

111TH CONGRESS
1ST SESSION

S. 1502

To establish a program to be managed by the Department of Energy to ensure prompt and orderly compensation for potential damages relating to the storage of carbon dioxide in geological storage units.

IN THE SENATE OF THE UNITED STATES

JULY 22, 2009

Mr. CASEY (for himself and Mr. ENZI) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To establish a program to be managed by the Department of Energy to ensure prompt and orderly compensation for potential damages relating to the storage of carbon dioxide in geological storage units.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Carbon Storage Stew-
5 ardship Trust Fund Act of 2009”.

6 **SEC. 2. PURPOSES.**

7 The purposes of this Act are—

1 (1) to promote the commercial deployment of
2 carbon capture and storage as an essential compo-
3 nent of a national climate mitigation strategy;

4 (2) to require private liability assurance during
5 the active project period of a carbon dioxide storage
6 facility;

7 (3) to establish a Federal trust fund consisting
8 of amounts received as fees from operators of carbon
9 dioxide storage facilities;

10 (4) to establish a limit on liability for damages
11 caused by injection of carbon dioxide by carbon diox-
12 ide storage facilities subject to certificates of closure;

13 (5) to establish a program—

14 (A) to certify the closure of commercial
15 carbon dioxide storage facilities; and

16 (B) to provide for the transfer of long-term
17 stewardship to the Federal Government for car-
18 bon dioxide storage facilities on the issuance of
19 certificates of closure for the facilities;

20 (6) to provide for the prompt and orderly com-
21 pensation for damages relating to the storage of car-
22 bon dioxide; and

23 (7) to protect the environment and public by
24 providing long-term stewardship of geological stor-
25 age units.

1 **SEC. 3. DEFINITIONS.**

2 In this Act:

3 (1) **ACTIVE PROJECT PERIOD.**—The term “ac-
4 tive project period” means the phases of the carbon
5 dioxide storage facility through receipt of a certifi-
6 cate of closure, including—

7 (A) the siting and construction of the facil-
8 ity;

9 (B) carbon dioxide injection;

10 (C) well capping;

11 (D) facility decommissioning; and

12 (E) geological storage unit monitoring,
13 measurement, verification, and remediation.

14 (2) **ADMINISTRATOR.**—The term “Adminis-
15 trator” means the Administrator of the Environ-
16 mental Protection Agency.

17 (3) **CARBON DIOXIDE STORAGE FACILITY.**—The
18 term “carbon dioxide storage facility” means a facil-
19 ity that receives and permanently stores or seques-
20 ters carbon dioxide within a geological storage unit,
21 including carbon dioxide permanently stored as a re-
22 sult of enhanced hydrocarbon recovery.

23 (4) **CERTIFICATE OF CLOSURE.**—The term
24 “certificate of closure” means a determination
25 issued by the Administrator or other Federal or
26 State regulatory authority with respect to a carbon

1 dioxide storage facility that certifies that the oper-
2 ator of the carbon dioxide storage facility has com-
3 pleted injection operations, well closure, and any re-
4 quired monitoring and remediation to ensure that
5 any carbon dioxide injected into a geological storage
6 unit would not harm or present a risk to human
7 health, safety, and the environment, including drink-
8 ing water supplies.

9 (5) CIVIL CLAIM.—The term “civil claim”
10 means a claim, cause of action, lawsuit, judgment,
11 court order, administrative order, government or
12 agency order, fine, penalty, or notice of violation, for
13 civil relief with respect to damages or harm to per-
14 sons, property, or natural resources from the injec-
15 tion of carbon dioxide by a carbon dioxide storage
16 facility.

17 (6) DAMAGE.—

18 (A) IN GENERAL.—The term “damage”
19 means any direct or indirect damage or harm to
20 persons, property, or natural resources from the
21 injection of carbon dioxide into geological stor-
22 age units.

