

Proposed Carbon Geologic Sequestration Legislation

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Subchapter I. General Provisions

101 Congressional Findings and Objectives

(a) Findings.

The Congress finds—

- (i) the geologic sequestration of carbon dioxide will benefit the citizens and environment of the United States by reducing greenhouse gas emissions; and
- (ii) as disclosed in reports of the Department of Energy and other reports made pursuant to the authority of Congress, it is declared that the business of geologic sequestration, capture by capture facilities, and transportation of carbon dioxide is affected with the public interest, and that Federal regulation in matters relating to the geologic sequestration, capture by capture facilities, and transportation of carbon dioxide in interstate and foreign commerce is necessary in the public interest.

(b) Objective.

The objective of this chapter is to encourage the implementation of geologic sequestration of carbon dioxide while protecting health and the environment.

102 Definitions

When used in this chapter—

- (a) The term "Administrator" means the Administrator of the Environmental Protection Agency.
- (b) The term "Agency" means the Environmental Protection Agency.
- (c) The term "capture facility" means electric generating or other facilities which employ carbon dioxide capture technology to capture carbon dioxide for geologic sequestration.
- (d) The term "carbon dioxide" means carbon dioxide (CO₂) produced as a byproduct of combustion in the industrial process (including carbon dioxide generated from oil and gas production and processing operations) of sufficient purity and quality as to not compromise the safety and efficiency of the reservoir to effectively contain the carbon dioxide, or otherwise create a health or environmental risk.
- (e) The term "carbon dioxide pipelines" means pipelines dedicated to transporting carbon dioxide from one or more capture facilities to the storage and injection site for geologic sequestration, not wholly contained within a joint capture and storage facility.

- (f) The term "Clean Air Act" means the Clean Air Act, as codified at 42 U.S.C. § 7401 *et seq.*
- (g) The term "Clean Water Act" means the Clean Water Act, as codified at 33 U.S.C. § 1251 *et seq.*
- (h) The term "Commission" means the Federal Electric Regulatory Commission.
- (i) The term "Commissioner" means a Commissioner of the Federal Electric Regulatory Commission.
- (j) The term "Comprehensive Environmental Response Compensation and Liability Act" shall mean the Comprehensive Environmental Response Compensation and Liability Act, as codified at 42 U.S.C. § 9601 *et seq.*
- (k) The term "Federal agency" means any department, agency, or instrumentality of the United States.
- (l) The term "geologic sequestration" means underground storage in a reservoir for at least 1,000 years of at least 90% of the carbon dioxide emitted from a capture facility, with a storage failure rate of no more than 1% volume loss in 1000 years (as determined by the Administrator based on the best scientific evidence).
- (m) The term "greenhouse gases" means those gases, including carbon dioxide, methane, nitrous oxide, chlorofluorocarbons, and ozone, whose presence in the atmosphere results in the capture of radiation from sunlight by preventing radiative heat from reflecting back into space.
- (n) The term "Indian tribe" means any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village, which is Federally recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.
- (o) The term "injection well" means a well used to inject carbon dioxide into and/or withdraw carbon dioxide from a reservoir.
- (p) The term "OSHA" means the Occupational Safety and Health Administration.
- (q) The term "oil or gas" means oil, natural gas, or gas condensate.
- (r) The term "owner or operator" means any person who owns, leases, operates, controls, or supervises a capture facility, carbon dioxide pipeline or storage facility.
- (s) The term "PHMSA" means the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation.
- (t) The term "person" includes an individual, corporation, partnership, association, State, municipality, political subdivision of a State, and any agency, department, or instrumentality of the United States and any officer, agent, or employee thereof.
- (u) The term "reservoir" means any subsurface sedimentary stratum, formation, aquifer, or cavity or void (whether natural or artificially created), including oil and gas reservoirs, saline formations and coal

seams, suitable for or capable of being made suitable for the injection and storage of carbon dioxide therein.

- (v) The term "Resource Conservation and Recovery Act" means the Resource Conservation and Recovery Act, as codified at 42 U.S.C. § 6991 *et seq.*
- (w) The term "Safe Drinking Water Act" means the Safe Drinking Water Act, as codified at 42 U.S.C. § 300f *et seq.*
- (x) The term "Secretary" means the Secretary of Energy.
- (y) The term "site" means the land or water area where any storage facility is physically located, including adjacent land used in connection with the storage facility.
- (z) The term "State" means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.
- (aa) The term "storage facility" means the underground reservoir, underground equipment, and surface buildings and equipment utilized in the storage operation, excluding pipelines used to transport the carbon dioxide from one or more capture facilities to the storage and injection site, not wholly contained within a joint capture and storage facility. The underground reservoir component of the storage facility includes any necessary and reasonable areal buffer and subsurface monitoring zones designated by the Agency for the purpose of ensuring the safe and efficient operation of the storage facility for the storage of carbon dioxide and shall be chosen to protect against pollution, invasion, and escape or migration of carbon dioxide.
- (bb) The term "third-party injector" means any person who geologically sequesters carbon dioxide at a storage facility owned or operated by another person.
- (cc) The term "unitization" means the process of combining separately owned portions of a common reservoir or field into a large, fieldwide unit.

103 Administration

- (a) Regulations; delegation of powers and duties; regional officers and employees.
 - (i) The Administrator, the Commission, OSHA, and PHMSA are authorized to prescribe such regulations as are necessary to carry out their respective functions under this chapter. Each may delegate to any officer or employee of its respective Federal agency such of its powers and duties under this chapter as it may deem necessary or expedient.
 - (ii) Not later than 12 months after the date of enactment of this chapter, the Administrator, the Commission, OSHA, and PHMSA shall promulgate regulations establishing general applicable procedures and policies for their respective officers and employees

to follow in carrying out a delegation under paragraph (a), if any. Such regulations shall be designed—

- (A) to assure fairness and uniformity in the criteria, procedures, and policies applied in implementing and enforcing the chapter; and
- (B) to provide a mechanism for identifying and standardizing inconsistent or varying criteria, procedures, and policies being employed by such officers and employees in implementing and enforcing the chapter.

(b) Authorities.

(i) In carrying out this chapter, the Administrator, the Commission, OSHA and PHMSA are authorized to—

- (A) prescribe, in consultation with Federal, State, and regional authorities, such regulations as are necessary to carry out each of their respective functions under this chapter;
- (B) consult with or exchange information with other Federal agencies undertaking research, development, demonstration projects, studies, or investigations relating to the capture, transport and geologic sequestration of carbon dioxide;
- (C) consult with representatives of science, industry, agriculture, labor, environmental protection and consumer organizations, and other groups, as each deems advisable;
- (D) utilize the information, facilities, personnel and other resources of Federal agencies, including the National Energy Technology Laboratory, on a reimbursable basis, to perform research and analyses and conduct studies and investigations related to the capture, transport and geologic sequestration of carbon dioxide and to otherwise carry out each of the Federal agencies' respective functions under this chapter; and
- (E) to delegate to the Secretary of Transportation the performance of any inspection or enforcement function under this chapter relating to the transportation of carbon dioxide for purposes of geologic sequestration where such delegation would avoid unnecessary duplication of activity and would carry out the objectives of this chapter.

(ii) Revision of regulations.

