# Appendix A Proposed Statutory Language

# CCS LIABILITY ACT OF 2010\*

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#### A BILL

To create the Carbon Capture and Sequestration (CCS) Trust Fund; to create the CCS Oversight Board to oversee the Fund; to create a liability framework for operation, closure, and long-term stewardship of captured carbon dioxide geological sequestration sites; to create a CCS Stewardship Office within the Environmental Protection Agency or Department of Interior or Department of Energy; to authorize the [Administrator of the Environmental Protection Agency<sup>1</sup>] to issue permits for geological sequestration; to authorize the [Administrator] to carry out stewardship of geological sequestration sites after issuance of a certificate of closure; to authorize the transfer of liability for damages caused by geological sequestration sites to the [Administrator] after issuance of a certificate of closure; to specify damages that may be awarded for incidents that occur after the issuance of a certificate of closure; to authorize the Secretary of Energy to carry out a program to demonstrate the commercial application of integrated systems for long-term geological sequestration of carbon dioxide, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

<sup>&</sup>lt;sup>1</sup> As discussed in Sec. 3, we do not take a position on whether the Environmental Protection Agency, the Department of the Interior, or the Department of Energy is the appropriate lead federal agency for overseeing geological sequestration of carbon dioxide. For ease of reading, we use the terms "Administrator" and "Environmental Protection Agency" in square brackets throughout this proposed statute to indicate that the appropriate entities may instead be the Secretary/Department of the Interior or the Secretary/Department of Energy.

## **SECTION 1. SHORT TITLE.**

This Act may be cited as the "CCS Liability Act."<sup>2</sup>

## SEC. 2. PURPOSES.

The purposes of this Act are--

(a) to promote the commercial deployment of carbon capture and sequestration("CCS") as an essential component of a national climate change mitigation strategy;

(b) to require liability assurance during the operational period of a geological sequestration site;

(c) to establish a liability framework and liability caps<sup>3</sup> for geological sequestration sites during the operational period and after closure;

(d) to establish a Federal trust fund for payment of compensation for damages caused by geological sequestration sites; to pay the costs of stewardship of geological sequestration sites that have received certificates of closure; and for other purposes;

(e) to establish a board to maintain financial and administrative management authority over the trust fund;

(f) to authorize the [Administrator]—

<sup>&</sup>lt;sup>2</sup> The structure and language of various portions of this Act are modeled after proposed Senate bills S. 1502, introduced by Sen. Casey on July 22, 2009, and S. 1013, introduced by Sen. Bingaman on May 7, 2009.

<sup>&</sup>lt;sup>3</sup> The proposed Fund is designed to obviate the need for indemnification of private-sector projects.

(1) to issue, periodically review, modify and withdraw if necessary sequestration permits for geological sequestration sites;

(2) to certify the closure of geological sequestration sites;

(3) to accept transfer of title to geological sequestration sites upon issuance of a certificate of closure;

(4) to take enforcement actions in the event of sequestration permit violations or leakage or significant irregularities at geological sequestration sites; and,

(5) to undertake emergency corrective action or remedial measures if necessary to prevent, reduce or minimize a threat to public health, safety or the environment;

(g) to protect the environment and public by providing long-term stewardship of geological sequestration sites; and

(h) to authorize the Secretary of Energy to carry out a program to demonstrate the commercial application of integrated systems for geological sequestration of carbon dioxide.

# **SEC. 3. DEFINITIONS.**

In this Act:

(a) "Administrator" means the Administrator of the Environmental Protection Agency.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> We do not take a position on whether the Environmental Protection Agency, Department of the Interior, or Department of Energy is the appropriate lead federal agency for overseeing geological sequestration of carbon dioxide. For ease of reading, we use the terms "Administrator" and "Environmental Protection

(b) "Authorized State" means a State having an authorized geological sequestration site program under Sec. 19.

(c) "Board" means the CCS Oversight Board.

(d) "CCS" means carbon capture and sequestration in a secure geological formation on-shore or beneath the seabed of an off-shore water body but not above the seabed.

(e) "Certificate of closure" shall have the meaning as described in Sec. 8.

(f) "Centralized regional geological sequestration site"<sup>5</sup> means a geological sequestration site which may be located on public or private land, onshore or offshore, that accepts captured carbon dioxide from several emitters and is accessed through a regional carbon dioxide pipeline system.

(g) "Civil claim" means a claim, cause of action, lawsuit, judgment, court order, administrative order, government or agency order, fine, penalty, notice of violation, or other similar claim for civil relief with respect to damages or harm to persons, property or natural resources.

(h) "Claims Resolution Panel" means the panel appointed by the Board as described in Sec. 6(b)(4).

(i) "CO<sub>2</sub>" means carbon dioxide.

Agency" in square brackets throughout this proposed statute to indicate that the appropriate entities may instead be the Secretary of the Interior or Secretary of Energy.

<sup>&</sup>lt;sup>5</sup> EELPC is expanding on the idea of centralized regional geological sequestration facilities in other work addressing issues of access to pore space. EELPC will release a white paper on this topic shortly.

(j) "Damages" means damages specified in Sec. 9 of this Act, and includes the cost of quantifying these damages.

(k) "Demonstration project" means projects defined in Section 13.

(l) "Endangerment" shall have the meaning as described in Sec. 17.

(m) "Enhanced hydrocarbon recovery" means the use of captured carbon dioxide to improve or enhance the recovery of oil or natural gas from oil or natural gas fields.

(n) "Existing emitter" means any source of at least 100,000 tons of annual carbon dioxide emissions that is in operation as of the date of enactment of this statute.

(o) "Fund" means the CCS Trust Fund as described in Sec. 7.

(p) "Geological sequestration site" means the geological sequestration unit, captured carbon dioxide sequestered in the geological sequestration unit, carbon dioxide injection wells, monitoring wells, underground equipment, and surface buildings and equipment used in the sequestration operation. The term "geological sequestration site" includes a facility that sequesters carbon dioxide in depleted or active oil or gas wells.

(q) "Geological sequestration unit" includes saline formations, hydrocarbon formations, basalt formations, unmineable coal seams, or any other geological formation, either onshore or beneath an offshore seabed, that is suitable for the injection and long-term sequestration of carbon dioxide. (r) "Incident" means any occurrence or series of occurrences having the same origin, involving one or more geological sequestration sites, resulting in leakage or significant irregularity;

(s) "Industrial source" means any source of carbon dioxide that is not naturally occurring.

(t) "Large-scale sequestration" means the injection of more than 1,500,000 tons of captured carbon dioxide each year from industrial sources into a geological sequestration unit.

(u) "Leakage" means the escape or release of carbon dioxide from a geological sequestration site.

(v) "Liability assurance" means privately funded financial mechanisms, including third-party insurance, performance bonds, trust funds, letters of credit, and surety bonds.

(w) "Migration" means the movement of the injected carbon dioxide, either within the geological storage unit or out of the geological storage unit.

(x) "MMV" means measurement, monitoring, and verification.

(y) "Operational period" means all phases of the geological sequestration site through receipt of a certificate of closure, including—

(1) site selection and characterization of the facility;

(2) construction of the facility;

(3) carbon dioxide injection;

(4) well capping;

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(5) facility decommissioning; and

(6) stewardship.

(z) "Owner or operator" means any person owning or operating a geological sequestration site. If the owner and operator are separate entities, both entities shall have joint and several liability for the responsibilities assigned under this Act.

(aa) "Post-closure period" means the period after the owner or operator has received a certificate of closure.

(bb) "Secretary" means the Secretary of Energy or Secretary of the Interior, depending on context.

(cc) "Sequestration permit" means a permit issued by the [Administrator] that authorizes the injection of captured carbon dioxide into a geological sequestration unit.

