ority consideration for the assistance awards provided under this section.

#### (j) Authorization of appropriations

There is authorized to be appropriated out of funds already authorized to carry out this section \$25,000,000 for each of fiscal years 2008 through 2013, to remain available until expended.

(Pub. L. 110–140, title VI, §656, Dec. 19, 2007, 121 Stat. 1703.)

# SUBCHAPTER VI—CARBON CAPTURE AND SEQUESTRATION

PART A—CARBON CAPTURE AND SEQUESTRATION RESEARCH, DEVELOPMENT, AND DEMONSTRATION

#### § 17251. Carbon capture

## (a) Program establishment

#### (1) In general

The Secretary shall carry out a program to demonstrate technologies for the large-scale capture of carbon dioxide from industrial sources. In making awards under this program, the Secretary shall select, as appropriate, a diversity of capture technologies to address the need to capture carbon dioxide from a range of industrial sources.

## (2) Scope of award

Awards under this section shall be only for the portion of the project that—

- (A) carries out the large-scale capture (including purification and compression) of carbon dioxide from industrial sources;
- (B) provides for the transportation and injection of carbon dioxide; and
- (C) incorporates a comprehensive measurement, monitoring, and validation program.

#### (3) Preferences for award

To ensure reduced carbon dioxide emissions, the Secretary shall take necessary actions to provide for the integration of the program under this paragraph with the large-scale carbon dioxide sequestration tests described in section 16293(c)(3) of this title. These actions should not delay implementation of these tests. The Secretary shall give priority consideration to projects with the following characteristics:

## (A) Capacity

Projects that will capture a high percentage of the carbon dioxide in the treated stream and large volumes of carbon dioxide as determined by the Secretary.

## (B) Sequestration

Projects that capture carbon dioxide from industrial sources that are near suitable geological reservoirs and could continue sequestration including—

- (i) a field testing validation activity under section 16293 of this title; or
- (ii) other geologic sequestration projects approved by the Secretary.

## (4) Requirement

For projects that generate carbon dioxide that is to be sequestered, the carbon dioxide

stream shall be of a sufficient purity level to allow for safe transport and sequestration.

#### (5) Cost-sharing

The cost-sharing requirements of section 16352 of this title for research and development projects shall apply to this section.

#### (b) Authorization of appropriations

There is authorized to be appropriated to the Secretary to carry out this section \$200,000,000 per year for fiscal years 2009 through 2013.

(Pub. L. 110–140, title VII, §703, Dec. 19, 2007, 121 Stat. 1708.)

#### SHORT TITLE

Subtitle A (§§ 701–708) of title VII of Pub. L. 110–140, which is classified principally to this part, is known as the "Department of Energy Carbon Capture and Sequestration Research, Development, and Demonstration Act of 2007". See Short Title note set out under section 17001 of this title.

## § 17252. Review of large-scale programs

The Secretary shall enter into an arrangement with the National Academy of Sciences for an independent review and oversight, beginning in 2011, of the programs under section 16293(c)(3) of this title and under section 17251 of this title, to ensure that the benefits of such programs are maximized. Not later than January 1, 2012, the Secretary shall transmit to the Congress a report on the results of such review and oversight.

(Pub. L. 110–140, title VII, §704, Dec. 19, 2007, 121 Stat. 1709.)

#### §17253. Geologic sequestration training and research

## (a) Study

## (1) In general

The Secretary shall enter into an arrangement with the National Academy of Sciences to undertake a study that—

- (A) defines an interdisciplinary program in geology, engineering, hydrology, environmental science, and related disciplines that will support the Nation's capability to capture and sequester carbon dioxide from anthropogenic sources;
- (B) addresses undergraduate and graduate education, especially to help develop graduate level programs of research and instruction that lead to advanced degrees with emphasis on geologic sequestration science;
- (C) develops guidelines for proposals from colleges and universities with substantial capabilities in the required disciplines that seek to implement geologic sequestration science programs that advance the Nation's capacity to address carbon management through geologic sequestration science; and
- (D) outlines a budget and recommendations for how much funding will be necessary to establish and carry out the grant program under subsection (b).

## (2) Report

Not later than 1 year after December 19, 2007, the Secretary shall transmit to the Congress a copy of the results of the study pro-

vided by the National Academy of Sciences under paragraph (1).