Each regulation promulgated under this chapter shall be reviewed and, where necessary, revised not less frequently than every three years.

104 Risk Assessment and Management

The Administrator shall examine, in consultation with the Secretary, the risks associated with geologic sequestration of carbon dioxide on a large scale as anticipated by this legislation and incorporate findings and determinations in the permitting process as necessary to protect public health, welfare and the environment.

Subchapter II. Authorities

201 Agency Authority Over Storage Facilities

The Administrator shall have exclusive authority to approve or deny an application for the siting, construction, expansion, or operation of a storage facility. Except as specifically provided in this chapter, nothing in this chapter is intended to affect otherwise applicable law related to any Federal agency's authorities or responsibilities related to storage facilities.

202 State Consultation for Storage Facilities

(a) State consultation.

The Governor of a State in which a storage facility is proposed to be located shall designate the appropriate State agency for the purposes of consulting with the Administrator regarding an application under section 302 or 304 of this chapter. The Administrator shall consult with such State agency regarding State and local safety considerations prior to issuing a permit pursuant to section 302 or 304. For the purposes of this section, State and local safety considerations include—

- (i) the type and use of the storage facility;
- (ii) the existing and projected population and demographic characteristics on and near the site;
- (iii) the existing and proposed land uses near the site;
- (iv) the natural and physical aspects of the site;
- (v) the emergency response capabilities near the site; and
- (vi) the need to encourage remote siting.

(b) Advisory report.

The State agency may furnish an advisory report on State and local safety considerations to the Agency with respect to an application no later than 30 days after the application was filed with the Agency. Before issuing a permit authorizing an applicant to site, construct, expand, or operate a storage facility, the Administrator shall review and respond specifically to the issues raised in the advisory report furnished by the State agency described in subsection (a) of this section.

203 Commission Regulatory Authority Over Capture Facilities and Carbon Dioxide Pipelines

Except as set forth in sections 204, 205, and subchapter X of this chapter, the Commission shall have the exclusive authority to promulgate regulations for the siting, construction, expansion, or operation of capture facilities and carbon dioxide pipelines. Except as specifically provided in this chapter, nothing in this chapter is intended to affect otherwise applicable law related to any Federal agency's authorities or responsibilities related to capture facilities and carbon dioxide pipelines.

204 OSHA Regulatory Authority Over Capture Facilities and Storage Facilities

- (a) Except as set forth in this chapter, OSHA shall have authority to promulgate regulations governing worker safety at capture facilities and storage facilities.
- (b) Not later than 12 months after the date of enactment of this chapter, OSHA shall propose regulations addressing worker safety requirements for the siting, construction, expansion, or operation of capture facilities and storage facilities.

205 PHMSA Regulatory Authority Over Carbon Dioxide Pipelines

- (a) Except as set forth in this chapter, PHMSA shall have authority to promulgate regulations governing worker safety for carbon dioxide pipelines
- (b) Not later than 12 months after the date of enactment of this chapter, PHMSA shall propose regulations addressing worker safety requirements for the siting, construction, expansion, or operation of carbon dioxide pipelines.

206 Rates and Charges for Owners and Operators

- (a) Market power.

In exercising its authority under this chapter, the Commission may authorize an owner or operator of a storage facility or carbon dioxide pipeline to provide storage and transport services at market-based rates for new storage and transport capacity related to a specific storage facility placed in service after _____, notwithstanding the fact that the owner or operator is unable to demonstrate that it lacks market power, if the Commission determines that—

- (i) market-based rates are in the public interest and necessary to encourage the construction of the storage capacity in the area needing geologic sequestration services; and

- (ii) customers are adequately protected.
- (b) The Commission shall ensure that reasonable terms and conditions are in place to protect consumers.
- (c) If the Commission authorizes an owner or operator of a storage facility or carbon dioxide pipeline to charge market-based rates under this section, the Commission shall review periodically whether the market-based rate is just, reasonable, and not unduly discriminatory or preferential.

207 Federal Jurisdiction Savings Clause

Except as specifically provided in this chapter, nothing in this chapter shall be construed to limit the authority or functions of any Federal agency under any otherwise applicable Federal law or regulation not inconsistent with this chapter.

208 State Jurisdiction Savings Clause

Except as specifically provided in this chapter, nothing in this chapter shall be construed to limit the authority or functions of any State or local authorities under any otherwise applicable State or local law or regulation not inconsistent with this chapter.

Subchapter III. Permits

301 Permits for Siting of Capture Facilities

(a) Permit requirements.

The Commission shall promulgate within 18 months after the date of enactment of this chapter regulations requiring each person owning or operating an existing capture facility or planning to site, construct, expand, or operate a new capture facility to have a permit issued pursuant to this section.

(b) Permit application requirements.

Each application for a permit under this section shall contain such information as may be required under regulations promulgated by the Commission, including but not limited to information respecting—

- (i) estimates of the percentage and total quantity of carbon dioxide proposed to be captured;
- (ii) the site at which the capture facility will be located; and
- (iii) risk characterization and risk management of any risks identified by the Administrator in accordance with section 104.

(c) Permit issuance.

(i) Procedure.

Upon the filing of any application to site, construct, expand, or operate a capture facility, the Commission shall, within ____ days—

- (A) set the matter for hearing;
- (B) give reasonable notice of the hearing to all interested persons, including the State electric regulatory commission and State environmental protection agency of the State in which the capture facility is or will be located and, if not the same, the Governor-appointed State agency described in section 202 (a) of this chapter;
- (C) decide the matter in accordance with this subsection; and
- (D) issue or deny the appropriate permit accordingly.

- (ii) The Commission must consider the following factors in determining whether to approve or deny an application:
 - (A) for a capture facility that is a coal-fired power generation facility, the efficiency of the capture and geologic sequestration of carbon dioxide; and
 - (B) with respect to the environmental impacts of the siting of a capture facility, the nature of the area where the capture facility is to be sited, including, but not limited to:
 - (1) the proximity of critical habitats designated under the Endangered Species Act;
 - (2) the proximity of drinking water aquifers or supplies;
 - (3) the proximity to identified State or Federal natural areas;
 - (4) the nature of the community, including its racial, ethnic and socioeconomic makeup; and
 - (5) the impact of increasing the ambient concentration of other pollutants.
- (iii) The Commission's consideration of the factors set forth in paragraph (ii)(B) of this subsection does not preempt other consideration required by Federal law not inconsistent with this statute.
- (iv) In order to issue a permit to site, construct, expand, or operate a capture facility, after public notice and hearing as described in subsection (c)(i) of this section, the Commission must find as follows:
 - (A) that the operation of the capture facility will comply with the standards set out in and promulgated in accordance with section 401;
 - (B) in the case of siting or construction, that the capture facility site is consistent with the public interest in light of the considerations set out in subsection (c)(ii)(B);
 - (C) in the case of siting or construction, that a good faith effort has been made to obtain the consent of a majority of the owners having property interests affected by the capture facility and that the owner or operator intends to acquire

any remaining interest by eminent domain or as otherwise allowed by this chapter; and

- (D) that the operation of the proposed capture facility is in the public interest.
- (v) Except as provided in this section, the Commission may approve an application described in subsection (b) of this section, in whole or part, with such modifications and upon such terms and conditions as the Commission finds necessary or appropriate.
- (vi) Certificate of Operation.

