

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 3704 of this title.

§ 3711. National Technology Medal

(a) Establishment

There is hereby established a National Technology Medal, which shall be of such design and materials and bear such inscriptions as the President, on the basis of recommendations submitted by the Office of Science and Technology Policy, may prescribe.

(b) Award

The President shall periodically award the medal, on the basis of recommendations received from the Secretary or on the basis of such other information and evidence as he deems appropriate, to individuals or companies, which in his judgment are deserving of special recognition by reason of their outstanding contributions to the promotion of technology or technological manpower for the improvement of the economic, environmental, or social well-being of the United States.

(c) Presentation

The presentation of the award shall be made by the President with such ceremonies as he may deem proper.

(Pub. L. 96-480, § 12, Oct. 21, 1980, 94 Stat. 2319.)

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 3704 of this title.

§ 3712. Personnel exchanges

The Secretary and the National Science Foundation, jointly, shall establish a program to foster the exchange of scientific and technical personnel among academia, industry, and Federal laboratories. Such program shall include both (1) federally supported exchanges and (2) efforts to stimulate exchanges without Federal funding.

(Pub. L. 96-480, § 13, Oct. 21, 1980, 94 Stat. 2320.)

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 3704, 3708 of this title.

§ 3713. Authorization of appropriations

(a) There is authorized to be appropriated to the Secretary for purposes of carrying out section 3705 of this title, not to exceed \$19,000,000 for the fiscal year ending September 30, 1981, \$40,000,000 for fiscal year ending September 30, 1982, \$50,000,000 for the fiscal year ending September 30, 1983, and \$60,000,000 for each of the fiscal years ending September 30, 1984, and 1985.

(b) In addition to authorizations of appropriations under subsection (a) of this section, there is authorized to be appropriated to the Secretary for purposes of carrying out the provisions of this chapter, not to exceed \$5,000,000 for the fiscal year ending September 30, 1981, \$9,000,000 for the fiscal year ending September

30, 1982, and \$14,000,000 for each of the fiscal years ending September 30, 1983, 1984, and 1985.

(c) Such sums as may be appropriated under subsections (a) and (b) of this section shall remain available until expended.

(d) To enable the National Science Foundation to carry out its powers and duties under this chapter only such sums may be appropriated as the Congress may authorize by law.

(Pub. L. 96-480, § 14, Oct. 21, 1980, 94 Stat. 2320.)

§ 3714. Spending authority

No payments shall be made or contracts shall be entered into pursuant to this chapter except to such extent or in such amounts as are provided in advance in appropriation Acts.

(Pub. L. 96-480, § 15, Oct. 21, 1980, 94 Stat. 2320.)

CHAPTER 64—METHANE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEMONSTRATION [NEW]

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§ 3801. Congressional statement of findings and declaration of policy

(a) The Congress finds and declares that—

(1) gasoline and diesel fuel for vehicular use are in short supply and constitute a sizable portion of domestic petroleum consumption;

(2) methane use in fleet-operated vehicles would result in substantial reduction in oil imports;

(3) methane is in more abundant domestic supply than petroleum products, is the primary component of natural gas and can be derived in increased quantities from coal, bio-

mass, waste products, and other renewable resources;

(4) recoverable methane presently available in the United States is not fully utilized;

(5) test results to date indicate that methane use as a substitute for gasoline as a motor fuel can result in emission reductions;

(6) experience to date has shown methane to be a safe motor fuel in properly modified vehicles and is therefore particularly suitable as fuel for fleet vehicles; and

(7) the introduction into commerce of methane-fueled vehicles would be expedited and facilitated by the establishment of a Federal program of research, development, and demonstration to explore and refine technologies related to methane use as a vehicular fuel.

(b) It is therefore declared to be the policy of the Congress in this chapter to—

(1) provide for and support advanced and accelerated research into, and development of, methane vehicle design, and related technologies;

(2) demonstrate the economic and technological practicalities of methane-fueled vehicles for fleet use and of methane fueled farm equipment;

(3) facilitate, and remove barriers to, the use of methane-fueled vehicles in lieu of gasoline- or diesel-powered motor vehicles where practicable;

(4) promote the substitution of methane-fueled vehicles for gasoline- and diesel-powered vehicles currently used on farms and in fleet operations, particularly in areas where such substitution would facilitate plans to meet air quality standards set under the Clean Air Act, as amended [42 U.S.C. 7401 et seq.]; and

(5) supplement, but neither supplant nor duplicate, the automotive propulsion system research and development efforts of private industry.