23 (B) INCLUSIONS.—The term “damage” in-
24 cludes personal injury, sickness, real or per-
25 sonal property damage, natural resource dam-

1 age, trespass, subsidence losses, revenue losses,
2 and loss of profits.

3 (7) ENHANCED HYDROCARBON RECOVERY.—

4 The term “enhanced hydrocarbon recovery” means
5 the use of carbon dioxide to improve or enhance the
6 recovery of oil or natural gas from oil or natural gas
7 fields.

8 (8) FUND.—The term “Fund” means the Car-
9 bon Storage Trust Fund established by section
10 5(d)(1).

11 (9) GEOLOGICAL STORAGE UNIT.—The term
12 “geological storage unit” includes saline formations,
13 hydrocarbon formations, basalt formations, salt cav-
14 erns, unmineable coal seams, or any other geological
15 formation capable of permanently storing carbon di-
16 oxide.

17 (10) LIABILITY ASSURANCE.—The term “liabil-
18 ity assurance” means privately funded financial
19 mechanisms, including third-party insurance, self-in-
20 surance, performance bonds, trust funds, letters of
21 credit, and surety bonds.

22 (11) LONG-TERM STEWARDSHIP.—The term
23 “long-term stewardship” means the monitoring,
24 measurement, verification, and remediation and re-

1 lated activities associated with a carbon dioxide stor-
 2 age facility after issuance of a certificate of closure.

3 (12) PROGRAM.—The term “Program” means
 4 the Carbon Storage Stewardship and Trust Fund
 5 Program established by section 5(a).

6 (13) SECRETARY.—The term “Secretary”
 7 means the Secretary of Energy.

8 **SEC. 4. LONG-TERM STEWARDSHIP RESPONSIBILITY.**

9 (a) IN GENERAL.—Subject to subsection (b), the Sec-
 10 retary shall be responsible for the long-term stewardship
 11 of a carbon dioxide storage facility on the issuance of a
 12 certificate of closure for the carbon dioxide storage facility.

13 (b) TRANSFER TO STATE.—

14 (1) IN GENERAL.—A State may request that
 15 the management responsibilities associated with
 16 long-term stewardship of a carbon dioxide storage
 17 facility located in the State be transferred to the
 18 State in accordance with regulations established by
 19 the Secretary.

20 (2) APPROVAL OF REQUEST.—If the Secretary
 21 approves a request under paragraph (1), the State
 22 shall be responsible for the long-term stewardship of
 23 the applicable carbon dioxide storage facility begin-
 24 ning on the date of the approval in accordance with

1 applicable Federal and State laws (including regula-
2 tions).

3 (3) FAILURE TO ACT BY STATE.—In accordance
4 with any regulations established under paragraph
5 (1), if the Secretary determines that a State that
6 has accepted management responsibilities under
7 paragraph (1) has failed to carry out the responsibil-
8 ities of the State with respect to the carbon dioxide
9 storage facility, the Secretary shall assume long-
10 term stewardship of the carbon dioxide storage facil-
11 ity as soon as practicable after the date of the deter-
12 mination.

13 (c) STANDARDS.—The Secretary, in coordination
14 with the Administrator, shall establish standards for any
15 monitoring, measurement, verification, and site remedi-
16 ation activities necessary to protect health, safety, and the
17 environment during long-term stewardship performed by
18 a State or the Federal Government.

19 (d) COORDINATION WITH ADMINISTRATOR.—If long-
20 term stewardship is vested with the Secretary, the Sec-
21 retary may coordinate responsibility for site monitoring,
22 measurement, verification, and remediation and related
23 activities with the Administrator.

1 **SEC. 5. CARBON STORAGE STEWARDSHIP AND TRUST FUND**
2 **PROGRAM.**

3 (a) IN GENERAL.—There is established in the De-
4 partment of Energy the Carbon Storage Stewardship and
5 Trust Fund Program.