(dd) "Significant irregularity" means any irregularity in the injection or sequestration operations or in the condition of the geological sequestration site itself, which implies the substantial risk of leakage or substantial risk to the environment or human health.<sup>6</sup>

(ee) "Stewardship" means the monitoring, measurement, verification, corrective action, remediation and related activities, including but not limited to repairing mechanical leaks at the facility, plugging and abandoning wells, and

<sup>&</sup>lt;sup>6</sup> Modeled after the European Union, Council Directive 2009/31/EC on the geological storage of carbon dioxide, 2009 O.J. (L 140/120) art. 3.

preventing, reducing, or minimizing a threat to public health, safety or the environment posed by a geological sequestration site after injections at the facility cease.

#### SEC. 4. LIABILITY ASSURANCE REQUIRED.

(a) IN GENERAL.—Notwithstanding any other provision of Federal or State law, the Board shall require owners or operators of geological sequestration sites to maintain adequate liability assurance with respect to the geological sequestration site during the operational period.

(b) ANNUAL REVIEW.—Owners or operators of geological sequestration sites must provide to the Board annually evidence of the liability assurance required under subsection (a).

(c) ADEQUACY OF LIABILITY ASSURANCE.—

(1) At least [120]<sup>7</sup> days prior to the commencement of injection of carbon dioxide into the geological sequestration unit, the owner or operator shall submit demonstration of liability assurance to the Board. The Board, in consultation with the Administrator, the Secretary of the Interior, the Secretary of Energy, and the authorized State, shall determine whether the owner or operator's liability assurance is adequate to protect public health, natural resources, and property. If the Board determines that an owner or operator's liability assurance

<sup>&</sup>lt;sup>7</sup> Numbers in square brackets indicate that we do not take a definitive position on the correct number but instead believe the appropriate number should be reached through discussion and consensus.

is not adequate, no sequestration permit may be issued until the owner or operator procures the required assurance.

(2) Following issuance of a sequestration permit, the Board shall request at least annually demonstration of the maintenance of adequate liability assurance. The Board, in consultation with the Administrator, the Secretary of the Interior, the Secretary of Energy, and the authorized State, shall determine whether such liability assurance is adequate to protect public health, natural resources, and property. If the Board determines that an owner or operator's liability assurance is not adequate, the owner or operator shall have 30 days within which to procure adequate liability assurance. If the owner or operator is unable to procure adequate liability assurance within 30 days, the Board shall take all necessary measures to protect public health, natural resources, and property, including instructing the [Administrator] to withdraw the sequestration permit under Sec. 5(e).

#### **SEC. 5. SEQUESTRATION PERMITS**

(a) ISSUANCE OF SEQUESTRATION PERMITS.—The [Administrator] or the authorized State shall issue sequestration permits that authorize an owner or operator to inject captured carbon dioxide into a geological sequestration unit. No geological sequestration site may be operated without a sequestration permit.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> Note that this proposed statutory language does not include a discussion of the required conditions for issuance of a sequestration permit. Rather, selected elements of a permit system are addressed to the extent that they are relevant to liability. See the accompanying white paper for references to works that provide more extensive discussions of a permitting regime.

(b) CONDITIONS FOR STORAGE PERMITS.—[]

(c) CAPTURED CARBON DIOXIDE ACCEPTANCE CRITERIA AND PROCEDURE.<sup>9</sup>—

(1) Carbon dioxide to be injected at a geological sequestration site shall consist overwhelmingly of carbon dioxide. No waste or other matter may be added for the purpose of disposing of that waste or other matter. Injected carbon dioxide may contain incidental associated substances from the source, capture or injection process and trace substances added to assist in monitoring and verifying carbon dioxide migration. Concentrations of all incidental and added substances shall be below levels that would:

(A) adversely affect the integrity of the geological sequestration site or the relevant transport infrastructure; or

(B) pose a significant risk to human health or the environment.

(2) The [Administrator] shall adopt regulations to identify the conditions applicable on a case-by-case basis for complying with subsection (1).

(3) The owner or operator shall:

(A) accept and inject captured carbon dioxide only if an analysis of the composition, including corrosive substances, of the captured carbon dioxide has been carried out, and only if the analysis has shown that the contamination levels comply with subsection (1);

<sup>&</sup>lt;sup>9</sup> Modeled after the European Union, Council Directive 2009/31/EC, 2009 O.J. (L 140/123) art. 12.

(B) keep a register of the quantities and properties of the captured carbon dioxide delivered and injected, including the composition of the captured carbon dioxide.

#### (d) TRANSFER OF SEQUESTRATION PERMITS.—

(1) The owner or operator shall request approval from the [Administrator] or the authorized State of any proposed transfer of a sequestration permit. Written approval of the [Administrator] or the authorized State is required before an owner or operator may sell, lease, transfer, assign, or otherwise convey any of his or its interest in the sequestration facility to any owner or operator not listed as such in the sequestration permit.

(2) The [Administrator] or the authorized State shall review and revise as necessary the sequestration permit to provide for the transfer of responsibility of the site as described in paragraph (1) only if the [Administrator] or the authorized State is satisfied that such transfer shall not compromise the safety, integrity and effectiveness of the geological storage facility.

(3) The [Administrator] or the authorized State shall require any new owner or operator to meet all requirements imposed upon former owners or operators, including providing proof of financial assurance as described in Sec. 4.

(4) Except as provided in Sec. 10, upon issuance of a revised sequestration permit as described in paragraph (2), any owner or operator who is no longer listed as such in the permit shall no longer be liable for damages or stewardship of the geological storage facility[, except the former owner or operator

remains liable for his or its gross negligence, willful misconduct, or violation of an applicable statute, regulation, or permit during the time such former owner or operator was listed as an owner or operator of the storage facility on the facility's sequestration permit]<sup>10</sup>.

(e) REVIEW, MODIFICATION, AND WITHDRAWAL OF SEQUESTRATION PERMITS.<sup>11</sup>—

(1) The owner or operator shall inform and request approval from the [Administrator] or the authorized State of any changes planned in the operation of the geological sequestration site. As appropriate, the [Administrator] or the authorized State shall either update the permit or the permit conditions or deny approval to make the proposed change.

(2) The [Administrator] or the authorized State shall review and where necessary update or withdraw the sequestration permit in the following circumstances:

(A) if the [Administrator] or the authorized State has been notified or made aware of any leakage or significant irregularity;

(B) if a report submitted pursuant to Sec. 16 shows non-compliance with permit conditions or a risk of leakage or significant irregularity;

<sup>&</sup>lt;sup>10</sup> This language is highlighted and bracketed because we believe this issue deserves further discussion, particularly in light of the ongoing oil spill in the Gulf of Mexico.

<sup>&</sup>lt;sup>11</sup> Modeled after the European Union, Council Directive 2009/31/EC, 2009 O.J. (L 140/122) art. 11 and the Resource Conservation and Recovery Act's permit requirements, 42 USCS § 6925 (2010).

(C) if the [Administrator] or the authorized State is aware of any other failure by the owner or operator to meet the permit conditions;

(D) if it appears necessary on the basis of the latest scientific findings and technological progress;

(E) in the event of, or immediately following, endangerment as described in Sec. 17; or

(F) without prejudice to subparagraphs (A) through (E), two years after issuing the permit and every five years thereafter.

(f) MEASURES IN THE EVENT THAT A SEQUESTRATION PERMIT IS WITHDRAWN.—

(1) If the [Administrator] or an authorized State withdraws a sequestration permit for any reason, the [Administrator] or the authorized State shall decide whether to order the closure of the geological sequestration site, issue a new permit, or transfer responsibility for continued captured carbon dioxide injections at the facility to the [Administrator].

(2) If the [Administrator] or authorized State orders closure of the geological sequestration site under paragraph (1) above, the owner or operator shall cease injections of captured carbon dioxide at the facility and shall begin closure operations.

(3) If responsibility for continued captured carbon dioxide injections at the facility is transferred to the [Administrator], the [Administrator] shall recover all

costs incurred from the former owner or operator, including by drawing on the liability assurance required by Sec. 4.