Prior to commencing construction of a capture facility, the owner or operator of the capture facility shall record with the Commission a certificate, entitled "Certificate of Operation of Carbon Dioxide Capture Facility," which shall contain a statement that the owner or operator has acquired by eminent domain or otherwise all necessary ownership rights with respect to the capture facility, and the date upon which the capture facility shall be effective.

302 Permits for Carbon Dioxide Pipelines

- (a) Permit requirements.

The Commission shall promulgate within 18 months after the date of enactment of this chapter regulations requiring each person owning or operating an existing carbon dioxide pipeline as defined in section 102(e) or planning to site, construct, expand, or operate a new carbon dioxide pipeline as defined in section 102(e) to have a permit issued pursuant to this section.

- (b) Permit application requirements.

Each application for a permit under this section shall contain such information as may be required under regulations promulgated by the Commission, including but not limited to information respecting—

- (i) engineering design data;
- (ii) surveyed route data;
- (iii) risk characterization and risk management of any risks identified by the Administrator in accordance with section 104; and
- (iv) all other materials deemed necessary by the Commission to fulfill the requirements of this chapter.

(c) Permit issuance.

(i) Procedure.

Upon the filing of any application to site, construct, expand, or operate a carbon dioxide pipeline, the Commission shall, within ____ days—

- (A) set the matter for hearing;
 - (B) give reasonable notice of the hearing to all interested persons, including the State electric regulatory commission and State environmental protection agency of the State or States in which the carbon dioxide pipeline is or will be located and, if not the same, the Governor-appointed State agency described in section 202(a) of this chapter;
 - (C) decide the matter in accordance with this subsection; and
 - (D) issue or deny the appropriate permit accordingly.
- (ii) The Commission must consider, in determining whether to approve or deny an application, with respect to the environmental impacts of the siting of a carbon dioxide pipeline, the nature of the area or areas where the carbon dioxide pipeline is to be sited, including:
- (A) the proximity of critical habitats designated under the Endangered Species Act;
 - (B) the proximity of drinking water aquifers or supplies;
 - (C) the proximity to identified State or Federal natural areas; and
 - (D) the nature of the community, including its racial, ethnic and socioeconomic makeup.
- (iii) In order to issue a permit to site, construct, expand, or operate a carbon dioxide pipeline, after public notice and hearing as described in subsection (c)(i) of this section, the Commission must find as follows:
- (A) that the operation of the carbon dioxide pipeline will comply with the standards set out in section 401;

- (B) in the case of siting or construction, that the carbon dioxide pipeline site is consistent with the public interest in light of the considerations set out in subsection (c)(ii);
 - (C) in the case of siting or construction, that a good faith effort has been made to obtain the consent of a majority of the owners having property interests affected by the capture facility and that the owner or operator intends to acquire any remaining interest by eminent domain or as otherwise allowed by this chapter; and
 - (D) that the operation of the proposed carbon dioxide pipeline is in the public interest.
- (iv) Except as provided in this section, the Commission may approve an application described in subsection (b) of this section, in whole or part, with such modifications and upon such terms and conditions as the Commission finds necessary or appropriate.
- (v) Certificate of Operation.

Prior to commencing construction of a carbon dioxide pipeline, the owner or operator of the carbon dioxide pipeline shall record with the Commission a certificate, entitled "Certificate of Operation of Carbon Dioxide Pipeline," which shall contain a statement that the owner or operator has acquired by eminent domain or otherwise all necessary ownership rights with respect to the carbon dioxide pipeline, and the date upon which the carbon dioxide pipeline shall be effective.

303 Permits for Storage Facilities

- (a) Permit requirements.

The Administrator shall promulgate within 18 months after the date of enactment of this chapter regulations requiring each person owning or operating an existing storage facility for the geologic sequestration of carbon dioxide or planning to site, construct, expand, or operate a new storage facility for the geologic sequestration of carbon dioxide to have a permit issued pursuant to this section.

(b) Permit application requirements.

Each application for a permit under this section shall contain such information as may be required under regulations promulgated by the Administrator, including but not limited to information respecting—

- (i) estimates of the quantity of carbon dioxide proposed to be sequestered;
- (ii) estimates of the quantity of carbon dioxide which can safely be sequestered in the reservoir;
- (iii) the site at which the storage facility will be located;
- (iv) the horizontal and vertical boundaries of the storage facility;
- (v) the means proposed for transporting the carbon dioxide to the storage facility; and
- (vi) risk characterization and risk management of any risks identified by the Administrator in accordance with section 104.

(c) Permit issuance.

(i) Procedure.

Upon the filing of any application to site, construct, expand, or operate a storage facility, the Administrator shall, within ____ days—

- (A) set the matter for hearing;
 - (B) give reasonable notice of the hearing to all interested persons, including the State environmental protection agency of the State in which the storage facility is located and, if not the same, the Governor-appointed State agency described in section 202(a) of this chapter;
 - (C) decide the matter in accordance with this subsection; and
 - (D) issue or deny the appropriate permit accordingly.
- (ii) The Administrator must consider, in determining whether to approve or deny an application, with respect to the environmental impacts of the siting or expansion of a storage facility, the nature of the area where the storage facility is to be sited, including:
- (A) the proximity of critical habitats designated under the Endangered Species Act;

- (B) the proximity of drinking water aquifers or supplies;
 - (C) the proximity to identified State or Federal natural areas; and
 - (D) the nature of the community, including its racial, ethnic and socioeconomic makeup.
- (iii) In order to issue a permit to establish a storage facility, after public notice and hearing as described in subsection (c)(i) of this section, the Administrator must find as follows:
- (A) that the operation of the storage facility will comply with the standards set out in section 402; and the definition of “geologic sequestration” in 102(1);
 - (B) that the storage facility and reservoir are suitable and feasible for the injection and storage of carbon dioxide;
 - (C) that the storage facility site is consistent with the public interest in light of the considerations set out in subsection (c)(ii);
 - (D) that a good faith effort has been made to obtain the consent of a majority of the owners having property interests affected by the storage facility and that the owner or operator intends to acquire any remaining interest by eminent domain or as otherwise allowed by this chapter;
 - (E) that the use of the storage facility for the geologic sequestration of carbon dioxide will not materially impair or contaminate other formations containing fresh water or oil, gas, coal, or other commercial mineral deposits; and
 - (F) that the operation of the proposed storage facility will not unduly endanger human health and the environment and is in the public interest.
- (iv) Except as provided in this section, the Administrator may approve an application described in subsection (a) of this section, in whole or part, with such modifications and upon such terms and conditions as the Administrator finds necessary or appropriate.
- (v) Certificate of Operation.

Prior to commencing injection of carbon dioxide, the owner or operator of the storage facility shall record with the Agency a certificate, entitled "Certificate of Operation of Carbon Dioxide

Sequestration Facility," which shall contain a statement that the owner or operator has acquired by eminent domain or otherwise all necessary ownership rights with respect to the storage facility, and the date upon which the storage facility shall be effective.

304 Permits for Third-Party Injectors

(a) Permit requirements.

The Administrator shall promulgate within 18 months after the date of enactment of this chapter regulations requiring each person planning to geologically sequester carbon dioxide at a storage facility owned by another person to have a permit issued pursuant to this section.