6 (b) LIABILITY ASSURANCE REQUIRED FOR OPERA-
7 TORS OF COMMERCIAL CARBON DIOXIDE STORAGE FA-
8 CILITIES.—Notwithstanding any other provision of Fed-
9 eral or State law, in carrying out the Program, the Sec-
10 retary shall require operators of carbon dioxide storage fa-
11 cilities to maintain adequate liability assurance during the
12 active project period.

13 (c) FEES.—

14 (1) IN GENERAL.—In carrying out the Pro-
15 gram, the Secretary shall require operators of car-
16 bon dioxide storage facilities to pay a risk-based fee,
17 in an amount to be established in accordance with
18 paragraph (2), for each ton of carbon dioxide in-
19 jected by the carbon dioxide storage facility into geo-
20 logical storage units during the operation phase of
21 the facility.

22 (2) AMOUNT.—

23 (A) IN GENERAL.—As soon as practicable
24 after the date of enactment of this Act and
25 after taking into account the criteria described

1 in subparagraph (B), the Secretary shall estab-
2 lish—

3 (i) the minimum and maximum bal-
4 ance for the Fund; and

5 (ii) the amount of the fee required
6 under paragraph (1).

7 (B) CRITERIA.—The criteria referred to in
8 subparagraph (A) are—

9 (i) the estimated quantity of carbon
10 dioxide to be injected annually into geologi-
11 cal storage units by all operating commer-
12 cial carbon dioxide storage facilities;

13 (ii) the likelihood or risk of an inci-
14 dent resulting in liability;

15 (iii) the likely dollar value of any dam-
16 ages relating to an incident;

17 (iv) other factors relating to the risk
18 of the carbon dioxide storage facility and
19 associated geological storage unit; and

20 (v) impact on commercial and eco-
21 nomic viability of carbon dioxide storage
22 facilities.

23 (C) CONSIDERATIONS.—In establishing the
24 amount of the fee under subparagraph (A)(ii),
25 the Secretary may consider using a fee system

1 that is based on the level of risk associated with
2 a specific geological storage unit to provide an
3 incentive for the selection and operation of the
4 best carbon dioxide storage facilities.

5 (D) ENHANCED HYDROCARBON RECOV-
6 ERY.—The Secretary shall determine the most
7 appropriate approach for charging a fee on the
8 quantity of carbon dioxide injected into oil and
9 gas fields, after taking into consideration—

10 (i) the quantity of carbon dioxide that
11 is permanently stored;

12 (ii) whether or not the enhanced hy-
13 drocarbon recovery operation is also being
14 operated as a carbon dioxide storage facil-
15 ity; and

16 (iii) any other factors that the Sec-
17 retary determines to be appropriate.

18 (E) REVIEW AND ADJUSTMENT.—The Sec-
19 retary shall, on at least an annual basis, review
20 the Fund balance—

21 (i) to ensure that there are sufficient
22 amounts in the Fund to make the pay-
23 ments required under subsection (d)(3)(A);
24 and

1 (ii) to determine whether or not to in-
2 crease or decrease the amount, or dis-
3 continue collection, of the fee, after taking
4 into consideration—

5 (I) the annual quantity of carbon
6 dioxide injected by carbon dioxide
7 storage facilities;

8 (II) the number and estimated
9 value of claims against the Fund; and

10 (III) any other relevant factors,
11 as determined by the Secretary.

12 (3) DEPOSIT.—Notwithstanding section 3302
13 of section 31, United States Code, the fees collected
14 under paragraph (1) shall be deposited in the Fund.

15 (d) CARBON STORAGE TRUST FUND.—

16 (1) ESTABLISHMENT.—There is established in
17 the Treasury of the United States a revolving fund,
18 to be known as the “Carbon Storage Trust Fund”,
19 consisting of such amounts as are deposited under
20 subsection (c)(3).