(g) TERMINATION OF OPERATIONS.—The [Administrator] or an authorized State may order an immediate termination of all operations at a geological sequestration site at any time the [Administrator] or the authorized State determines that termination is necessary to protect human health, safety or the environment. In such case, the owner or operator shall remain responsible for stewardship until issuance of the certificate of closure pursuant to Sec. 8.

## SEC. 6. CCS OVERSIGHT BOARD.

(a) CREATION OF BOARD.—There shall be created the CCS Oversight Board, consisting of [15]<sup>12</sup> individuals who shall be appointed by [the President]<sup>13</sup> to serve for staggered six-year terms. Each individual appointed to the Board shall have expertise and/or experience with one or more aspects of CCS. The Board shall at all times consist of individuals representing the following organizations:

(1) One representative each from the Departments of Treasury, Energy, Interior, and Justice;

- (2) One representative from the Environmental Protection Agency;
- (3) Three representatives from states with ongoing CCS activities;
- (4) One representative from the insurance and surety industry;

<sup>&</sup>lt;sup>12</sup> Numbers in square brackets indicate that we do not take a definitive position on the correct number but instead believe the appropriate number should be reached through discussion and consensus.

<sup>&</sup>lt;sup>13</sup> An item for further discussion is whether the President is the appropriate person to appoint members of the Board.

(5) Two citizen representatives;

(6) Two owner or operator representatives; and

(7) Two nongovernmental organization representatives.

(b) RESPONSIBILITY GENERALLY.—

(1) FINANCIAL MANAGEMENT OF FUND.—The Board shall provide financial management and oversight of the Fund, make investment decisions regarding the money in the Fund, adjust the schedule of fees as provided for in this Act, and conduct periodic assessments to ensure the adequacy of the Fund.

(2) DETERMINATION OF ADEQUACY OF LIABILITY ASSURANCE.—The Board shall—

(A) establish minimum requirements for financial assurance; and

(B) as provided for in Sec. 4, determine the adequacy of each owner or operator's liability assurance both prior to the commencement of injections and annually thereafter.

(3) REVIEW AND APPROVAL OF [ENVIRONMENTAL PROTECTION AGENCY] EXPENDITURES.—The Board shall review the [Administrator's] requests for disbursements from the Fund. The Board shall determine the level of review appropriate for requests for disbursement. The Board may waive its review rights over certain disbursements if the Board determines that review would be unnecessary or inefficient in certain instances. The Board's decisions whether to approve disbursements from the Fund shall be final.

(4) MANAGEMENT OF CLAIMS RESOLUTION PROCESS. —The Board shall appoint three of its members on a three-year rotating basis to constitute a Claims Resolution Panel. The Claims Resolution Panel of the Board shall be responsible for the management and oversight of the Claims Procedure provided for by Sec. 22.

# SEC. 7. CCS TRUST FUND.

(a) ESTABLISHMENT.—There is established in the Treasury of the United States a fund, to be known as the "CCS Trust Fund," consisting of such amounts as are deposited under subsection (b).

(b) TRANSFERS TO CCS TRUST FUND.<sup>14</sup>—There are hereby appropriated to the CCS Trust Fund amounts equivalent to—

(1) PER-TON FEE AMOUNT.—The Board shall require owners or operators of geological sequestration sites to pay a fee of [\$0.50]<sup>15</sup>, subject to adjustment as provided for in subsection (f), for each ton of carbon dioxide injected into geological storage units.<sup>16</sup>

(2) SEQUESTRATION PERMIT FEE.—The [Administrator] shall require operators of geological sequestration sites to pay a sequestration permit fee when

<sup>&</sup>lt;sup>14</sup> Modeled after the Oil Pollution Act, 26 U.S.C. § 9509(b) (2010). In addition to this type of annual fee, several states that have enacted CCS legislation also charge CCS owners and operators an annual regulatory fee, based on projected annual costs for oversight and regulation of sites. Such fees are appropriate but should be paid directly to the permitting agency, not to the Fund.

<sup>&</sup>lt;sup>15</sup> Numbers in square brackets indicate that we do not take a definitive position on the correct number but instead believe the appropriate number should be reached through discussion and consensus.

<sup>&</sup>lt;sup>16</sup> A point for further discussion is whether this fee should be set higher or lower for existing emitters and/or for carbon dioxide sequestered at a Demonstration Project under Sec. 13.

submitting an application for a sequestration permit in an amount that shall cover the [Administrator's] costs of processing the permit application.

(3) CLOSURE ASSESSMENT.—

(A) After consulting with the Board, the Secretary of the Interior and the Secretary of Energy, the [Administrator] shall require owners or operators of geological sequestration sites to pay a closure assessment in an amount that shall cover the [Administrator's] cost of conducting postclosure stewardship at the geological sequestration site for 30 years. The [Administrator] shall not issue a certificate of closure, as described in Sec. 8, until the owner or operator has paid the required closure assessment into the Fund.

(B) CASE-BY-CASE BASIS.— The [Administrator] in consultation with the Board, the Secretary of the Interior, and Secretary of Energy shall set the level of the closure assessment on a case-by-case basis, taking into account all site-specific criteria that the [Administrator] determines to be appropriate.

(C) SEPARATE ACCOUNT.—The Board shall ensure that all closure assessments are credited to a separate account within the Fund. Funds in this account may only be disbursed for uses described in Sec. 7(j)(1)(G) below.

(c) INTEREST ON CERTAIN PROCEEDS.—The interest on, and the proceeds from the sale or redemption of, any obligations held in the Fund shall be credited to and form a part of the Fund.<sup>17</sup>

(d) AUTHORITY TO BORROW.<sup>18</sup>—

(1) In general. There are authorized to be appropriated to the CCS Trust Fund, as repayable advances, such sums as may be necessary to carry out the purposes of such Fund, including advances to enable the Fund to meet the minimum balance requirement of subsection (e) below.

(2) Limitation on amount outstanding. The maximum aggregate amount of repayable advances to the CCS Trust Fund which is outstanding at any one time shall not exceed [\$50,000,000]<sup>19</sup>.

(3) Repayment of advances.

(A) In general. Advances made to the CCS Trust Fund shall be repaid, and interest on such advances shall be paid, to the general fund of the Treasury when the Board determines that moneys in the CCS Trust Fund are available for such purposes.

(B) Final repayment. No advance shall be made to the CCS Trust Fund after ten years from enactment of this Act, and all advances to the Fund shall be repaid on or before such date.

<sup>&</sup>lt;sup>17</sup> Modeled after the Trust Fund Code, 26 USCS § 9602 (2010).

<sup>&</sup>lt;sup>18</sup> Modeled after 26 USCS § 9509(d) (2010) (borrowing authority of Oil Spill Liability Trust Fund).

<sup>&</sup>lt;sup>19</sup> Numbers in square brackets indicate that we do not take a definitive position on the correct number but instead believe the appropriate number should be reached through discussion and consensus.

(C) Rate of interest. Interest on advances made pursuant to this subsection shall be—

(i) at a rate determined by the Secretary of the Treasury (as of the close of the calendar month preceding the month in which the advance is made) to be equal to the current average market yield on outstanding marketable obligations of the United States with remaining periods to maturity comparable to the anticipated period during which the advance will be outstanding, and

(ii) compounded annually.

#### (e) BALANCE OF THE FUND.—

(1) MINIMUM.—The minimum balance for the Fund shall be [\$50,000,000]<sup>20</sup> during the sequestration of the first [100] million tons of captured carbon dioxide that are sequestered after enactment of this Act. This required minimum balance shall increase, without further action by the Board or any other party, by [\$50,000,000] upon sequestration of captured carbon dioxide beyond the first [100] million tons, until [200] million tons of captured carbon dioxide have been sequestered. The minimum balance shall continue increasing in this manner, subject to adjustment as provided for in subsection (f).<sup>21</sup>

<sup>&</sup>lt;sup>20</sup> Numbers in square brackets indicate that we do not take a definitive position on the correct number but instead believe the appropriate number should be reached through discussion and consensus.