(b) Permit application requirements.

Each application for a permit under this section shall contain such information as may be required under regulations promulgated by the Administrator, including but not limited to information respecting—

- (i) estimates of the quantity of carbon dioxide proposed to be sequestered;
- (ii) the means proposed for transporting the carbon dioxide to the storage facility; and
- (iii) risk characterization and risk management of any risks identified by the Administrator in accordance with section 104.

(c) Permit issuance.

In order to issue a permit to a third-party injector to geologically sequester carbon dioxide at a storage facility, the Administrator must find that the sequestration by the third-party injector at the proposed storage facility will not unduly endanger human health and the environment and is in the public interest.

Subchapter IV. Standards

401 Capture Facility and Carbon Dioxide Pipeline Standards

Not later than 18 months after the date of enactment of this chapter, and after opportunity for public hearings and consultation with the Secretary, the Administrator and other appropriate Federal agencies, the Commission shall propose regulations establishing such performance standards, applicable to owners and operators of capture facilities and carbon dioxide pipelines, as may be consistent with the public interest. In establishing such standards, the Commissioner shall, where appropriate, distinguish in such standards between requirements appropriate for new facilities and for facilities in existence on the date of promulgation of such regulations. Such standards shall include, but need not be limited to, requirements respecting—

- (a) operating methods, techniques, and practices for the capture, compression and on-site storage at the capture facility of carbon dioxide;
- (b) satisfactory reporting, monitoring, and inspection practices to ensure compliance with laws and regulations applicable to capture facilities and carbon dioxide pipelines; and
- (c) compliance with the requirements of section 301 or 302, as applicable, respecting permits for capture facilities and carbon dioxide pipelines, respectively.

402 Geologic Sequestration and Storage Facility Standards

Not later than 18 months after the date of enactment of this chapter, and after opportunity for public hearings and consultation with the Secretary and other appropriate Federal agencies, the Administrator shall promulgate regulations establishing such performance standards, applicable to storage facility owners and operators, as may be necessary to protect human health and the environment. In establishing such standards, the Administrator shall, where appropriate, distinguish in such standards between requirements appropriate for new facilities and for facilities in existence on the date of promulgation of such regulations. Such standards shall include, but need not be limited to, requirements respecting—

- (a) the purity and quality of carbon dioxide necessary so as not to compromise the safety and efficiency of the reservoir to effectively contain the carbon dioxide for long-term geologic sequestration;
- (b) the appropriate selection of reservoirs and the design, construction, operation, maintenance and monitoring of storage facilities;

- (c) maintaining records of the location, amount and performance of carbon dioxide which is geologically sequestered, including amounts sequestered by third-party injectors in existing storage facilities;
- (d) satisfactory reporting, monitoring, and inspection practices to ensure compliance with laws and regulations applicable to storage facilities;
- (e) procedures for closure and decommissioning of storage facilities and post-closure monitoring;
- (f) contingency plans for effective action to minimize unanticipated damage from pollution, invasion, and escape or migration of carbon dioxide from a storage facility;
- (g) such additional qualifications as to ownership, continuity of operation, and training for personnel as may be necessary or desirable; and
- (h) compliance with the requirements of section 303 of this title respecting permits for geologic sequestration of carbon dioxide.

Subchapter V. Liability of Owners and Operators of Capture Facilities, Carbon Dioxide Pipelines and Storage Facilities

501 Liability of Owners and Operators for Specified Harms

The liability of owners and operators of capture facilities, carbon dioxide pipelines and storage facilities for release of carbon dioxide or accidents causing harm to human health or the environment that are associated with geologic sequestration of carbon dioxide shall be limited to compensation from a government-administered fund set out below.

502 Source of Compensation Fund

- (a) Fee amount.

The Administrator is authorized to collect a fee from all persons with whom an indemnification agreement is executed under this section. This fee shall be a fixed amount, as determined by the Administrator, per year per ton of carbon dioxide injected for storage facilities licensed under section 303 of this chapter. Such fees will be used to establish and fund the Compensation Fund.

- (b) Fee reduction.

The Administrator is authorized to reduce the fee set forth above. The Administrator shall establish criteria in writing for determination of the fee for storage facilities licensed under section 303 of this chapter, taking into consideration such factors as—

- (i) the type, size, and location of the storage facility involved, and other factors pertaining to the hazard, and
 - (ii) the nature and purpose of the storage facility.
- (c) Use of funds.

The Compensation Fund shall only be used as compensation for injuries that may arise from the release of carbon dioxide from storage facilities.

503 Administrative Hearings

The assessment of any claim arising under this chapter will be governed by the Consolidated Rules of Practice as set out in 40 C.F.R. Part 22.

504 Compensable Injuries and Compensation Amount

- (a) The Administrator shall establish criteria in writing for determination of—
- (i) the types of injuries that are compensable under the Compensation Fund; and
 - (ii) the amount to be paid for each type of injury identified under subsection (c)(i) of this section.
- (b) An Administrative Law Judge (ALJ) may authorize compensation for injuries if the person requesting such payment has demonstrated to the ALJ that—
- (i) the type of injury is compensable under subsection (a)(i) of this section;
 - (ii) the injury is the result of a carbon dioxide release or accident resulting from the geologic sequestration of carbon dioxide; and
 - (iii) such costs are reasonable and equitable.
- (c) If an injury is not listed in subsection (a)(i) of this section, an ALJ retains the authority to determine
- (i) whether the injury resulted from the geologic sequestration of carbon dioxide; and
 - (ii) the compensation amount to be awarded for that injury.
- (d) Any determination under subsection (c) of this section that compensation should be awarded shall be made within the compensation limits as set out by the Administrator under subsection (a)(ii) of this section.

505 Source of Compensation

- (a) Any injuries deemed compensable under section 504 shall be paid from the Compensation Fund under section 502(a).
- (b) After any incident resulting from the geologic sequestration of carbon dioxide involving damages, the Administrator, as appropriate, shall—
 - (i) make a survey of the causes and extent of damage; and
 - (ii) expeditiously submit a report setting forth the results of such survey to Congress, to the Representatives of the affected districts, to the Senators of the affected States, and (except for information that will cause serious damage to the national defense of the United States) to the public, to the parties involved, and to the courts.
- (c) Plan for distribution of funds when liability exceeds Compensation Fund.
 - (i) Whenever the United States District Court for the District of Columbia determines upon the petition of any interested person that public liability from a single incident resulting from geologic sequestration may exceed the Compensation Fund under section 502(a) of this chapter, the Administrator shall submit to the Congress within 90 days:
 - (A) an estimate of the aggregate dollar value of claims for personal injuries and environmental damage that have arisen or will arise from such incident and that exceed the amount of aggregate funds collected under section 502(a) of this chapter;
 - (B) recommendations for additional sources of funds to pay claims exceeding the applicable amount of aggregate funds collected under section 502(a) of this chapter, which recommendations shall consider a broad range of possible sources of funds (including possible revenue measures on the sector of the economy, or on any other class, to which such revenue measures might be applied);
 - (C) one or more compensation plans that either individually or collectively shall provide for full and prompt compensation for all valid claims and contain a recommendation or recommendations as to the relief to be provided, including any recommendations that funds be allocated or set aside for the payment of claims that may arise as a result of latent injuries that may not be discovered until a later date; and

(D) any additional legislative authorities necessary to implement such compensation plan or plans.