21 (2) USE OF FUND.—

22 (A) IN GENERAL.—Amounts in the Fund
23 shall be made available, without further appro-
24 priation or fiscal year limitation—

1 (i) to the Secretary for the payment
 2 of civil claims from a carbon dioxide stor-
 3 age facility that are brought after a certifi-
 4 cate of closure for the carbon dioxide stor-
 5 age facility has been issued;

6 (ii) to the Secretary for long-term
 7 stewardship after the date of issuance of a
 8 certificate for closure; and

9 (iii) to the Secretary or other appro-
 10 priate regulatory authority to pay any rea-
 11 sonable and verified administrative costs
 12 incurred by the Secretary or regulatory au-
 13 thority in carrying out the Program.

14 (B) LIMITATION.—Amounts in the Fund
 15 shall only be used for the purposes described in
 16 clause (i), (ii), or (iii) of subparagraph (A).

17 (C) LIMITATION ON PAYMENTS.—

18 (i) IN GENERAL.—Subject to clause
 19 (ii), an aggregate claim for damages
 20 brought under subparagraph (A)(i) shall
 21 be limited to an amount to be established
 22 by the Secretary as soon as practicable
 23 after the date of enactment of this Act,
 24 based on mechanisms such as—

1 (I) actuarial modeling of probable
2 damage; and

3 (II) net present value analysis.

4 (ii) CONGRESSIONAL ACTION.—If esti-
5 mated or actual aggregate damages exceed
6 the amount established under clause (i)—

7 (I) the Secretary shall notify
8 Congress; and

9 (II) on receipt of notice under
10 subclause (I), Congress may provide
11 for payments in excess of that
12 amount, in accordance with guidelines
13 established by Congress by law.

14 (D) EXCEPTION FOR GROSS NEGLIGENCE
15 AND INTENTIONAL MISCONDUCT.—Notwith-
16 standing subparagraph (A), no amounts in the
17 Fund shall be used to pay a claim for liability
18 arising out of conduct of an operator of a car-
19 bon dioxide storage facility that is grossly neg-
20 ligent or that constitutes intentional mis-
21 conduct, as determined by the Secretary.

22 (E) PROCEDURES FOR ADJUDICATION OF
23 CLAIMS.—Claims of damage brought under sub-
24 paragraph (A)(i) relating to carbon dioxide in a

1 carbon dioxide storage facility subject to a cer-
2 tificate of closure shall be—

3 (i) filed in the United States Court of
4 Federal Claims; and

5 (ii) adjudicated in accordance with
6 procedures established by the United
7 States Court of Federal Claims.

8 (3) INITIAL FUNDING.—

9 (A) IN GENERAL.—If sufficient amounts
10 are not available in the Fund to cover potential
11 claims during the first years of the Program,
12 the Secretary may request from the Secretary
13 of the Treasury an interest-bearing advance in
14 funding from the Treasury to carry out the
15 Program, subject to subparagraph (B).

16 (B) TERMS AND CONDITIONS.—The terms
17 and conditions for the repayment of an advance
18 under subparagraph (A) shall be specified by
19 the Secretary of the Treasury.

20 **SEC. 6. LIMITATION ON CIVIL CLAIMS.**

21 (a) IN GENERAL.—Except as provided in subsection
22 (b), on issuance of a certificate of closure, a civil claim
23 or claim for the performance of long-term stewardship re-
24 sponsibilities under applicable Federal and State law, may
25 not be brought against—

1 (1) the operator or owner of the carbon dioxide
2 storage facility subject to the certificate of closure;

3 (2) the generator of the carbon dioxide stored
4 in the applicable geological storage unit; or

5 (3) the owner or operator of the pipeline used
6 to transport the carbon dioxide to the carbon dioxide
7 storage facility subject to the certificate of closure.

8 (b) EXCEPTION.—Subsection (a) shall not apply in
9 the case of a civil claim involving the gross negligence or
10 intentional misconduct of an owner, operator, or gener-
11 ator.

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