<sup>&</sup>lt;sup>21</sup> An overall maximum balance for the Fund may be appropriate in the future. However, until more data become available on the extent and frequency of the actual long-term risks of geological sequestration, the Fund balance should not be capped and the collection of fees should not be suspended.

(2) CLOSURE ASSESSMENTS DO NOT COUNT TOWARD MINIMUM.— Notwithstanding any provision to the contrary in this section, any closure assessments received pursuant to paragraph (b)(3) above will not be counted for purposes of determining whether the minimum balance described in paragraph (1) above is met.

(f) ADJUSTMENTS.—Every five years after the Board begins assessing a fee for each ton of carbon dioxide injected into geological storage units, the Board may adjust the per-ton fees after taking into account the criteria described in subsection (g) and the considerations described in subsection (h), subject at all times to the minimum balance described in subsection (e). Every three years after the Board begins assessing a fee for each ton of carbon dioxide injected into geological storage units, the Board, in coordination with the Secretary and the Administrator and taking into account the criteria described in subsection (g), may adjust the minimum balance described in subsection (e), but in no case may the Board increase or decrease the default minimum balances by more than 50 percent during the first 10 years after enactment of this Act without the prior approval of Congress.

(g) CRITERIA.—The criteria referred to in subsection (f) are—

(1) the estimated quantity of carbon dioxide to be injected annually into geological storage units by all geological sequestration sites;

(2) the likelihood or risk of an incident resulting in liability;

(3) the likely dollar value of any damages relating to an incident;

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(4) the number and estimated value of claims against the Fund;

(5) whether amounts in the Fund are sufficient to make payments under subsection (j);

(6) the impact on commercial and economic viability of geological sequestration sites;

(7) the impact on the reduction of greenhouse gas emissions and mitigation of climate change;

(8) adjustments for inflation; and

(9) any other factors that the Board, in coordination with the Secretaries of the Energy and the Interior and the Administrator, determines to be appropriate.

(h) CONSIDERATIONS.—In adjusting the amount of the fee under subparagraph (f), the Board may provide an incentive for the selection and operation of geological sequestration sites that use the most secure geological formations by using a fee system that is based on the level of risk associated with a specific geological sequestration unit or facility. The Board may also use a fee system that is based on other criteria to provide incentives for certain projects that, in the opinion of the Board, will best advance knowledge regarding carbon capture and sequestration and/or will best further the environmental and public health interests of the country. The use of an alternative fee system shall not relieve any operator of a geological sequestration site from fees altogether, but instead shall provide that all operators of a geological sequestration site pay some non-zero amount for each ton of carbon dioxide injected into geological sequestration units during the operational period. Such alternative systems may include, but are not limited to, setting tiered fees for:

(1) injection into onshore geological sequestration units, compared with injection into sub-seabed offshore geological sequestration units;

(2) injection into centralized regional geological sequestration sites, compared with injection into other geological sequestration sites;

(3) injection into geological sequestration sites that demonstrate new capture or sequestration technologies, compared with injection into geological sequestration sites that use proven capture and sequestration technologies; and

(4) injection into geological sequestration sites that are located on federal or state land, compared with injection into geological sequestration sites that are located on private land.

(i) DEPOSIT.—Notwithstanding section 3302 of section 31, United States Code, the fees collected under subsection (b) shall be deposited in the Fund.<sup>22</sup>

(j) USE OF FUND.

(1) IN GENERAL.—Amounts in the Fund shall be made available, without further appropriation or fiscal year limitation—

<sup>&</sup>lt;sup>22</sup> Modeled after proposed Senate bill S. 1502, introduced by Sen. Casey on July 22, 2009. The referenced section of the Code is Title 31, Money and Finance; Chapter 33, Depositing, Keeping, and Paying Money; § 3302, Custodians of Money.

(A) to the Secretary of Energy to carry out the program described in Sec. 13 to demonstrate the commercial application of integrated systems for long-term geological sequestration of carbon dioxide;

(B) to the Board for the payment of damages as described in Sec. 9(b);

(C) to the Board for distribution of funds to the [Administrator] or an authorized State to pay for remediation, corrective action, and damages during the operational period of a geological sequestration site if the owner or operator is unable to pay and liability assurance for the facility is not adequate, with any such funds to be reimbursed by the owner or operator;

(D) to the Board for distribution of funds to the [Administrator] to pay for site operation, site closure, MMV, remediation, corrective action, and damages for a facility when the facility's sequestration permit has been withdrawn, with any such funds to be reimbursed by the owner or operator;

(E) to the Board for the purchase of financial assurance products, including but not limited to insurance policies payable to the benefit of the Board, to maintain adequate liability assurance for geological sequestration sites that are in the post-closure period;

(F) to the Board or other appropriate regulatory authority to pay any reasonable and verified administrative costs incurred by the Board, the [Administrator], or an authorized State with respect to this Act; and

(G) to the Board for distribution to the [Administrator] for stewardship of sites that have been issued a certificate of closure.

(k) AUTHORIZED USES OF UNUSED FUNDS.—If at any point the Fund balance is greater than or equal to [\$500,000,000],<sup>23</sup> the Board, in coordination with the Administrator, the Secretary of Energy, and the Secretary of the Interior, may disburse funds in the following manner, subject at all times to the minimum balance described in subsection (e) as adjusted, if applicable, by subsection (f):

(1) to fund research and development in connection with carbon capture and sequestration technology and methods;

(2) to purchase and request the cancellation of allowances under a federal or global cap-and-trade system designed to reduce greenhouse gas emissions; and/or

(3) to fund research and development of other technologies to reduce greenhouse gas emissions, such as renewable energy technologies or efficiency.

#### SEC. 8. CERTIFICATE OF CLOSURE.

(a) IN GENERAL.—The [Administrator] shall issue a certificate of closure upon application of the owner or operator and if the [Administrator] determines that the owner or operator has met all of the conditions required for such certificate, as described in subsection (b).

(b) CRITERIA.—The [Administrator] shall not issue a certificate of closure under subsection (a) until the owner or operator has demonstrated, to the satisfaction of the [Administrator], the following:—

<sup>&</sup>lt;sup>23</sup> Numbers in square brackets indicate that we do not take a definitive position on the correct number but instead believe the appropriate number should be reached through discussion and consensus.

(1) injections of carbon dioxide into the geological sequestration unit have ceased for at least 10 consecutive years;

(2) the owner and operator have performed adequate stewardship of the facility continuously since injections of carbon dioxide into the geological sequestration unit have ceased;

(3) the owner and operator and the geological sequestration site are in full compliance with applicable statutes, permits and regulations governing the geological sequestration site and with all other applicable statutes and regulations;

(4) the owner and operator have adequately addressed all pending claims regarding the geological sequestration site's operation;

(5) all wells, equipment, and facilities to be used for ongoing monitoring, measurement, and verification and remediation are in good condition and have demonstrated mechanical integrity;

(6) the owner and operator have plugged wells, removed equipment and facilities, and completed reclamation work as required by the [Administrator] and any relevant State agency;

(7) the carbon dioxide in the geological sequestration unit has become stable, meaning that it is essentially stationary or chemically combined or, if it is migrating or may migrate, that any migration will not cross the geological sequestration unit boundary; and (8) the Board has received payment of the full closure assessment from the owner or operator, as described in Sec. 7(b)(3).

#### **SEC. 9. ELEMENTS OF LIABILITY.**

(a) IN GENERAL.—Notwithstanding any other provision or rule of law, and subject to the provisions of this Act, each owner and operator of a geological sequestration site from which captured carbon dioxide migrates or escapes in a way which is not allowed by the geological sequestration site's permit is liable for the damages specified in subsection (b) that result to the extent that such damages occur during or relate to the geological sequestration site's operational period.

