27 section, the commission may not proceed to hearing on any issues

1 other than preliminary matters such as notice until the letter
2 required from the railroad commission under Subsection (a) is
3 provided to the commission.

4 (c) The commission shall find that there will be no
5 impairment of oil or gas mineral rights if the railroad commission
6 has issued a letter under Subsection (a) that concludes that
7 drilling and using the anthropogenic carbon dioxide injection well
8 will not endanger or injure any known oil or gas reservoir.

9 SECTION 3. Chapter 27, Water Code, is amended by adding
10 Subchapter C-1 to read as follows:

11 SUBCHAPTER C-1. INJECTION AND GEOLOGIC STORAGE OF ANTHROPOGENIC
12 CARBON DIOXIDE

13 Sec. 27.041. JURISDICTION. (a) The railroad commission
14 has jurisdiction over injection of anthropogenic carbon dioxide
15 into a reservoir that is initially productive of oil, gas, or
16 geothermal resources or a saline formation directly above or below
17 that reservoir. Any well initially completed under the
18 jurisdiction of the railroad commission shall remain under the
19 jurisdiction of the railroad commission, notwithstanding the
20 well's subsequent use for the injection of anthropogenic carbon
21 dioxide.

22 (b) This subchapter does not apply to the injection of fluid
23 through the use of a Class II injection well as defined by 40 C.F.R.
24 Section 144.6(b) for the sole purpose of the enhanced recovery of
25 oil or gas.

26 Sec. 27.042. PERMIT FROM RAILROAD COMMISSION. A person may
27 not begin drilling or operating an anthropogenic carbon dioxide

1 injection well or constructing or operating a geologic storage
2 facility regulated under this subchapter without first obtaining a
3 permit from the railroad commission.

4 Sec. 27.043. INFORMATION REQUIRED OF APPLICANT. The
5 railroad commission shall require an applicant to provide any
6 information the railroad commission considers necessary to
7 discharge its duties under this subchapter.

8 Sec. 27.044. FEES. (a) The railroad commission may impose
9 fees to cover the cost of:

10 (1) permitting, monitoring, and inspecting
11 anthropogenic carbon dioxide injection wells and geologic storage
12 facilities; and

13 (2) enforcing this subchapter and rules adopted by the
14 railroad commission under this subchapter.

15 (b) Fees collected by the railroad commission under this
16 section shall be deposited to the credit of the anthropogenic
17 carbon dioxide storage trust fund established under Section
18 120.003, Natural Resources Code.

19 Sec. 27.045. LETTER FROM EXECUTIVE DIRECTOR. (a) An
20 application to the railroad commission for a permit under this
21 subchapter must include a letter from the executive director
22 stating that drilling and operating the anthropogenic carbon
23 dioxide injection well or operating the geologic storage facility
24 will not endanger any freshwater strata in that area and that the
25 formation or stratum to be used for the geologic storage facility is
26 not freshwater sand.

27 (b) To make the determination required by Subsection (a),

1 the executive director shall review:

2 (1) the area of review and corrective action plans;

3 (2) any subsurface monitoring plans required during
4 injection or post injection;

5 (3) any postinjection site care plans; and

6 (4) any other elements of the application reasonably
7 required in order for the executive director to make the
8 determination required by Subsection (a).

9 (c) The commission shall adopt rules to implement and
10 administer this section.

11 Sec. 27.046. RULES. The railroad commission shall adopt
12 rules and procedures reasonably required for the performance of its
13 powers, duties, and functions under this subchapter, including
14 rules for:

15 (1) the injection and geologic storage of
16 anthropogenic carbon dioxide, including:

17 (A) geologic site characterization, including
18 acquisition of property rights;

19 (B) area of review and corrective action;

20 (C) well construction;

21 (D) operation;

22 (E) mechanical integrity testing;

23 (F) monitoring;

24 (G) well plugging;

25 (H) postinjection site care;

26 (I) site closure; and

27 (J) long-term stewardship;

1 (2) the enforcement of this subchapter and rules
2 adopted by the railroad commission under this subchapter; and

3 (3) the collection and administration of:

4 (A) fees imposed under Section 27.044; and

5 (B) penalties imposed for a violation of this
6 subchapter or rules adopted by the railroad commission under this
7 subchapter.

8 Sec. 27.047. CONSISTENCY WITH AND IMPLEMENTATION OF FEDERAL
9 REQUIREMENTS. (a) Rules adopted by the railroad commission under
10 this subchapter must be consistent with and not more stringent than
11 rules or regulations adopted by the United States Environmental
12 Protection Agency or another federal agency governing the injection
13 and geologic storage of anthropogenic carbon dioxide.