506 Claims Exempt From Compensation Fund Coverage

- (a) No claims will be paid for harms based solely on any carbon dioxide contribution to climate change.
- (b) Claims under this chapter are limited to direct harm of human health or the environment from exposure to carbon dioxide or accident associated with its release from reservoirs at storage facilities. Claims of trespass and nuisance are governed by the law of the State where a storage facility is located.

Subchapter VI. Property Rights

601 Effects on State Law

Except as specifically provided herein, nothing in this Act shall be construed as affecting, intending to affect, or in any way interfering with the laws of the respective States, including common law relating to private property rights, including, but not limited to, those private property rights related to ownership of the surface estate, subsurface reservoir, and mineral estate, as well as any State law or common law pertaining to subsurface water rights.

602 Ownership Requirements and Eminent Domain Authority

- (a) No permit shall be issued for a storage facility unless the owner or operator holds the necessary property rights for construction and operation of the storage facility.
- (b) When any owner or operator of a storage facility that has been licensed in accordance with this chapter cannot acquire by contract, or is unable to agree with the owner of property as to the compensation to be paid, all surface and subsurface property rights and interests necessary for construction and operation of the storage facility, including, but not limited to, all necessary rights-of-way to construct, operate and maintain all pipelines, compressor stations, pressure apparatus, or other stations or necessary equipment or facilities, the owner or operator may acquire the same by the exercise of the right of eminent domain in the district court of the United States for the district in which such property may be located, or in the State courts. The practice and procedure in any action or proceeding for that purpose in the district court of the United States shall conform as nearly as may be with the practice and procedure in similar action or proceeding in the courts of the State where the property is situated.
- (c) Owners of property subject to eminent domain authority shall be compensated at fair market value. The Administrator may promulgate regulations establishing the method for determination of fair market value.
- (d) The right of eminent domain granted in this section shall not prejudice the rights of the owners of said land or other rights or interests therein as to all other uses not acquired for the storage facility.

Subchapter VII. Trust Fund, Liability Release and Transfer of Ownership

701 Establishment of Trust Fund

There is hereby established a Carbon Dioxide Storage Facility Trust Fund to be administered by the Administrator. There is hereby levied on the owner or operator of a storage facility a fee equal to ____ for each ton of carbon dioxide

injected for geologic sequestration for the purposes of funding the Carbon Dioxide Storage Facility Trust Fund. The Trust Fund shall be utilized solely for the long-term monitoring and maintenance of the site and storage facility, including but not limited to maintenance and monitoring of remaining surface facilities and wells, remediation of mechanical problems associated with remaining wells and surface infrastructure, repairing mechanical leaks at the site, and plugging and abandoning remaining wells under the jurisdiction of the Administrator for use as observation wells. The Trust Fund shall be administered by the Administrator.

702 Transfer of Ownership

Ten years after cessation of injection operations, or such other time frame as the Administrator establishes by regulation, the Administrator shall issue a Certificate of Completion of Injection Operations, upon a showing by the owner or operator of the storage facility that the reservoir is reasonably expected to retain mechanical integrity and remain emplaced, at which time ownership to the remaining storage facility, including the geologically sequestered carbon dioxide, transfers to the United States.

703 Liability Release

Upon issuance of the Certificate of Completion of Injection Operations, the owner or operator of a storage facility and the owner or operator of any capture facility which captured, transported and geologically sequestered carbon dioxide at such storage facility shall be released from all further liability relating to permitted geologic sequestration of carbon dioxide associated with such storage facility. This subsection shall have no impact on the Compensation Fund and associated regulations, which Fund will remain in effect at all times regardless of ownership of the reservoir and geologically sequestered carbon dioxide.

Subchapter VIII. Tribal Lands and Geologic Sequestration

801 Tribal Ownership

- (a)** Indian tribes have sovereign ownership over reservoirs on Indian tribal lands into which carbon dioxide has been geologically sequestered.
- (b)** Indian tribes retain ownership rights over geologically sequestered carbon dioxide that has migrated to non-Indian tribal lands.
- (c)** If carbon dioxide which has been geologically sequestered by an Indian tribe migrates off of Indian tribal lands, the owners of the trespassed land are entitled to receipt of a portion of the proceeds under a unitization theory.

Subchapter IX. Offshore Sequestration

901 Definitions

When used in this section of this chapter

- (a) The term "affected State" means, with respect to any program, plan, lease sale, or other activity, proposed, conducted, or approved pursuant to the provisions of this chapter, any State—
 - (i) which is, or is proposed to be, directly connected by transportation facilities to any leased area covered by this section of this chapter;
 - (ii) which is designated by the Secretary as a State in which there is a substantial probability of significant impact on or damage to the coastal, marine, or human environment, or a State in which there will be significant changes in the social, governmental, or economic infrastructure, resulting from the sequestration of carbon dioxide anywhere on the Outer Continental Shelf; or
 - (iii) in which the Secretary finds that because of such activity there is, or will be, a significant risk of serious damage, due to factors such as prevailing winds and currents, to the marine or coastal environment in the event of any release of carbon dioxide from vessels, pipelines, or other transshipment facilities.
- (b) The term "Agency" means the Minerals Management Service.
- (c) The term "disposal" means the sequestration of carbon in sub-seabed geological formations.
- (d) The term "lease" means any form of authorization which is issued under section 902 of this chapter and which authorizes the sub-seabed geologic sequestration of carbon dioxide.
- (e) The term "marine environment" means the physical, atmospheric, and biological components, conditions, and factors which interactively determine the productivity, state, condition, and quality of the marine ecosystem, including the waters of the high seas, the contiguous zone, transitional and intertidal areas, salt marshes, and wetlands within the coastal zone and on the outer Continental Shelf.
- (f) The term "outer Continental Shelf" means all submerged lands lying seaward and outside of the area of lands beneath navigable waters as defined in section 2 of the Submerged Lands Act (Public Law 31, Eighty-third Congress, first session), and of which the subsoil and seabed appertain to the United States and are subject to its jurisdiction and control.

- (g) The term "Secretary" means the Secretary of the Interior, except that with respect to functions under this Act transferred to, or vested in, the Secretary of Energy or the Federal Energy Regulatory Commission by or pursuant to the Department of Energy Organization Act (42 U.S.C. § 7101 *et seq.*), the term "Secretary" means the Secretary of Energy, or the Federal Energy Regulatory Commission, as the case may be.
- (h) The term "sub-seabed geologic sequestration" means underground storage in a sub-seabed geological reservoir, located in the outer Continental Shelf, for at least 1,000 years of at least 90% of the carbon dioxide emitted from a capture facility, with a storage failure rate of no more than 1%.

902 Coordination of Leasing and Permitting Activities

- (a) In general.

Not later than 180 days after the date of enactment of this section, the Secretary of the Interior and the Administrator of the Environmental Protection Agency shall enter into and submit to Congress a memorandum of understanding in accordance with this section, the outer Continental Shelf Lands Act, and other applicable laws, regarding coordination of leasing and permitting for sub-seabed geologic sequestration of carbon dioxide in the outer Continental Shelf.

- (b) Administration of leasing and permitting activities.

