

(6) to consider the comparative environmental and public health impacts of the energy to be produced or saved by the specific activities;

(7) to consider the obstacles inherent in private industry's development of new energy technologies and steps necessary for establishing or maintaining technological leadership in the area of energy and energy efficiency resource technologies; and

(8) to consider the contribution of a given activity to fundamental scientific knowledge.

(Pub. L. 102-486, title XX, §2001, Oct. 24, 1992, 106 Stat. 3057.)

PART A—OIL AND GAS SUPPLY ENHANCEMENT

§ 13411. Enhanced oil recovery

(a) Program direction

The Secretary shall conduct a 5-year program, in accordance with sections 13541 and 13542 of this title, on technologies to increase the recoverability of domestic oil resources to—

- (1) improve reservoir characterization;
- (2) improve analysis and field verification;
- (3) field test and demonstrate enhanced oil recovery processes, including advanced processes, in reservoirs the Secretary considers to be of high priority, ranked primarily on the basis of oil recovery potential and risk of abandonment;
- (4) transfer proven recovery technologies to producers and operators of wells, including stripper wells, that would otherwise be likely to be abandoned in the near term due to declining production;
- (5) improve enhanced oil recovery process technology for more economic and efficient oil production;
- (6) identify and develop new recovery technologies;
- (7) study reservoir properties and how they affect oil recovery from porous media;
- (8) improve techniques for meeting environmental requirements;
- (9) improve data bases of reservoir and environmental conditions; and
- (10) lower lifting costs on stripper wells by utilizing advanced renewable energy technologies such as small wind turbines and others.

(b) Program goals

(1) Near-term priorities

The near-term priorities of the program include preserving access to high potential reservoirs, identifying available technologies that can extend the lifetime of wells and of stripper well property, and developing environmental field operations for waste disposal and injection practices.

(2) Mid-term priorities

The mid-term priorities of the program include developing and testing identified but unproven technologies, and transferring those technologies for widespread use.

(3) Long-term priorities

The long-term priorities of the program include developing advanced techniques to recover oil not recoverable by other techniques.

(c) Accelerated program plan

Within 180 days after October 24, 1992, the Secretary shall prepare and submit to the Congress a plan for carrying out under this section the accelerated field testing of technologies to achieve the priorities stated in subsection (b). In preparing the plan, the Secretary shall consult with appropriate representatives of industry, institutions of higher education, Federal agencies, including national laboratories, and professional and technical societies, and with the Advisory Board established under section 13522 of this title.

(d) Proposals

Within 1 year after October 24, 1992, the Secretary shall solicit proposals for conducting activities under this section.

(e) Consultation

In carrying out the provisions of this section, the Secretary shall consult representatives of the oil and gas industry with respect to innovative research and development proposals to improve oil and gas recovery and shall consider relevant technical data from industry and other research and information centers and institutes.

(f) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section, including advanced extraction and process technology, \$57,250,000 for fiscal year 1993 and \$70,000,000 for fiscal year 1994.

(Pub. L. 102-486, title XX, §2011, Oct. 24, 1992, 106 Stat. 3057.)

§ 13412. Oil shale

(a) Program direction

The Secretary shall conduct a 5-year program, in accordance with sections 13541 and 13542 of this title, on oil shale extraction and conversion, including research and development on both eastern and western shales, as provided in this section.

(b) Program goals

The goals of the program established under this section include—

- (1) supporting the development of economically competitive and environmentally acceptable technologies to produce domestic supplies of liquid fuels from oil shale;
- (2) increasing knowledge of environmentally acceptable oil shale waste disposal technologies and practices;
- (3) increasing knowledge of the chemistry and kinetics of oil shale retorting;
- (4) increasing understanding of engineering issues concerning the design and scale-up of oil shale extraction and conversion technologies;
- (5) improving techniques for oil shale mining systems; and
- (6) providing for cooperation with universities and other private sector entities.

(c) Eastern oil shale program

(1) As part of the program authorized by this section, the Secretary shall carry out a program on oil shale that includes applied research, in