14 (b) If rules or regulations adopted to govern the injection
15 and geologic storage of anthropogenic carbon dioxide under the
16 federal Safe Drinking Water Act (42 U.S.C. Section 300f et seq.)
17 allow the state to seek primary enforcement authority under the
18 underground injection control program, the commission and the
19 railroad commission may seek primacy to administer and enforce the
20 program subject to the jurisdiction of each agency under state law.

21 Sec. 27.048. MEMORANDUM OF UNDERSTANDING. The commission
22 and the railroad commission by rule shall amend as necessary the
23 memorandum of understanding recorded in 16 T.A.C. Section 3.30 or
24 shall enter into a new memorandum of understanding as necessary to
25 comply with the provisions of this subchapter.

26 Sec. 27.049. FINANCIAL RESPONSIBILITY. A person to whom a
27 permit is issued under this subchapter must provide to the railroad

1 commission annually evidence of financial responsibility that is
2 satisfactory to the railroad commission.

3 SECTION 4. Section 27.051, Water Code, is amended by
4 amending Subsection (b) and adding Subsection (b-1) to read as
5 follows:

6 (b) The railroad commission may grant an application for a
7 permit under Subchapter C in whole or part and may issue the permit
8 if it finds:

9 (1) that the use or installation of the injection well
10 is in the public interest;

11 (2) that the use or installation of the injection well
12 will not endanger or injure any oil, gas, or other mineral
13 formation;

14 (3) that, with proper safeguards, both ground and
15 surface fresh water can be adequately protected from pollution; and

16 (4) that the applicant has made a satisfactory showing
17 of financial responsibility if required by Section 27.073 [~~of this~~
18 ~~code~~].

19 (b-1) The railroad commission may issue a permit under
20 Subchapter C-1 if it finds that:

21 (1) the injection and geologic storage of
22 anthropogenic carbon dioxide will not endanger or injure any oil,
23 gas, or other mineral formation;

24 (2) with proper safeguards, both groundwater and
25 surface fresh water can be adequately protected from pollution;

26 (3) the injection of anthropogenic carbon dioxide will
27 not endanger human health and safety; and

1 (4) the applicant for the permit meets all of the other
2 statutory and regulatory requirements for the issuance of the
3 permit.

4 SECTION 5. Sections 27.071 and 27.072, Water Code, are
5 amended to read as follows:

6 Sec. 27.071. POWER TO ENTER PROPERTY. Members of the
7 commission and the railroad commission and employees of the
8 commission and the railroad commission may enter public or private
9 property to inspect and investigate conditions relating to
10 injection well, monitoring well, disposal well, ~~[ex]~~ production
11 well, anthropogenic carbon dioxide injection well, or geologic
12 storage activities within their respective jurisdictions or to
13 monitor compliance with a rule, permit, or other order of the
14 commission or railroad commission. Members or employees acting
15 under the authority of this section who enter an establishment on
16 public or private property shall observe the establishment's
17 safety, internal security, and fire protection rules.

18 Sec. 27.072. POWER TO EXAMINE RECORDS. Members of the
19 commission and the railroad commission and employees of the
20 commission and railroad commission may examine and copy those
21 records or memoranda of a business they are investigating as
22 provided by Section 27.071 ~~[of this code]~~ that relate to the
23 operation of an injection well, monitoring well, disposal well,
24 ~~[ex]~~ production well, anthropogenic carbon dioxide injection well,
25 or geologic storage facility, or any other records required to be
26 maintained by law.

27 SECTION 6. Subsections (a) and (b), Section 27.073, Water

1 Code, are amended to read as follows:

2 (a) A person to whom an injection well or anthropogenic
3 carbon dioxide injection well permit is issued may be required by
4 the commission or railroad commission to maintain a performance
5 bond or other form of financial security to ensure that:

6 (1) an abandoned injection well is properly plugged;
7 or

8 (2) funds are available for plugging, postinjection
9 site care, and closure of an anthropogenic carbon dioxide injection
10 well.

11 (b) Each state agency is authorized to receive funds as the
12 beneficiary of a financial responsibility mechanism established
13 under this section for the proper plugging of an injection well or
14 proper management of an anthropogenic carbon dioxide injection well
15 or geologic storage facility. Each state agency is authorized to
16 expend such funds from a financial responsibility mechanism for the
17 plugging of wells covered by that mechanism.