(b) DAMAGES.—The damages referred to in subsection (a) are—

(1) PERSONAL INJURY.—Damages for the death, bodily injury, or sickness of a person or persons;

(2) REAL OR PERSONAL PROPERTY.—Damages for destruction of or injury to real or personal property; and

(3) NATURAL RESOURCES.—Damages for injury to, destruction of, loss of, or loss of use of, natural resources, including the reasonable costs of quantifying such damage.

# SEC. 10. DEFENSES TO LIABILITY<sup>24</sup>

(a) COMPLETE DEFENSES.—An owner or operator is not liable for damages under Sec. 9 if the owner or operator establishes, by a preponderance of the

<sup>&</sup>lt;sup>24</sup> This language is based on section 1003 of the Oil Pollution Act, 33 U.S.C. § 2703.

evidence, that the leakage or significant irregularities and the resulting damages or removal costs were caused solely by—

(1) an act of God, provided that the owner or operator can demonstrate that it adequately investigated and took adequate precautions to prevent such risks, including the risk of seismic events; or

(2) an act of war for which the owner or operator is not responsible.

(b) LIMITATION ON COMPLETE DEFENSE.—Subsection (a) does not apply with respect to an owner or operator who—

(1) fails to report the incident as required by law if the owner or operator knows or has reason to know of the incident;

(2) fails or refuses to provide all reasonable cooperation and assistance requested by a responsible official in connection with corrective actions or actions to prevent, mitigate or minimize a threat to public health, safety or the environment; or

(3) by any act or omission, caused or contributed to leakage or significant irregularity which is the subject of the action relating to the facility.

(c) PREVIOUS OWNER OR OPERATOR. If an owner or operator obtained actual knowledge of the leakage or significant irregularity at such facility when the owner or operator owned the facility and then subsequently transferred ownership of the facility or the real property on which the facility is located to another person without disclosing such knowledge, the owner or operator shall be treated as liable

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under Sec. 9(a) and no defense under subsection (a) of this section shall be available to such owner or operator.

## **SEC. 11. ALLOCATION OF LIABILITY**

(a) GENERAL RULE.—For any incident, liability for damages shall be allocated as follows:

(1) Limits of owner and operator's financial assurance. Claims shall be paid out of the owner and operator's financial assurance until the financial assurance is exhausted.

(2) Payments from Fund.—

(A) Demonstration projects. For demonstration projects under Sec. 13, after the owner and operator have exhausted their financial assurance, then all remaining claims shall be paid out of the Fund.

(B) Other geological sequestration facilities. For all geological sequestration facilities other than demonstration projects under Sec. 13, after the owner and operator have exhausted their financial assurance and paid another [\$20 million]<sup>25</sup> in claims, the next [\$20 million] in claims shall be paid out of the Fund. All remaining claims shall be the responsibility of the owner or operator.

(b) [EXCEPTIONS.—

<sup>&</sup>lt;sup>25</sup> Numbers in square brackets indicate that we do not take a definitive position on the correct number but instead believe the appropriate number should be reached through discussion and consensus.

(1) Acts of owner or operator. Subsection (a) does not apply if the incident was proximately caused by—

(A) gross negligence or willful misconduct of the owner or operator; or

(B) the violation of an applicable Federal permit or safety, construction or operating regulation by the owner or operator, an agent or employee of the owner or operator, or a person acting pursuant to a contractual relationship with the owner or operator (except where the sole contractual arrangement arises in connection with carriage by a common carrier by pipeline).

(2) Failure or refusal of owner of operator. Subsection (a) does not apply if the owner or operator fails or refuses—

(A) to report the incident as required by law and the owner or operator knows or has reason to know of the incident; or

(B) to provide all reasonable cooperation and assistance requested

by a responsible official in connection with corrective activities.]<sup>26</sup>

(c) Adjustment to reflect Consumer Price Index. The [Administrator], not later than 3 years after the date of enactment of this Act, and not less than every 3 years thereafter, shall adjust the allocation of liability specified in subsection (a) to reflect significant increases in the Consumer Price Index.

<sup>&</sup>lt;sup>26</sup> This language is highlighted and bracketed because we believe this issue deserves further discussion, particularly in light of the ongoing oil spill in the Gulf of Mexico.

#### **SEC. 12. POST-CLOSURE STEWARDSHIP**

(a) TRANSFER OF TITLE.—Subject to paragraph (c)(2), the [Administrator] shall accept title to the geological sequestration site, without payment of any compensation, on the issuance of a certificate of closure for the geological sequestration site. Title acquired by the [Administrator] includes all rights and interests in, and all responsibilities associated with, the geological sequestration site.<sup>27</sup>

(b) STANDARDS- The [Administrator], in coordination with the Secretary and the Board, shall establish standards necessary to protect public health, property, and natural resources during post-closure stewardship performed by the [Administrator].

(c) RELEASE OF LIABILITY.—

(1) IN GENERAL.—Except as provided in paragraph (2), on issuance of a certificate of closure, the owner or operator of the applicable geological sequestration site, generators of carbon dioxide injected into the applicable geological sequestration unit, entities that captured or compressed the carbon dioxide stored in the applicable geological sequestration site, and all owners otherwise having any interest in the applicable geological sequestration site shall be released from liability for civil claims which relate to circumstances and

<sup>&</sup>lt;sup>27</sup> Proposed Senate bill S. 1502 allows for transfer of title to a geological sequestration facility, along with the responsibility for long-term stewardship, to be transferred to a state upon request of the state. However, to ensure the long-term safety of sequestration sites, we believe that long-term stewardship should remain in the hands of one federal agency which will develop expertise and will be the public face of ensuring the safety of sequestration sites.

events and related to the geological sequestration site which occurs after the issuance of the certificate of closure.

(2) [EXCEPTION.—The release of liability described in paragraph (1) shall not apply in the case of a civil claim arising out of the gross negligence or intentional misconduct or violation of an applicable permit, statute or regulations by any such owner, operator, former owner or operator, generator, capture entity, or compression entity, or in the case of a claim for violation of an applicable regulation.]<sup>28</sup>

## SEC. 13. LARGE-SCALE CARBON SEQUESTRATION

# **DEMONSTRATION PROGRAM.**<sup>29</sup>

(a) IN GENERAL.—In addition to the research, development, and demonstration programs authorized by 42 U.S.C. § 16293,<sup>30</sup> the Secretary of Energy shall carry out a program to advance large geological sequestration demonstration projects, involving the sequestration of at least 1.5 million tons of carbon dioxide per year.

(b) AUTHORIZED ASSISTANCE.—The Secretary of Energy may enter into cooperative agreements to provide financial and technical assistance to up to ten (10) demonstration projects.

<sup>&</sup>lt;sup>28</sup> This language is highlighted and bracketed because we believe this issue deserves further discussion, particularly in light of the ongoing oil spill in the Gulf of Mexico.

<sup>&</sup>lt;sup>29</sup> The general structure and language of this section is adapted from proposed Senate bill S. 1462, a bill introduced by Sen. Bingaman on July 16, 2009.

 $<sup>^{30}</sup>$  This program is the Carbon Capture and Sequestration Research, Development, and Demonstration Program, which provides funding of \$240 million annually for each of 2008 through 2012 to fund seven large-scale (>1 MtCO<sub>2</sub>/year) sequestration tests. This program does not require the use of CO<sub>2</sub> captured from industrial sources, and it does not require that projects comprise an integrated system of capture, transportation, and sequestration.

(c) PROJECT SELECTION.—The Secretary of Energy shall competitively select recipients of cooperative agreements from among applicants that—

(1) provide the Secretary of Energy with sufficient site information to establish that the proposed geological sequestration unit is capable of long-term sequestration of at least  $[1.5]^{31}$  million tons of injected carbon dioxide per year for at least [10] years, including—

(A) the location, extent, and sequestration capacity of the geological sequestration unit;

(B) the ability of the geological sequestration unit to retain the injected carbon dioxide; and

(C) the measurement, monitoring, and verification requirements necessary to ensure adequate information on the operation of the geological sequestration unit during the operational period;

(2) possess the land or interests in land necessary for-

(A) the injection and sequestration of carbon dioxide at the proposed geological sequestration site; and

(B) the closure, monitoring, and long-term stewardship of the geological sequestration site;

<sup>&</sup>lt;sup>31</sup> Numbers in square brackets indicate that we do not take a definitive position on the correct number but instead believe the appropriate number should be reached through discussion and consensus.