The Secretary shall administer the provisions of this chapter relating to the leasing of the outer Continental Shelf, and shall prescribe such rules and regulations as may be necessary to carry out such provisions. The Secretary may at any time prescribe and amend such rules and regulations as he determines to be necessary and proper in order to provide for the protection of the marine environment and the protection of the natural resources of the outer Continental Shelf, and, notwithstanding any other provisions herein, such rules and regulations shall, as of their effective date, apply to all operations conducted under a lease issued or maintained under the provisions of this chapter. In the enforcement of safety, environmental, and conservation laws and regulations, the Secretary shall cooperate with the relevant departments and agencies of the Federal Government and of the affected States.

- (c) Lease and permit applications.

The regulations prescribed by the Secretary under this subsection shall include, but not be limited to, provisions to—

- (i) establish an administrative procedure for processing lease applications for sub-seabed geologic sequestration of carbon dioxide, including lines of authority, steps in permit application

processing, criteria for assessing permit applications, and time limits for permit application procession;

- (ii) establish a 5-year program for leasing of lands in the outer Continental Shelf for sequestration, and a process for updating that program every 5 years; and
 - (iii) establish a program for evaluating the long-term effects of sub-seabed geologic sequestration of carbon dioxide on the marine environment.
- (d) Data retrieval system.

The memorandum of understanding shall establish a joint data retrieval system that is capable of tracking lease and permit applications and providing to the applicants information as to their status within the Department of the Interior and Environmental Protection Agency, including an estimate of the time required for administrative action.

903 Ownership of Sub-Seabed Geological Formation

It is hereby declared to be the policy of the United States that—

- (a) the subsoil and seabed of the outer Continental Shelf appertain to the United States and are subject to its jurisdiction, control, and power of disposition as provided in this chapter; and
- (b) this chapter shall be construed in such a manner that the character of the waters above the outer Continental Shelf as high seas and the right to navigation and fishing therein shall not be affected.

904 Method of Disposal

The regulations prescribed by the Secretary under this subsection shall be limited to the sequestration of carbon dioxide through permitted injection wells into the sub-seabed geological formations or the outer Continental Shelf.

Subchapter X. Interaction With Other Federal and State Laws

1001 Interaction with the Clean Air Act

- (a) Nothing in this chapter shall be construed to preempt or otherwise affect the authority of the Administrator to promulgate any regulations under the Clean Air Act, except to the extent described in this section.
- (b) Facilities and equipment involved solely in transportation or sequestration of carbon dioxide (as defined in this chapter) are not subject to regulations promulgated under the Clean Air Act. Equipment used at a capture facility to prepare carbon dioxide for transportation will be considered transportation equipment for purposes of this paragraph.
- (c) Nothing in this chapter or the Clean Air Act shall be construed to authorize any State, interstate, or local authority to require of a capture facility any emission standards more stringent than the applicable Federal requirements, unless such standards are part of a Federally approved State Implementation Plan.
- (d) Permitting agencies must give the highest priority to applications for capture facilities in order to expedite the application process.
- (e) New capture facilities created by modifying existing power generating facilities will not be considered modifications under the New Source Review program (42 U.S.C. §§ 7475, 7503) if the following conditions are met:
 - (i) the power generating facility already complies with the Best Available Control Technology (42 U.S.C. § 7475), or agrees to implement it within 5 years;
 - (ii) the creation of the capture facility results in no net emissions increase of any regulated Clean Air Act pollutants; and
 - (iii) the capture facility modifications are limited to changes necessary to implement the capture and geologic sequestration of carbon dioxide.

1002 Interaction with the Clean Water Act, Safe Drinking Water Act, Resource Conservation and Recovery Act, and Comprehensive Environmental Response Compensation and Liability Act

- (a) Nothing in this chapter shall be construed to preempt or otherwise affect the authority of the Administrator to promulgate any regulations under the Clean Water Act, Safe Drinking Water Act, Resource Conservation and Recovery Act, or the Comprehensive Environmental Response

Compensation and Liability Act except to the extent described in this section.

- (b) Carbon dioxide is not considered a pollutant or waste under the Clean Water Act, Safe Drinking Water Act, Resource Conservation and Recovery Act, or Comprehensive Environmental Response Compensation and Liability Act for purposes of geologic sequestration of carbon dioxide.
- (c) Clean Water Act § 404 permitting requirements shall not be preempted by this chapter.
- (d) Except as provided in subsection (b), the Clean Water Act, Safe Drinking Water Act, Resource Conservation and Recovery Act, and Comprehensive Environmental Response Compensation and Liability Act will apply to the regular operations of capture facilities and storage facilities. As used in this section, the term "regular operations" means construction and operation of any power generation, operation and other activities of capture facilities and storage facilities outside of those involved in the capture, storage and geologic sequestration of carbon dioxide.
- (e) Nothing in this chapter shall be construed to limit the Administrator's authority under the Clean Water Act, Safe Drinking Water Act, Resource Conservation and Recovery Act, or Comprehensive Environmental Response Compensation and Liability Act with regard to the regular operations of capture facilities and storage facilities. Penalties and other enforcement mechanisms provided for in the Clean Water Act, Safe Drinking Water Act, Resource Conservation and Recovery Act, or Comprehensive Environmental Response Compensation and Liability Act may be imposed or implemented with regard to the operations of capture facilities and storage facilities outside of direct CCS transportation and injection.

1003 Interaction with State Environmental Laws

- (a) Except as otherwise provided in this section, a State or political subdivision of a State may not establish, continue in effect, or enforce a law or regulation establishing standards with regard to the capture, transport (designed to connect to a storage facility), injection, or geologic sequestration of carbon dioxide or imposing a requirement for equipment associated with a capture facility or storage facility if such law, regulation, standard or requirement is inconsistent with the provisions or purposes of this chapter.
- (b) The authority of each State to enforce environmental protection legislation within its jurisdiction not inconsistent with the Administrator's and Commission's permitting of capture, transport, injection, or geologic sequestration of carbon dioxide and/or not related to the climate change

issues associated with the capture, transport, injection, or geologic sequestration of carbon dioxide shall not be superseded, abrogated or otherwise impaired by this chapter.

- (c) Compliance with this chapter or standards, regulations, or orders prescribed under this chapter does not relieve a person from liability at common law or under State law.

1004 Integration with Federal Agency Consultation Laws

- (a) In making a decision under this chapter, the Administrator or the Commission, as applicable, shall comply with applicable requirements of Federal law, including any requirements of—
 - (i) the National Environmental Protection Act of 1969 (42 U.S.C. § 4321 *et seq.*);
 - (ii) the Endangered Species Act of 1973 (16 U.S.C. § 1531 *et seq.*);
 - (iii) the Marine Mammal Protection Act of 1972 (16 U.S.C. § 1361 *et seq.*); and
 - (iv) the National Historic Preservation Act of 1966 (16 U.S.C. § 470 *et seq.*).

Such integration shall be effected only to the extent that it can be done in a manner consistent with the goals and policies expressed in this chapter and in the other acts referred to in this section.

- (b) Not later than 18 months after the date of enactment of this section, the Administrator shall issue any regulations necessary to implement this section. The regulations should describe any categorical exclusions or exemptions under the acts referred to in this section.
- (c) Except as provided in subsection (b) of this section, this chapter shall not be construed as superseding or limiting the authorities and responsibilities, under any other provision of law, of the Administrator or any other Federal officer, department, or agency.