18 SECTION 7. Chapter 91, Natural Resources Code, is amended
19 by adding Subchapter R to read as follows:

20 SUBCHAPTER R. CONVERSION OF PURPOSE OF WELLS

21 Sec. 91.801. CONVERSION OF WELL TO NEW OR ADDITIONAL
22 PURPOSE. (a) The commission shall adopt rules allowing:

23 (1) a person to obtain an injection well permit for
24 multiple purposes; and

25 (2) an operator of a well authorized by a permit issued
26 by the commission to convert the well from its authorized purpose to
27 a new or additional purpose.

1 (b) If a well is converted to or authorized as an
2 anthropogenic carbon dioxide injection well as defined by Section
3 27.002, Water Code, Subchapter C-1, Chapter 27, Water Code, applies
4 to the well.

5 SECTION 8. Subtitle D, Title 3, Natural Resources Code, is
6 amended by adding Chapter 120 to read as follows:

7 CHAPTER 120. OWNERSHIP AND STEWARDSHIP OF ANTHROPOGENIC CARBON
8 DIOXIDE

9 Sec. 120.001. DEFINITIONS. In this chapter:

10 (1) "Anthropogenic carbon dioxide," "anthropogenic
11 carbon dioxide injection well," and "geologic storage facility"
12 have the meanings assigned by Section 27.002, Water Code.

13 (2) "Commission" means the Railroad Commission of
14 Texas.

15 (3) "Storage operator" means a person authorized by
16 the commission to operate a geologic storage facility.

17 Sec. 120.002. OWNERSHIP OF ANTHROPOGENIC CARBON DIOXIDE.

18 (a) Unless otherwise expressly provided by a contract, bill of
19 sale, deed, mortgage, deed of trust, or other legally binding
20 document or by other law, anthropogenic carbon dioxide stored in a
21 geologic storage facility is considered to be the personal property
22 of the storage operator or the storage operator's heirs,
23 successors, or assigns.

24 (b) Absent a final judgment of wilful abandonment rendered
25 by a court or a regulatory determination of closure or abandonment,
26 anthropogenic carbon dioxide stored in a geologic storage facility
27 is not considered to be the property of the owner of the surface or

1 mineral estate in the land in which the anthropogenic carbon
2 dioxide is stored or of a person claiming under the owner of the
3 surface or mineral estate.

4 (c) The owner, as designated by Subsection (a) or (b), of
5 the anthropogenic carbon dioxide stored in a geologic storage
6 facility, or the owner's heirs, successors, or assigns, may
7 produce, take, or reduce to possession anthropogenic carbon dioxide
8 stored in a geologic storage facility.

9 Sec. 120.003. ANTHROPOGENIC CARBON DIOXIDE STORAGE TRUST
10 FUND. (a) The anthropogenic carbon dioxide storage trust fund is
11 created as a special fund in the state treasury.

12 (b) The anthropogenic carbon dioxide storage trust fund is
13 an interest-bearing fund. Interest earned on money in the fund
14 shall be deposited to the credit of the fund.

15 (c) Fees collected by the commission under Subchapter C-1,
16 Chapter 27, Water Code, and penalties imposed for violations of
17 that subchapter or rules adopted under that subchapter shall be
18 deposited to the credit of the anthropogenic carbon dioxide storage
19 trust fund.

20 (d) The anthropogenic carbon dioxide storage trust fund may
21 be used by the commission only for:

22 (1) inspecting, monitoring, investigating, recording,
23 and reporting on anthropogenic carbon dioxide injection wells and
24 geologic storage facilities;

25 (2) long-term monitoring of anthropogenic carbon
26 dioxide injection wells and geologic storage facilities, including
27 surface facilities and wells;

1 (3) remediation of mechanical problems associated
2 with anthropogenic carbon dioxide injection wells and surface
3 infrastructure;

4 (4) repairing mechanical leaks at geologic storage
5 facilities;

6 (5) plugging abandoned anthropogenic carbon dioxide
7 injection wells;

8 (6) training and technology transfer related to
9 anthropogenic carbon dioxide injection and geologic storage; and

10 (7) compliance and enforcement activities related to
11 anthropogenic carbon dioxide injection and geologic storage.

12 Sec. 120.004. EXTRACTION OF STORED ANTHROPOGENIC CARBON
13 DIOXIDE. (a) The commission shall adopt rules allowing
14 anthropogenic carbon dioxide stored in a geologic storage facility
15 to be extracted for a commercial or industrial use.

16 (b) The commission has jurisdiction over the extraction of
17 anthropogenic carbon dioxide stored in a geologic storage facility.

18 SECTION 9. (a) In this section, "anthropogenic carbon
19 dioxide," "geologic storage," and "geologic storage facility" have
20 the meanings assigned by Section 27.002, Water Code.