(3) possess or have a reasonable expectation of obtaining all necessary permits and authorizations under applicable Federal and State laws (including regulations); and

(4) agree to comply with each requirement of subsection (f).

(d) DIVERSITY OF FORMATIONS TO BE DEMONSTRATED.—In selecting demonstration projects under this section, the Secretary of Energy shall ensure that the selected projects shall demonstrate injection of carbon dioxide into a variety of geological formations. Such a variety of geological formations shall include projects injecting carbon dioxide into the following types of geological formations:

(1) depleted oil and gas reservoirs;

(2) saline formations;

(3) offshore sub-seabed geological formations;

(4) basalt formations; and

(5) unmineable coal seams.

(e) CAPTURED CARBON DIOXIDE FROM INDUSTRIAL SOURCES.—In selecting demonstration projects under this section, the Secretary of Energy shall ensure that the selected projects inject only carbon dioxide captured from industrial sources.

(f) TERMS AND CONDITIONS.—The Secretary of Energy shall condition receipt of financial assistance pursuant to a cooperative agreement under this section on the recipient agreeing to(1) comply with all applicable Federal and State laws (including regulations), including a certification by the appropriate regulatory authority that the project will comply with Federal and State requirements to protect water supplies;

(2) comply with all applicable construction and operating requirements for deep injection wells;

(3) measure, monitor, and test to verify that carbon dioxide injected into the injection zone is not—

(A) escaping from or migrating beyond the geological sequestration unit boundaries; or

(B) endangering an underground source of drinking water;

(4) comply with applicable well-plugging, post-injection facility care, and facility closure requirements, including—

(A) maintaining liability assurance during the operational period as required by Sec. 4; and

(B) promptly undertaking remediation activities for any leakage or significant irregularity at the facility; and

(5) comply with applicable long-term care requirements.

(g) LIABILITY.—Liability for damages that result from or relate to a demonstration project as described in this section shall be allocated pursuant to the allocation formula described in Sec. 11.

# SEC. 14. FEDERALLY-OWNED GEOLOGICAL SEQUESTRATION SITES

(a) IN GENERAL.—The Secretary of Agriculture, with respect to National Forest System land, and the Secretary of the Interior, with respect to land managed by the Bureau of Land Management or the Minerals Management Service, may authorize the siting of a project on Federal land under the jurisdiction of the relevant Secretary in a manner consistent with applicable laws and land management plans and subject to such terms and conditions as the relevant Secretary determines to be necessary.

(b) FRAMEWORK FOR GEOLOGICAL CARBON SEQUESTRATION ON PUBLIC LAND.—In determining whether to authorize a project on Federal land, the Secretary described in paragraph (a) shall take into account the framework for geological carbon sequestration on public land prepared in accordance with section 714 of the Energy Independence and Security Act of 2007 (Public Law 110-140; 121 Stat. 1715).

#### SEC. 15. VIOLATIONS AND PENALTIES.

(a) IN GENERAL.—Whenever the [Administrator] determines that a violation of any requirement of this Act has occurred or is about to occur, the [Administrator] shall either issue an order requiring compliance within a specified time period or shall commence a civil action for appropriate relief, including a temporary or permanent injunction. (b) COMPLIANCE ORDERS.—Any compliance order issued under this Act shall state with reasonable specificity the nature of the violation and specify a time for compliance and, in the event of noncompliance, assess a civil penalty, if any, which the [Administrator] determines is reasonable, taking into account the seriousness of the violation and any good faith efforts to comply with the applicable requirements.

(c) CIVIL PENALTIES.—Except as otherwise provided by law, any person to whom a compliance order is issued and who fails to take corrective action within the time specified in the order or any person found by the [Administrator] to be in violation of any requirement of this Act may be liable for a civil penalty to be assessed by the [Administrator] or a court, of not more than [\$5,000]<sup>32</sup> a day for each day of violation and for each act of violation.

(d) OPPORTUNITY FOR HEARING REQUIRED.—No penalty shall be assessed until the person charged has been given notice and an opportunity for a hearing on such charge. In determining whether or not a civil penalty is to be assessed and in determining the amount of the penalty, or the amount agreed upon in compromise, the gravity of the violation and the demonstrated good faith of the person charged in attempting to achieve rapid compliance after notification of a violation shall be considered.

<sup>&</sup>lt;sup>32</sup> Numbers in square brackets indicate that we do not take a definitive position on the correct number but instead believe the appropriate number should be reached through discussion and consensus.

(e) PROSECUTION OF VIOLATIONS.—The [Administrator], or the Attorney General if requested by the [Administrator], shall have charge of and shall prosecute all civil cases arising out of violation of any provision of this section including the recovery of penalties.

(f) SETTLEMENT.—Except as otherwise provided herein, the [Administrator] may settle or resolve as it may deem advantageous to the United States any suits, disputes, or claims for any penalty under any provisions of this section.

(g) PENALTIES TO BE DEPOSITED INTO FUND.—Any penalties or settlement monies collected pursuant to this Sec. 15 shall be deposited into the Fund.

# SEC. 16. REPORTING BY THE OWNER OR OPERATOR.<sup>33</sup>

(a) At least once a year, or more often if required by the [Administrator], the operator shall submit to the [Administrator]:

(1) all results of monitoring during the relevant reporting period;

(2) the quantities and properties of the captured carbon dioxide streams injected during the relevant reporting period;

(3) an explanation of how the monitoring results compare with the modeled predictions of performance;

(4) proof of the putting in place and maintenance of the liability assurance required pursuant to Sec. 4; and

<sup>&</sup>lt;sup>33</sup> Modeled after European Union, Council Directive 2009/31/EC, 2009 O.J. (L 140/124) art. 14.

(5) any other information the [Administrator] considers relevant for the purpose of assessing compliance with sequestration permit conditions and increasing the knowledge of the behavior of captured carbon dioxide in the geological sequestration site.

(b) Notification in case of leakage or significant irregularity.—In the event of leakage or significant irregularity, the owner or operator shall immediately notify the [Administrator] or the authorized State. The [Administrator] or the authorized State shall take the necessary corrective measures, which may include withdrawal of the sequestration permit pursuant to Sec. 5(e).

## SEC. 17. ENDANGERMENT<sup>34</sup>

(a) AUTHORITY OF [ADMINISTRATOR].—Notwithstanding any other provision of this chapter, upon receipt of evidence that the past or present capture, compression, or sequestration of carbon dioxide poses a threat to public health, safety or the environment, the [Administrator] may bring suit on behalf of the United States in the appropriate district court against any person who has contributed or who is contributing to such capture, compression, or sequestration to restrain such person from such capture, compression, or sequestration, to order such person to take such other action as may be necessary, or both.

(b) VIOLATIONS.— Any person who willfully violates, or fails or refuses to comply with, any order of the [Administrator] under subsection (a) may, in an

<sup>&</sup>lt;sup>34</sup> Adapted from RCRA § 7003, 42 U.S.C. § 6973.

action brought in the appropriate United States district court to enforce such order, be fined not more than [\$5,000]<sup>35</sup> for each day in which such violation occurs or such failure to comply continues.

(c) IMMEDIATE NOTICE.—Upon receipt of information that any geological sequestration site poses a threat to public health, safety or the environment, the [Administrator] shall provide immediate notice to the appropriate local government agencies. In addition, the [Administrator] shall require notice of such threat to be promptly posted at the geological sequestration site.