(Pub. L. 96-512, § 2, Dec. 12, 1980, 94 Stat. 2827.)

#### REFERENCES IN TEXT

The Clean Air Act, as amended, referred to in subsec. (b)(4), is act July 14, 1955, ch. 360, as amended generally by Pub. L. 88-206, Dec. 17, 1963, 77 Stat. 392, and later by Pub. L. 95-95, Aug. 7, 1977, 91 Stat. 685. The Clean Air Act was originally classified to chapter 15B (§ 1857 et seq.) of Title 42, The Public Health and Welfare. On enactment of Pub. L. 95-95, the Act was reclassified to chapter 85 (§ 7401 et seq.) of Title 42. For complete classification of this Act to the Code, see short Title note set out under section 7401 of Title 42 and Tables.

#### SHORT TITLE

Section 1 of Pub. L. 96-512 provided: "That this Act [enacting this chapter] may be cited as the 'Methane Transportation Research, Development, and Demonstration Act of 1980'."

#### § 3802. Definitions

For purposes of this chapter—

(a) the term "methane" means either natural gas (as defined in section 3301(1) of this title), gas derived from coal, liquefied natural gas, or any gaseous transportation fuel produced from biomass, waste products, and other renewable resources;

(b) the term "Secretary" means the Secretary of Energy;

(c) the term "public entities" means any unit or units of State and/or local governments;

(d) the term "private entities" means any person, such as any organization incorporated under State law, for profit or not-for-profit, or a consortium of such organizations, but does not include public entities;

(e) the term "vehicle" means any truck, van, station wagon, bus, or car used on public roads or highways as well as off-road agricultural equipment, such as tractors, harvesters, and so forth, which presently burn gasoline or diesel fuel; and

(f) the terms "facilities for the transmission and storage of methane", "methane transmission, storage and dispensing facilities", and any variant thereof means such facilities which are (1) directly necessary for the conduct of a demonstration, (2) for the exclusive use of a demonstration and (3) reasonably incidental to a demonstration.

(Pub. L. 96-512, § 3, Dec. 12, 1980, 94 Stat. 2828.)

#### § 3803. Duties of Secretary of Energy

(a) Designation of management entity for program

The Secretary shall designate prior to February 1, 1981, an appropriate organizational entity within the Department of Energy to manage the methane vehicle research, development, and demonstration program.

(b) Monitoring and management of program; agreements with other Federal departments and agencies

The Secretary shall have the responsibility for monitoring and assuring proper management of the program. The Secretary may enter into agreements or arrangements with the National Aeronautics and Space Administration, the Department of Transportation, the Environmental Protection Agency, or any other Federal department or agency, pursuant to which such department or agency shall conduct specified parts or aspects of the program as the Secretary deems necessary or appropriate and within the particular competence of such agency, to the extent that such agency has capabilities which would enable it to contribute to the success of the program and attainment of the purposes of this chapter.

(c) Assurances respecting scope of program activities

In assuring the effective management of this program, the Secretary shall have specific responsibility to ascertain that the program includes activities to—

(1) promote basic and applied research on methane-fueled vehicle construction, modification, and safety;

(2) conduct research and development on optimum overall specifications for methane-fueled vehicles;

(3) determine appropriate means and facilities for safely and economically storing, transporting, and dispensing methane for use as a vehicular fuel;

(4) conduct demonstration projects with respect to the feasibility of methane-fueled vehicles and methane transmission, storage and dispensing facilities (A) by providing necessary financial or technical assistance for the construction, modification, or operation of motor vehicles to be methane-fueled for practical use or of methane transmission, storage and dispensing facilities, and (B) by entering into agreements or arrangements with other entities, governmental and nongovernmental, for the demonstration of such vehicles and facilities;

(5) gather performance data, including but not limited to emissions data, on methane-fueled vehicles and related transmission and storage facilities;

(6) determine that the participants in each demonstration assisted under this chapter have made satisfactory arrangements to obtain an adequate supply of methane for vehicular use in the project;

(7) ascertain the need for modifications in available methane-fueled vehicles to improve their efficiency and performance and to facilitate their widespread use by fleet owners; and

(8) ascertain and report to the Congress on any changes in fuel supply patterns, tax policies, and standards governing the manufacture of vehicles which are needed to facilitate the manufacture and use of methane-fueled vehicles.