21 (b) Not later than December 1, 2010, the Commissioner of the
22 General Land Office shall file with the legislature a report on a
23 recommended framework for managing activities related to geologic
24 storage on state-owned land. The report shall include:

25 (1) recommended criteria for identifying candidate
26 geologic storage sites in each of the following types of geological
27 settings:

- 1 (A) operating oil and gas fields;
- 2 (B) depleted oil and gas fields;
- 3 (C) unminable coal seams;
- 4 (D) deep saline formations;
- 5 (E) deep geological systems that may be used as
- 6 engineered reservoirs to extract economical quantities of heat from
- 7 geothermal resources of low permeability or porosity;
- 8 (F) deep geological systems containing igneous
- 9 formations; and
- 10 (G) coal beds being used for methane recovery;
- 11 (2) a proposed regulatory framework for leasing
- 12 state-owned land for geologic storage, including an assessment of
- 13 options to ensure that the state receives fair market value for
- 14 using state-owned land for the geologic storage;
- 15 (3) a proposed procedure for:
- 16 (A) providing an opportunity for public review
- 17 of, and the presentation of comments by interested persons
- 18 regarding, any activities related to geologic storage on
- 19 state-owned land; and
- 20 (B) ensuring that the quality of the natural and
- 21 cultural resources of state-owned land overlying the site of a
- 22 geologic storage facility are protected from any geologic storage
- 23 activities at the site;
- 24 (4) a description of the status of leasehold or
- 25 mineral estate liability issues related to the geological
- 26 subsurface trespass of, or caused by, anthropogenic carbon dioxide
- 27 stored in state-owned land, including any relevant experience from

1 enhanced oil recovery using carbon dioxide on state-owned land;

2 (5) recommendations for additional legislation that
3 may be required to ensure that public land management and leasing
4 laws are adequate to accommodate geologic storage;

5 (6) an identification of the legal and regulatory
6 issues specific to geologic storage in cases in which title to the
7 mineral estate is held by the state but title to the surface estate
8 is not held by the state;

9 (7) an identification of the issues specific to the
10 issuance of pipeline rights-of-way on state-owned land; and

11 (8) recommendations for additional legislation that
12 may be required to clarify the appropriate framework for issuing
13 rights-of-way for anthropogenic carbon dioxide pipelines on public
14 land.

15 (c) In preparing the report under Subsection (b) of this
16 section, the Commissioner of the General Land Office shall
17 coordinate with:

18 (1) the Bureau of Economic Geology of The University
19 of Texas at Austin;

20 (2) the Railroad Commission of Texas;

21 (3) the Texas Commission on Environmental Quality; and

22 (4) the heads of other appropriate agencies.

23 (d) This section expires December 31, 2010.

24 SECTION 10. (a) Not later than January 1 of every
25 odd-numbered year, the Texas Commission on Environmental Quality
26 and the Railroad Commission of Texas shall issue a joint report to
27 the legislature providing an assessment of the permitting process

1 for anthropogenic carbon dioxide injection wells and geologic
2 storage facilities and the status of compliance with any federal
3 rules regulating the injection and storage of anthropogenic carbon
4 dioxide.

5 (b) The report shall include:

6 (1) the status of any applications for permits that
7 have been received since the prior report;

8 (2) an update on the exchange of information between
9 the Texas Commission on Environmental Quality and the Railroad
10 Commission of Texas as required by the memorandum of understanding
11 and Sections 27.0221 and 27.045, Water Code, as added by this Act;

12 (3) the status of any request for primary enforcement
13 authority for the underground injection and geologic storage of
14 anthropogenic carbon dioxide under the underground injection
15 control program; and

16 (4) any recommendations for additional legislation,
17 modifications to the memorandum of understanding, or new rules for
18 regulating the injection and storage of anthropogenic carbon
19 dioxide.

20 (c) This section expires January 1, 2019.

21 SECTION 11. Section 27.038, Water Code, is repealed.

22 SECTION 12. (a) Not later than January 1, 2010, the
23 Railroad Commission of Texas shall adopt rules under Section
24 27.046, Water Code, as added by this Act.

25 (b) The Texas Commission on Environmental Quality and the
26 Railroad Commission of Texas shall adopt rules under Section
27 27.048, Water Code, as added by this Act, as soon as practicable

1 after the effective date of this Act.

2 (c) The Railroad Commission of Texas shall adopt rules under
3 Sections 91.801 and 120.004, Natural Resources Code, as added by
4 this Act, as soon as practicable after the effective date of this
5 Act.

6 SECTION 13. This Act takes effect September 1, 2009.