1005 Construction with Other Federal Laws

- (a) The Secretary (as defined in section 901(g)) shall consult with the Governor of any Affected State when reviewing any license or permit for sequestration of carbon dioxide in a sub-seabed geological formation of the outer Continental Shelf which may affect any land use or water use in the coastal zone of a State with a coastal zone management program approved pursuant to section 306 of the Coastal Zone Management Act of 1972 (16 U.S.C. § 1455). Notwithstanding the foregoing, the Secretary

shall have exclusive authority to approve any license or permit for geologic sequestration of carbon dioxide in a sub-seabed geological formation of the outer Continental Shelf. This chapter supersedes consistency review requirements under the Coastal Zone Management Act of 1972 (16 U.S.C. § 1451 *et seq.*).

- (b) Except as specifically provided in this chapter, or where they prevent or interfere with the uniform permitting and regulatory system set up in this legislation, nothing in this chapter affects the rights of States under:
 - (i) the Coastal Zone Management Act of 1972 or
 - (ii) the Clean Water Act.

Subchapter XI. Enforcement

1101 Citizen Suits

(a) Authorization; jurisdiction.

Except as provided in subsection (b) of this section, any citizen may commence a civil action on his own behalf—

- (i) against any person (including (1) the United States, and (2) 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 chapter;
- (ii) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this chapter which is not discretionary with the Administrator; or
- (iii) against the Commission where there is alleged a failure of the Commission to perform any act or duty under this chapter which is not discretionary with the Commission.

Any action under paragraph (i) of this subsection shall be brought in the district court for the district in which the alleged violation occurred. Any action brought under paragraph (ii) or (iii) of this subsection may be brought in the district court for the district in which the alleged violation occurred or in the District Court of the District of Columbia. The district courts 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 (i), to order such person to take such other action as may be necessary, or both, to order the Administrator to perform the act or duty referred to in paragraph (ii), or to order the Commission to perform the act or duty referred to in paragraph (iii), as the case may be, and to apply any appropriate civil penalties under section 1102 of this chapter.

(b) Notice.

No action may be commenced—

- (i) under subsection (a)(i) of this section—
 - (A) prior to 60 days after the plaintiff has given notice of the alleged violation (i) to the Administrator or the

Commission, as applicable, and (ii) to any alleged violator of the standard, limitation, or order, except that such action may be brought immediately after such notification in the case of an action under this section respecting a violation of section 1103 of this chapter;

- (B) with respect to the siting of a storage or capture facility, nor to restrain or enjoin the issuance of a permit for such facility; or
 - (C) if the Administrator or Commission has commenced and is diligently prosecuting a civil or criminal action in a court of the United States, but in any such action in a court of the United States any citizen may intervene as a matter of right; or
- (ii) under subsection (a)(ii) of this section, prior to 90 days after the plaintiff has given notice of such action to the Administrator, except that such action may be brought immediately after such notification in the case of an action under this section respecting a violation of section 1103 of this chapter. Notice under this subsection shall be given in such manner as the Administrator shall prescribe by regulation.
 - (iii) under subsection (a)(ii) of this section, prior to 90 days after the plaintiff has given notice of such action to the Commission, except that such action may be brought immediately after such notification in the case of an action under this section respecting a violation of section 1103 of this chapter. Notice under this paragraph shall be given in such manner as the Commission shall prescribe by regulation.
- (c) Intervention by Administrator or Commission; United States interests protected.
 - (i) In any action under this section, the Administrator or the Commission, as applicable, if not a party, may intervene as a matter of right.
 - (ii) Protection of interests of United States.

Whenever any action is brought under this section in a court of the United States, the plaintiff shall serve a copy of the complaint on the Attorney General and the Administrator or the Commission, as applicable. No consent judgment shall be entered in an action in which the United States is not a party prior to 45 days following the receipt of a copy of the proposed consent judgment by the

Attorney General and the Administrator or the Commission, as applicable.

(iii) Litigation 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 any prevailing or substantially prevailing party, whenever the court determines such 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.

(iv) Statutory or common law rights not restricted.

Nothing in this section shall restrict any right which any person (or class of persons) may have under any statute or common law to seek enforcement of any standard or limitation or to seek any other relief (including relief against the Administrator, the Commission or a State agency).

(v) Standard or limitation.

For purposes of this section, the term "standard or limitation under this chapter" means (1) a standard of performance under subchapter IV of this chapter; (2) a permit or condition thereof issued under subchapter III of this chapter, which is in effect under this chapter; or (3) a regulation under section 203, 204, or 205 of this chapter.

(vi) "Citizen" defined.

For the purposes of this section, the term "citizen" means a person or persons having an interest which is or may be adversely affected.

(vii) Civil action by State Governors.

A Governor of a State may commence a civil action under subsection (a) of this section, without regard to the limitations of subsection (b) of this section, against the Administrator where there is alleged a failure of the Administrator to enforce a standard or limitation under this chapter, the violation of which is occurring in another State and is causing an adverse effect on the public health or welfare in his State.

1102 Federal Enforcement

(a) Compliance orders.

- (i) Whenever on the basis of any information the Administrator or the Commission determines that any person has violated or is in violation of any requirement of this chapter, the Administrator or the Commission may issue an order assessing a civil penalty for any past or current violation, requiring compliance immediately or within a specified time period, or both, or the Administrator or the Commission may commence a civil action in the United States district court in the district in which the violation occurred for appropriate relief, including a temporary or permanent injunction.
- (ii) Any order issued pursuant to this subsection may include a suspension or revocation of any permit issued by the Administrator or the Commissioner under this chapter and shall state with reasonable specificity the nature of the violation. Any penalty assessed in the order shall not exceed \$25,000 per day of noncompliance for each violation of a requirement of this chapter. In assessing such a penalty, the Administrator or Commission shall take into account the seriousness of the violation and any good faith efforts to comply with applicable requirements.

(b) Public hearing.

Any order issued under this section shall become final unless, no later than 30 days after the order is served, the person or persons named therein request a public hearing. Upon such request, the Administrator or the Commission, as applicable, shall promptly conduct a public hearing. In connection with any proceeding under this section, the Administrator or the Commission, as applicable, may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and may promulgate rules for discovery procedures.

(c) Violation of compliance orders.

If a violator fails to take corrective action within the time specified in a compliance order, the Administrator or the Commission, as applicable, may assess a civil penalty of not more than \$25,000 for each day of continued noncompliance with the order and the Administrator or the Commission may suspend or revoke any permit issued to the violator.

(d) Criminal penalties.

Any person who—

- (i) knowingly transports or causes to be transported carbon dioxide for geologic sequestration to a storage facility which does not have a permit under this chapter;
- (ii) knowingly captures, transports or geologically sequesters carbon dioxide—
 - (A) without a permit under this chapter, or
 - (B) in knowing violation of any material condition or requirement of such permit;
- (iii) knowingly captures, transports or geologically sequesters carbon dioxide and who knowingly destroys, alters, conceals, or fails to file any record, application, report, or other document required to be maintained or filed for purposes of compliance with regulations promulgated by the Administrator or the Commission under this chapter, or
- (iv) knowingly omits material information or makes any false material statement or representation in any application, record, report, permit, or other document filed, maintained, or used for purposes of compliance with regulations promulgated by the Administrator or the Commission under this chapter;

shall, upon conviction, be subject to a fine of not more than \$50,000 for each day of violation, or imprisonment not to exceed two years (five years in the case of a violation of paragraph (i), (ii) or (iii) of this subsection), or both. If the conviction is for a violation committed after a first conviction of such person under this subsection, the maximum punishment under the respective paragraph shall be doubled with respect to both fine and imprisonment.

