

of former subsec. (c) read as follows: “From amounts authorized under section 16291(b) of this title, the following sums are authorized for activities described in subsection (a)(2):

- “(1) \$25,000,000 for fiscal year 2006;
- “(2) \$30,000,000 for fiscal year 2007; and
- “(3) \$35,000,000 for fiscal year 2008.”

EFFECTIVE DATE OF 2007 AMENDMENT

Amendment by Pub. L. 110-140 effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110-140, set out as an Effective Date note under section 1824 of Title 2, The Congress.

**§ 16294. Research and development for coal mining technologies**

**(a) Establishment**

The Secretary shall carry out a program for research and development on coal mining technologies.

**(b) Cooperation**

In carrying out the program, the Secretary shall cooperate with appropriate Federal agencies, coal producers, trade associations, equipment manufacturers, institutions of higher education with mining engineering departments, and other relevant entities.

**(c) Program**

The research and development activities carried out under this section shall—

- (1) be guided by the mining research and development priorities identified by the Mining Industry of the Future Program and in the recommendations from relevant reports of the National Academy of Sciences on mining technologies;
- (2) include activities exploring minimization of contaminants in mined coal that contribute to environmental concerns including development and demonstration of electromagnetic wave imaging ahead of mining operations;
- (3) develop and demonstrate coal bed electromagnetic wave imaging, spectroscopic reservoir analysis technology, and techniques for horizontal drilling in order to—
  - (A) identify areas of high coal gas content;
  - (B) increase methane recovery efficiency;
  - (C) prevent spoilage of domestic coal reserves; and
  - (D) minimize water disposal associated with methane extraction; and
- (4) expand mining research capabilities at institutions of higher education.

(Pub. L. 109-58, title IX, §964, Aug. 8, 2005, 119 Stat. 892.)

**§ 16295. Oil and gas research programs**

**(a) In general**

The Secretary shall conduct a program of research, development, demonstration, and commercial application of oil and gas, including—

- (1) exploration and production;
- (2) gas hydrates;
- (3) reservoir life and extension;
- (4) transportation and distribution infrastructure;
- (5) ultraclean fuels;
- (6) heavy oil, oil shale, and tar sands; and
- (7) related environmental research.

**(b) Objectives**

The objectives of this program shall include advancing the science and technology available to domestic petroleum producers, particularly independent operators, to minimize the economic dislocation caused by the decline of domestic supplies of oil and natural gas resources.

**(c) Natural gas and oil deposits report**

Not later than 2 years after August 8, 2005, and every 2 years thereafter, the Secretary of the Interior, in consultation with other appropriate Federal agencies, shall submit to Congress a report on the latest estimates of natural gas and oil reserves, reserves growth, and undiscovered resources in Federal and State waters off the coast of Louisiana, Texas, Alabama, and Mississippi.

**(d) Integrated clean power and energy research**

**(1) Establishment of center**

The Secretary shall establish a national center or consortium of excellence in clean energy and power generation, using the resources of the Clean Power and Energy Research Consortium in existence on August 8, 2005, to address the critical dependence of the United States on energy and the need to reduce emissions.

**(2) Focus areas**

The center or consortium shall conduct a program of research, development, demonstration, and commercial application on integrating the following 6 focus areas:

- (A) Efficiency and reliability of gas turbines for power generation.
- (B) Reduction in emissions from power generation.
- (C) Promotion of energy conservation issues.
- (D) Effectively using alternative fuels and renewable energy.
- (E) Development of advanced materials technology for oil and gas exploration and use in harsh environments.
- (F) Education on energy and power generation issues.

(Pub. L. 109-58, title IX, §965, Aug. 8, 2005, 119 Stat. 892.)

**§ 16296. Low-volume oil and gas reservoir research program**

**(a) Definition of GIS**

In this section, the term “GIS” means geographic information systems technology that facilitates the organization and management of data with a geographic component.

**(b) Program**

The Secretary shall establish a program of research, development, demonstration, and commercial application to maximize the productive capacity of marginal wells and reservoirs.

**(c) Data collection**

Under the program, the Secretary shall collect data on—

- (1) the status and location of marginal wells and oil and gas reservoirs;
- (2) the production capacity of marginal wells and oil and gas reservoirs;