**(d) Implementation of program; administrative procedures, etc., applicable**

(1) The Secretary of Energy shall insure that the conduct of the research and development program of this chapter—

(A) supplements the automotive propulsion system research and development efforts of industry;

(B) is not formulated in a manner that will supplant private industry research and development or displace or lessen industry's research and development; and

(C) avoids duplication of private research and development.

(2) To that end, the Secretary of Energy shall issue administrative regulations, within 60 days after December 12, 1980, which shall specify procedures, standards, and criteria for the timely review for compliance of each new contract, grant, Department of Energy project, or other agency project funded or to be funded under the authority of this chapter. Such regulations shall require that the Secretary of Energy or his designee shall certify that each such contract, grant, or project satisfies the requirement of this subsection, and shall include in such certification a discussion of the relationship of any related or comparable industry research and development, in terms of this subsection, to the proposed research and development under the authority of this chapter. The discussion shall also address related issues, such as cost sharing and patent rights.

(3) Such certifications shall be available to the Committee on Science and Technology of the House of Representatives and the Commit-

tee on Energy and Natural Resources of the Senate. The provisions of chapter 5 of title 5 shall not apply to such certifications and no court shall have any jurisdiction to review the preparation or adequacy of such certifications; but section 553 of title 5 and section 5916 of title 42 shall apply to public disclosure of such certifications.

(4) The Secretary of Energy also shall include in the report required by section 3808 of this title a detailed discussion of how each research and development contract, grant, or project funded under the authority of this chapter satisfies the requirement of this subsection.

(5) Further, the Secretary of Energy in each annual budget submission to the Congress, or amendment thereto, for the programs authorized by this chapter shall describe how each identified research and development effort in such submission satisfies the requirements of this subsection.

(6) The provisions and requirements of this subsection shall not apply with respect to any contract, grant, or project which was entered into, made, or formally approved and initiated prior to the enactment of this chapter, or with respect to any renewal or extension thereof.

(Pub. L. 96-512, § 4, Dec. 12, 1980, 94 Stat. 2828.)

**SECTION REFERRED TO IN OTHER SECTIONS**

This section is referred to in section 3804 of this title.

**§ 3804. Coordination with other Federal departments and agencies; scope of assistance**

(a) In carrying out the programs established under sections 3803 and 3806 of this title, the Secretary shall assure, to the maximum extent practicable, that the functions of this program are coordinated with related regulatory activities and other responsibilities of the Department of Energy and any other Federal departments of agencies.

(b) Each department, agency, and instrumentality of the executive branch of the Federal Government shall carefully consider any written request from the Secretary, the head of any organizational entity designated by the Secretary pursuant to section 3803(a) of this title, or the head of any agency which is party to an agreement or arrangement pursuant to section 3803(b) of this title, to furnish such assistance, on a reimbursable basis, as the Secretary or such head deems necessary to carry out the program and to achieve the purposes of this chapter. Such assistance may include transfer of personnel with their consent and without prejudice to their position and rating.

(Pub. L. 96-512, § 5, Dec. 12, 1980, 94 Stat. 2830.)