(e) Knowing endangerment.

Any person who knowingly captures, transports or geologically sequesters in violation of subsection (d) of this section who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment for not more than fifteen years, or both. A defendant that is an organization shall, upon conviction of violating this subsection, be subject to a fine of not more than \$1,000,000.

(f) Special rules.

For the purposes of subsection (e) of this section—

- (i) A person's state of mind is knowing with respect to—
 - (A) his conduct, if he is aware of the nature of his conduct;
 - (B) an existing circumstance, if he is aware or believes that the circumstance exists; or
 - (C) a result of his conduct, if he is aware or believes that his conduct is substantially certain to cause danger of death or serious bodily injury.
- (ii) In determining whether a defendant who is a natural person knew that his conduct placed another person in imminent danger of death or serious bodily injury—
 - (A) the person is responsible only for actual awareness or actual belief that he possessed; and
 - (B) knowledge possessed by a person other than the defendant but not by the defendant himself may not be attributed to the defendant;

provided, that in proving the defendant's possession of actual knowledge, circumstantial evidence may be used, including evidence that the defendant took affirmative steps to shield himself from relevant information.

- (iii) It is an affirmative defense to a prosecution that the conduct charged was consented to by the person endangered and that the danger and conduct charged were reasonably foreseeable hazards of an occupation, a business, or a profession. The defendant may establish an affirmative defense under this subsection by a preponderance of the evidence.
- (iv) All general defenses, affirmative defenses, and bars to prosecution that may apply with respect to other Federal criminal offenses may apply under subsection (e) of this section and shall be determined by the courts of the United States according to the principles of common law as they may be interpreted in the light of reason and experience. Concepts of justification and excuse applicable under this section may be developed in the light of reason and experience.

- (v) The term "organization" means a legal entity, other than a government, established, or organized for any purpose, and such term includes a corporation, company, association, firm, partnership, joint stock company, foundation, institution, trust, society, union, or any other association of persons.
- (vi) The term "serious bodily injury" means—
 - (A) bodily injury which involves a substantial risk of death;
 - (B) unconsciousness;
 - (C) extreme physical pain;
 - (D) protracted and obvious disfigurement; or
 - (E) protracted loss or impairment of the function of a bodily member, organ, or mental faculty.
- (g) Civil penalty.

Any person who violates any requirement of this section shall be liable to the United States for a civil penalty in an amount not to exceed \$25,000 for each such violation. Each day of such violation shall, for purposes of this subsection, constitute a separate violation.

Subchapter XII. Miscellaneous Provisions

1201 Petition for Regulations; Public Participation

(a) Petition.

Any person may petition the appropriate Federal agency for the promulgation, amendment, or repeal of any regulation for which it has responsibility under this chapter. Within a reasonable time following receipt of such petition, such Federal agency shall take action with respect to such petition and shall publish notice of such action in the Federal Register, together with the reasons therefor.

(b) Public participation.

(i) Public participation in the development, revision, implementation, and enforcement of any regulation, guideline, information, or program for which a Federal agency is responsible under this chapter shall be provided for, encouraged, and assisted by such Federal agency. Each such Federal agency shall develop and publish minimum guidelines for public participation in such processes.

(ii) Before the issuing of a permit to any person in accordance with subchapter III of this chapter, the Administrator or the Commission, as applicable, will provide notice to the public in accordance with the procedures set forth in such subchapter. If within 45 days the Administrator or the Commission, as applicable, receives written notice of opposition to its intention to issue such permit and a request for a hearing, or if the Administrator or the Commission determines on his own initiative, he shall hold an informal public hearing (including an opportunity for presentation of written and oral views) on whether he should issue a permit for the proposed facility. Whenever possible, the Administrator or the Commission shall schedule such hearing at a location convenient to the nearest population center to such proposed facility and give notice in the aforementioned manner of the date, time, and subject matter of such hearing.

1202 Separability

If any provision of this chapter, or the application of any provision of this chapter to any person or circumstance, is held invalid, the application of such provision to other persons or circumstances, and the remainder of this chapter, shall not be affected thereby.

1203 Review of Federal Agency Action

- (a) Venue; procedures.
- (i) Review of any action taken by a Federal agency pursuant to its responsibilities under this chapter that is reviewable under subsection (b)(1) of this section may be had by any interested person only in the United States Court of Appeals for the District of Columbia.
 - (ii) Review of any action taken by a Federal agency pursuant to its responsibilities under this chapter that is reviewable under subsection (b)(ii) of this section may be had by any interested person in the Circuit Court of Appeals of the United States for the Federal judicial district in which such person resides or transacts business which is directly affected by such action upon application by such person.
 - (iii) Any such application under paragraph (i) or (ii) of this subsection shall be made within 60 days from the date notice of such Federal agency action appears in the Federal Register, or after such date only if such application is based solely on grounds which arose after such 60th day. The filing of a petition for reconsideration by the Administrator of any otherwise final rule or action shall not affect the finality of such rule or action for purposes of judicial review nor extend the time within which a petition for judicial review of such rule or action under this section may be filed, and shall not postpone the effectiveness of such rule or action.
- (b) Reviewable actions.
- (i) The following actions taken by a Federal agency pursuant to its responsibilities under this chapter are subject to judicial review under this section pursuant to subsection (a)(i):
 - (A) promulgating any regulation under subchapter II of this chapter;
 - (B) promulgating any standard or regulation under subchapter IV of this chapter; or
 - (ii) The following actions taken by a Federal agency pursuant to its responsibilities under this chapter are subject to judicial review under this section pursuant to subsection (a)(ii):
 - (A) issuing or denying any permit under subchapter III of this chapter;

(B) issuing any order or penalty under section 1102 or 1103.

(c) Action of a Federal agency with respect to which review could have been obtained under subsection (iii) of this section shall not be subject to judicial review in any civil or criminal proceeding for enforcement.

(d) Award of fees.

In any judicial proceeding under this subsection, the court may award costs of litigation (including reasonable attorney and expert witness fees) to any prevailing or substantially prevailing party whenever it determines that such award is appropriate.

(e) Additional evidence.

In any judicial proceeding brought under subsection (a) of this section in which review is sought of a determination under this chapter required to be made on the record after notice and opportunity for hearing, if any party applies to the court for leave to adduce additional evidence, and shows to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for the failure to adduce such evidence in the administrative proceeding, the court may order such additional evidence (and evidence in rebuttal thereof) to be taken before the applicable Federal agency, in such manner and upon such terms and conditions as the court may deem proper. The applicable Federal agency may modify its findings as to the facts, or make new findings, by reason of the additional evidence so taken, and it shall file such modified or new findings, and its recommendation, if any, for the modification or setting aside of his original determination, with the return of such additional evidence.