(d) PUBLIC PARTICIPATION IN SETTLEMENTS.—Whenever the United States or the [Administrator] proposes to covenant not to sue or to forbear from suit or to settle any claim arising under this section, notice and opportunity for a public meeting in the affected area, and a reasonable opportunity to comment on the proposed settlement prior to its final entry, shall be afforded to the public. The decision of the United States or the [Administrator] to enter into or not to enter into such consent decree, covenant or agreement shall not constitute a final agency action subject to judicial review under this Act or the Administrative Procedure Act.

<sup>&</sup>lt;sup>35</sup> Numbers in square brackets indicate that we do not take a definitive position on the correct number but instead believe the appropriate number should be reached through discussion and consensus.

#### **SEC. 18. CITIZEN SUITS**

(a) IN GENERAL.—Except as provided in subsection (b) or (c) of this section, and notwithstanding any other provision in this Act, any person may commence a civil action on his own behalf—

(1) against any person, including the United States and any other governmental instrumentality or agency, to the extent permitted by the Eleventh Amendment to the Constitution, who is alleged to be in violation of any permit, standard, regulation, condition, requirement, prohibition, or order which has become effective pursuant to this Act; or

(2) against the [Administrator] or an authorized State where there is alleged a failure of the [Administrator] or such State to perform any act or duty under this Act which is not discretionary.

Any action under paragraph (a)(1) of this subsection shall be brought in the federal district court in which the alleged violation occurred or the alleged endangerment may occur. Any action brought under paragraph (a)(2) of this subsection may be brought in the federal district court in which the alleged violation occurred or in the U.S. District Court for the District of Columbia. The district court shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, to enforce the permit, standard, regulation, condition, requirement, prohibition, or order referred to in paragraph (a)(1), or to order the [Administrator] or authorized State to perform the act or duty referred

to in paragraph (a)(2), as the case may be, and to apply any appropriate civil penalties under Sec. 15(c).

(b) NOTICE.—No action may be commenced under paragraph (a)(2) of this section prior to sixty days after the plaintiff has given notice to the [Administrator] or authorized State that he will commence such action. Notice under this subsection shall be given in such manner as the [Administrator] shall prescribe by regulation.

(c) INTERVENTION.—In any action under this section the [Administrator], if not a party, may intervene as a matter of right.

(d) COSTS. The court, in issuing any final order in any action brought pursuant to this section, may award costs of litigation (including reasonable attorney and expert witness fees) to the prevailing or substantially prevailing party, whenever the court determines such an award is appropriate. The court may, if a temporary restraining order or preliminary injunction is sought, require the filing of a bond or equivalent security in accordance with the Federal Rules of Civil Procedure.

# SEC. 19. AUTHORIZED STATE GEOLOGICAL SEQUESTRATION PROGRAMS<sup>36</sup>

(a) FEDERAL GUIDELINES.—Not later than [eighteen months]<sup>37</sup> after enactment of this statute, the [Administrator], after consultation with the Board and with

<sup>&</sup>lt;sup>36</sup> Adapted from RCRA § 3006, 42 U.S.C. § 6926.

<sup>&</sup>lt;sup>37</sup> Numbers in square brackets indicate that we do not take a definitive position on the correct number but instead believe the appropriate number should be reached through discussion and consensus.

State authorities, shall promulgate guidelines to assist States in the development of State geological sequestration programs.

(b) AUTHORIZATION OF STATE PROGRAM.—Any State which seeks to administer and enforce a geological sequestration program pursuant to this Act may develop and, after notice and opportunity for public hearing, submit to the [Administrator] an application, in such form as the [Administrator] shall require, for authorization of such program. Within [ninety days] following submission of an application under this subsection, the [Administrator] shall issue a notice as to whether or not he expects such program to be authorized, and within [ninety days] following such notice (and after opportunity for public hearing) he shall publish his findings as to whether or not the conditions listed in items (1), (2), and (3) below have been met. Such State is authorized to carry out such program in lieu of the Federal program under this Act in such State and to issue and enforce permits for the geological sequestration of carbon dioxide unless, within ninety days following submission of the application, the [Administrator] notifies such State that such program may not be authorized and, within ninety days following such notice and after opportunity for public hearing, he finds that (1) such State program is not equivalent to the Federal program under this Act, (2) such program is not consistent with the Federal or State programs applicable in other States, or (3) such program does not provide adequate enforcement of compliance with the requirements of this Act. In authorizing a State program, the [Administrator] may base his findings on the Federal program in effect one year prior to submission of a State's application or in effect on the date of enactment of this Act, whichever is later.

(c) CLARIFICATIONS AND EXCEPTIONS.—

(1) Operators shall pay the per-ton storage fees described in Sec. 7(b)(1), for deposit into the Fund, regardless of whether the State in which the geological sequestration site is located has an authorized State program.<sup>38</sup>

(2) If a geological sequestration site crosses State boundaries, and all States in which the geological sequestration site is located have authorized State programs in place, the States may elect to coordinate oversight of the geological sequestration site. Any States which seek to administer and enforce a joint State program for an interstate geological sequestration site may submit to the [Administrator] an application, in such form as he shall require, for authorization of such a joint State program. Within ninety days following submission of an application under this subsection (and after opportunity for public hearing), the [Administrator] shall publish his findings as to whether or not the conditions listed in items (1), (2), and (3) in subsection (b) above have been met. In authorizing a joint State program, the [Administrator] may base his findings on the Federal program in effect one year prior to submission of a joint State

<sup>&</sup>lt;sup>38</sup> The purpose of requiring operators to pay into the federal Fund is to ensure that sufficient funds are pooled in the federal Fund to address future risks at all sites. State trust funds may not grow large enough to adequately protect human health and the environment.

application or in effect on the date of enactment of this subchapter, whichever is later.

(d) INTERIM AUTHORIZATION.—

(1) Any State which has in existence a geological sequestration program pursuant to State law before the date ninety days after the date of enactment of this Act may submit to the [Administrator] evidence of such existing program and may request a temporary authorization to carry out such program under this Act. The [Administrator] shall, if the evidence submitted shows the existing State program to be substantially equivalent to the Federal program under this Act, grant an interim authorization to the State to carry out such program in lieu of the Federal program pursuant to this Act for a period ending no later than three years after enactment of this Act.

(2) The [Administrator] shall, by rule, establish a date for the expiration of interim authorization under this subsection.

(e) EFFECT OF STATE PERMIT.—Any action taken by a State under a geological sequestration program authorized under this section shall have the same force and effect as action taken by the [Administrator] under this Act.

(f) WITHDRAWAL OF AUTHORIZATION.—Whenever the [Administrator] determines after public hearing that a State is not administering and enforcing a program authorized under this section in accordance with the requirements of this section, he shall so notify the State and, if appropriate corrective action is not taken within a reasonable time, not to exceed ninety days, the [Administrator]

shall withdraw authorization of such program and establish a Federal program pursuant to this Act. The [Administrator] shall not withdraw authorization of any such program unless he shall first have notified the State, and made public, in writing, the reasons for such withdrawal.

(g) AVAILABILITY OF INFORMATION—No State program may be authorized by the [Administrator] under this section unless—

(1) such program provides for the public availability of information obtained by the State regarding geological sequestration sites; and

(2) such information is available to the public in substantially the same manner, and to the same degree, as would be the case if the [Administrator] were carrying out the provisions of this Act in such State.

#### SEC. 20. PREEMPTION OF STATE TORT LAW

(a) PREEMPTION DURING OPERATIONAL PERIOD.—During the operational period of a geological sequestration site, state common law claims for trespass or nuisance that allege no damages, or damages less than [\$2,500],<sup>39</sup> based on the migration of carbon dioxide from a geologic sequestration site are hereby expressly preempted. Nothing in this Act shall serve to preempt any other remedies that an injured party may have under state common law. An injured party must submit its claim for damages to the Board for review under Sec. 22

<sup>&</sup>lt;sup>39</sup> Numbers in square brackets indicate that we do not take a definitive position on the correct number but instead believe the appropriate number should be reached through discussion and consensus.

before pursuing any state court claims. For purposes of this section, an "injured party" does not include any party bringing a citizen suit as provided for in Sec. 18.