**§ 3805. Research and development activities**

The Secretary, acting through appropriate agencies and contractors, shall initiate and provide for the conduct of research and development in areas relating to methane-fueled vehicles, including but not limited to—

(1) flammability and combustibility of methane under conditions likely to develop in storage or during vehicular use;

(2) handling, storage, and distribution of methane for vehicular propulsion purposes;

(3) comprehensive assessment of the relative hazards under identical circumstances of methane, propane, gasoline, and diesel fuel;

(4) feasibility, economy, and efficiency of technologies for the production and recovery of methane from unconventional and supplemental sources, as provided for in other authorization Acts;

(5) engine and fuel tank design including, but not limited to, optimum design for dual fuel capacity vehicles;

(6) total vehicle construction and design;

(7) the nature and quantities of emissions, and alterations in or alternatives to emission control systems presently in use; and

(8) overcoming institutional barriers to widespread use including but not limited to restrictions on the transportation of methane for vehicular use through tunnels, and the potential expansion of the distribution of methane for vehicular purposes.

(Pub. L. 96-512, § 6, Dec. 12, 1980, 94 Stat. 2830.)

#### § 3806. Demonstrations

##### (a) Development of data assessing current state-of-the-art

Not later than January 1, 1982, the Secretary shall develop data assessing the current state-of-the-art with respect to vehicles fueled by methane to serve as baseline data to be utilized in evaluating improvements in methane-fueled vehicle technologies.

##### (b) Guidelines; promulgation, criteria, scope, etc.

Not later than April 1, 1982, the Secretary shall have promulgated necessary and appropriate guidelines for demonstrations and issued an initial request for proposals for technical and financial assistance to support public and private entities in developing and implementing demonstration projects to gather data on the operation of methane-fueled vehicles and methane transmission, storage, and dispensing facilities, under differing climatic, atmospheric, and operating conditions and on design and technical modifications of those vehicles and facilities:

(1) In the case of public entities, the Secretary is authorized to provide—

(A) technical assistance reasonably associated with the modification or acquisition of vehicles to be fueled by methane or with dual fuel capacity, the installation of methane transmission, storage and dispensing facilities, and compliance with data acquisition and reporting requirements under this chapter; and

(B) grants to cover up to 50 per centum of reasonable and necessary costs associated with the installation of methane transmission, storage and dispensing facilities: *Provided*, That the Secretary shall be authorized to direct and require recipients of assistance under this section to enter into cooperative agreements for the planning and use of such facilities with other recipients of assistance under this section, under a cost-sharing agreement where appropriate and economical.

(2)(A) In the case of private entities, the Secretary is authorized to provide—

(i) technical assistance reasonably associated with the modification or acquisition of vehicles to be fueled by methane or with dual fuel capacity, the installation of methane transmission, storage and dispensing facilities, and compliance with data acquisition and reporting requirements under this chapter; and

(ii) loans to cover up to 50 per centum of reasonable and necessary costs associated with the installation of methane transmission, storage and dispensing facilities: *Provided*, That the Secretary shall be authorized to direct and require recipients of assistance under this section to enter into cooperative agreements for the planning and use of such facilities with other recipients of assistance under this section, under a cost-sharing agreement where appropriate and economical.

(B) Loans issued under this section shall bear interest at such rate as the Secretary may determine, giving consideration to the needs and capacities of the recipient and the prevailing rates of interest (public and private), except that such rate shall not be less than a rate determined by the Secretary of the Treasury, taking into consideration the current average yield on outstanding marketable obligations of the United States with remaining periods of maturity comparable to the average maturities of such loans. No loan shall be made unless the Secretary shall have determined that there is reasonable prospect of repayment.

(C) The terms and conditions of loans issued under this section shall take into account the scope of the particular demonstration and any particular conditions which might reasonably be expected to result in additional costs to the recipient, and shall reflect the relative costs of gasoline and diesel fuel and methane and the projected savings in fuel costs to the recipient as a result of participating in the demonstration. In no instance shall a loan issued under this section be for a period in excess of five years.

(3) The Secretary shall provide for appropriate assistance to defray costs associated with complying with data acquisition and reporting requirements under this chapter.

(4) In the case of an organization comprised of both public and private entities, a package of technical and financial assistance shall be designed to the maximum extent feasible, in such a manner as to assist its public components as provided for in paragraph (1) and to assist its private components as provided for in paragraph (2) of this section.