#### (3) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this subsection \$1,000,000 for fiscal year 2008.

#### (b) Grant program

#### (1) Establishment

The Secretary shall establish a competitive grant program through which colleges and universities may apply for and receive 4-year grants for—

- (A) salary and startup costs for newly designated faculty positions in an integrated geologic carbon sequestration science program; and
- (B) internships for graduate students in geologic sequestration science.

#### (2) Renewal

Grants under this subsection shall be renewable for up to 2 additional 3-year terms, based on performance criteria, established by the National Academy of Sciences study conducted under subsection (a), that include the number of graduates of such programs.

## (3) Interface with regional geologic carbon sequestration partnerships

To the greatest extent possible, geologic carbon sequestration science programs supported under this subsection shall interface with the research of the Regional Carbon Sequestration Partnerships operated by the Department to provide internships and practical training in carbon capture and geologic sequestration.

#### (4) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this subsection such sums as may be necessary.

(Pub. L. 110–140, title VII, §705, Dec. 19, 2007, 121 Stat. 1709.)

## § 17254. Relation to Safe Drinking Water Act

The injection and geologic sequestration of carbon dioxide pursuant to this subtitle and the amendments made by this subtitle shall be subject to the requirements of the Safe Drinking Water Act (42 U.S.C. 300f et seq.), including the provisions of part C of such Act (42 U.S.C. 300h et seq.; relating to protection of underground sources of drinking water). Nothing in this subtitle and the amendments made by this subtitle imposes or authorizes the promulgation of any requirement that is inconsistent or in conflict with the requirements of the Safe Drinking Water Act (42 U.S.C. 300f et seq.) or regulations thereunder.

(Pub. L. 110–140, title VII, §706, Dec. 19, 2007, 121 Stat. 1710.)

## REFERENCES IN TEXT

This subtitle, referred to in text, is subtitle A (§§701-708) of title VII of Pub. L. 110-140, which enacted this part, amended section 16293 of this title, and enacted provisions set out as a note under section 17001 of this title. For complete classification of subtitle A to the Code, see Short Title note set out under section 17001 of this title and Tables.

The Safe Drinking Water Act, referred to in text, is title XIV of act July 1, 1944, as added Dec. 16, 1974, Pub. L. 93–523, §2(a), 88 Stat. 1660, which is classified generally to subchapter XII (§300f et seq.) of chapter 6A of this title. Part C of the Act is classified generally to part C (§300h et seq.) of subchapter XII of chapter 6A of this title. For complete classification of this Act to the Code, see Short Title note set out under section 201 of this title and Tables.

#### § 17255. Safety research

#### (a) Program

The Administrator of the Environmental Protection Agency shall conduct a research program to address public health, safety, and environmental impacts that may be associated with capture, injection, and sequestration of greenhouse gases in geologic reservoirs.

#### (b) Authorization of appropriations

There are authorized to be appropriated for carrying out this section \$5,000,000 for each fiscal year.

(Pub. L. 110–140, title VII, §707, Dec. 19, 2007, 121 Stat. 1710.)

## § 17256. University based research and development grant program

## (a) Establishment

The Secretary, in consultation with other appropriate agencies, shall establish a university based research and development program to study carbon capture and sequestration using the various types of coal.

### (b) Rural and agricultural institutions

The Secretary shall give special consideration to rural or agricultural based institutions in areas that have regional sources of coal and that offer interdisciplinary programs in the area of environmental science to study carbon capture and sequestration.

## (c) Authorization of appropriations

There are to be authorized to be appropriated \$10,000,000 to carry out this section.

(Pub. L. 110–140, title VII, §708, Dec. 19, 2007, 121 Stat. 1710.)

PART B—CARBON CAPTURE AND SEQUESTRATION ASSESSMENT AND FRAMEWORK

## § 17271. Carbon dioxide sequestration capacity assessment

#### (a) Definitions

In this section—

#### (1) Assessment

The term "assessment" means the national assessment of onshore capacity for carbon dioxide completed under subsection (f).

#### (2) Capacity

The term "capacity" means the portion of a sequestration formation that can retain carbon dioxide in accordance with the requirements (including physical, geological, and economic requirements) established under the methodology developed under subsection (b).

## (3) Engineered hazard

The term "engineered hazard" includes the location and completion history of any well that could affect potential sequestration.