(b) PREEMPTION DURING LONG-TERM STEWARDSHIP PERIOD.—During the long-term stewardship period of a geological sequestration site, state common law claims for trespass or nuisance that allege no damages, or damages less than [\$2,500],<sup>40</sup> based on the migration of carbon dioxide from a geologic sequestration site are hereby expressly preempted. [During this period, state common law claims for the ordinary negligence of owners and operators are also barred.]<sup>41</sup> Nothing in this Act shall serve to preempt any other remedies that an injured party may have under state common law. An injured party must submit its claim for damages to the Board for review under Sec. 22 before pursuing any state law claims. During the long-term stewardship period, an injured party shall be barred from bringing a state common law cause of action against the [Administrator] or an authorized State.

### SEC. 21. INSPECTIONS<sup>42</sup>

(a) ACCESS ENTRY.—For purposes of developing or assisting in the development of any regulation or enforcing the provisions of this title, any person who generates, captures, compresses, or sequesters carbon dioxide in connection

<sup>&</sup>lt;sup>40</sup> Numbers in square brackets indicate that we do not take a definitive position on the correct number but instead believe the appropriate number should be reached through discussion and consensus.

<sup>&</sup>lt;sup>41</sup> This language is highlighted and bracketed because we believe this issue deserves further discussion, particularly in light of the ongoing oil spill in the Gulf of Mexico.

<sup>&</sup>lt;sup>42</sup> This section is adapted from RCRA § 3007, 42 USCS § 6927 (2010).

with eventual sequestration at a geological sequestration site, or who has generated, captured, compressed, or sequestered carbon dioxide in connection with eventual sequestration at a geological sequestration site, shall, upon request of any officer, employee, or representative of the [Environmental Protection Agency], duly designated by the [Administrator], or upon request of any duly designated officer, employee, or representative of a State having an authorized geological sequestration site program, furnish information relating to such carbon dioxide and permit such person at all reasonable times to have access to, and to copy all records relating to such geological sequestration site. For the purposes of developing or assisting in the development of any regulation or enforcing the provisions of this title, such officers, employees, or representatives are authorized—

(1) to enter at reasonable times any establishment or other place where such carbon dioxide is or has been generated, captured, compressed, or sequestered; and

(2) to inspect and obtain samples from any person of any such carbon dioxide.

Each such inspection shall be commenced and completed with reasonable promptness. If the officer, employee, or representative obtains any samples, prior to leaving the premises, he shall give to the owner, operator, or agent in charge a receipt describing the sample obtained and if requested a portion of each such sample equal in volume or weight to the portion retained. If any analysis is made

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of such samples, a copy of the results of such analysis shall be furnished promptly to the owner, operator, or agent in charge.

#### (b) AVAILABILITY TO PUBLIC.—

(1) Any records, reports, or information (including records, reports, or information obtained by representatives of the [Environmental Protection Agency]) obtained from any person under this section shall be available to the public, except that upon a showing satisfactory to the [Administrator] or the authorized State by any person that documents, information, records, or reports, or particular part thereof, to which the [Administrator] or authorized State or any officer, employee, or representative thereof has access under this section if made public, would divulge information entitled to protection under section 1905 of title 18 of the United States Code,<sup>43</sup> such information or particular portion thereof shall be considered confidential in accordance with the purposes of that section, except that such record, report, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act, or when relevant in any proceeding under this Act.

(2) Any person not subject to the provisions of section 1905 of title 18 of the United States Code who knowingly and willfully divulges or discloses any information entitled to protection under this subsection shall, upon conviction,

<sup>&</sup>lt;sup>43</sup> The referenced section relates to disclosure of confidential information by public officers and employees.

be subject to a fine of not more than \$5,000 or to imprisonment not to exceed one year, or both.

(3) In submitting data under this Act, a person required to provide such data may—

(A) designate the data which such person believes is entitled to protection under this subsection, and

(B) submit such designated data separately from other data submitted under this Act.

A designation under this paragraph shall be made in writing and in such manner as the [Administrator] may prescribe.

(4) Notwithstanding any limitation contained in this section or any other provision of law, all information reported to, or otherwise obtained by, the [Administrator] (or any representative of the [Administrator]) under this Act shall be made available, upon written request of any duly authorized committee of the Congress, to such committee.

(c) FEDERAL FACILITY INSPECTIONS.—The [Administrator] shall undertake on an annual basis a thorough inspection of each geological sequestration site which is owned or operated by a department, agency, or instrumentality of the United States to enforce its compliance with this Act and the regulations promulgated thereunder. Any State with an authorized geological sequestration site program also may conduct an inspection of any such facility for purposes of enforcing the facility's compliance with the State geological sequestration site program. The records of such inspections shall be made available to the public as provided in subsection (b). The department, agency, or instrumentality owning or operating each such facility shall reimburse the [Environmental Protection Agency] for the costs of the inspection of the facility.

(d) STATE-OPERATED FACILITIES.—The [Administrator] shall annually undertake a thorough inspection of every geological sequestration site which is operated by a State for which a permit is required under Sec. 5 of this title. The records of such inspection shall be made available to the public as provided in subsection (b).

#### (e) MANDATORY INSPECTIONS.—

(1) The [Administrator] or the authorized State shall commence a program to thoroughly inspect every geological sequestration site for which a permit is required under Sec. 5 no less often than every two years as to its compliance with this Act and the regulations promulgated under this Act. Such inspections shall commence not later than twelve months after the date of enactment of this Act. The [Administrator] shall, after notice and opportunity for public comment, promulgate regulations governing the minimum frequency and manner of such inspections, including the manner in which records of such inspections shall be maintained and the manner in which reports of such inspections shall be filed. The [Administrator] may distinguish among classes and categories of facilities commensurate with the risks posed by each class or category. (2) Not later than six months after the date of enactment of this Act, the [Administrator] shall submit to the Congress a report on the potential for inspections of geological sequestration sites by nongovernmental inspectors as a supplement to inspections conducted by officers, employees, or representatives of the [Environmental Protection Agency] or authorized States. Such report shall be prepared in cooperation with the States, insurance companies offering insurance products to geological sequestration sites, independent companies providing inspection services, and other such groups as appropriate. Such report shall contain recommendations on provisions and requirements for a program of private inspections to supplement governmental inspections.

#### **SEC. 22. CLAIMS PROCEDURE**

(a) PRESENTATION TO BOARD.—Claims for reimbursement for emergency or corrective actions or damages undertaken by the [Administrator] or an authorized State shall be presented first to the Board. No person may bring a civil action for damages against an owner or operator regarding an incident at a geological sequestration site in a State or Federal court, unless a petition has been filed pursuant to subsection (b) and the claims resolution panel has issued a final decision on the petition.

(b) PROCEDURE FOR CLAIMS RESOLUTION BY THE BOARD.—

(1) Upon presentation of a claim to the Board, the claims resolution panel of the Board shall appoint a special master to hear all claims related to the incident that is the subject of the claim. (2) The special master shall conduct a hearing on the claim and issue a recommended decision. The special master may award damages as defined in Section 9(b).

(3) If a claimant objects to the Special Master's decision, the claimant may appeal that decision to the Board's Claims Resolution Panel within 60 days.

(c) ADDITIONAL INSTRUCTIONS FOR CLAIMS RESOLUTION PROCEDURE.—The Board shall issue instructions for the presentation, filing, processing, settlement, and adjudication of claims under this Act.

(d) OPTION OF PURSUING COURT ACTION. —After the Board has issued a final decision, a claimant may elect to accept the Board's decision or to reject the Board's decision, including any award made by the Board, and pursue an action in court, subject to the limits on action identified in Section 20.