##### (c) Fiscal year limitations

Not fewer than fifty demonstrations shall be assisted under this section with not fewer than ten being initiated in the fiscal year ending September 30, 1982, and not fewer than twenty being initiated in each of the fiscal years ending September 30, 1983, and September 30, 1984. In the case of demonstrations initiated

under this chapter after the first fiscal year in which demonstrations are funded, the Secretary shall ascertain that plans for such demonstrations take into consideration information and findings included in reports filed on other demonstrations assisted under this chapter.

(d) Duration; recordkeeping requirements

Each demonstration shall have a duration of at least three years during which time records including, but not limited to, fuel efficiency indicators, emissions data, repair statistics, and detailed reports of any accidents, shall be maintained and reports made to the Secretary in accordance with guidelines promulgated by the Secretary prior to issuance of the first loan or grant under this section and amended no more often than twice annually.

(e) Selection of proposed demonstrations; discretionary and mandatory criteria

In selecting proposed demonstrations to be supported under this section, the Secretary shall, to the maximum extent practicable, assure representation of diverse operating conditions and vehicle types including, but not limited to—

- (1) altitude and topography,
- (2) climatic conditions,
- (3) air quality conditions,
- (4) industrial, commercial, and agricultural uses,
- (5) varying vehicular structures, and
- (6) average trip lengths;

*Provided, however,* That not fewer than two demonstrations initiated in each year shall be located in a county or standard metropolitan statistical area designated by the Secretary upon recommendation of the Administrator of the Environmental Protection Agency based on severity or uniqueness of air quality conditions; *And provided further,* That the fleet or portions of fleets participating in each demonstration with funding under this chapter shall consist of not fewer than fifty vehicles except in the case of one demonstration each year involving methane-fueled off-road agricultural equipment.

(Pub. L. 96-512, § 7, Dec. 12, 1980, 94 Stat. 2830.)

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 3804, 3807, 3809 of this title.

§ 3807. Use of methane-fueled vehicles by Federal agencies and departments

The Secretary shall consult with the Postmaster General of the United States Postal Service, the Administrator of the General Services Administration, the Secretary of Defense, and the heads of other Federal agencies where appropriate to—

- (a) determine the practicability of using methane vehicles in the performance of certain or all of the functions of their agencies based in counties and standard metropolitan statistical areas in which demonstrations under section 3806 of this title are being conducted; and

- (b) arrange for appropriate use of methane-fueled vehicles at the earliest practicable date.

(Pub. L. 96-512, § 8, Dec. 12, 1980, 94 Stat. 2832.)

§ 3808. Reports to Congress

The Secretary shall submit to the Senate and the House of Representatives, for referral to the appropriate committees, such reports as the Secretary deems appropriate including an annual report on all activities being undertaken or carried out pursuant to the provisions of the chapter, including—

- (1) such projections and estimates as may be necessary to evaluate the progress of the program and to indicate the extent to which, and the pace at which, the objectives of the chapter are being achieved;

- (2) an assessment of what problems exist and of the need for further research and development oriented toward the resolution of those problems;

- (3) an assessment of the potential for commercialization of methane-fueled vehicles in various markets; and

- (4) any recommendations which the Secretary may deem appropriate for legislation or administrative action which would further the purposes of this chapter or facilitate expanded commercial use of methane-fueled vehicles.

(Pub. L. 96-512, § 9, Dec. 12, 1980, 94 Stat. 2833.)

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 3803, of this title.

§ 3809. Authorization of appropriations; required funding

There are authorized to be appropriated to the Secretary for purposes of carrying out this chapter, not to exceed \$3,000,000 for the fiscal year ending September 30, 1982, not less than one-half of which shall be for the purpose of making loans under section 3806(b) of this title; not to exceed \$5,000,000 for the fiscal year ending September 30, 1983, not less than one-half of which shall be for the purpose of making loans under section 3806(b) of this title; not to exceed \$5,000,000 for the fiscal year ending September 30, 1984, not less than one-half of which shall be for the purpose of making loans under section 3806(b) of this title; and such sums as may be necessary for the fiscal years ending September 30, 1985, and September 30, 1986. Any amount appropriated pursuant to this section shall remain available until expended.

(Pub. L. 96-512, § 10, Dec. 12, 1980, 94 Stat. 2833.)

§ 3810. Relationship to other laws

(a) Nothing in this chapter shall be construed as authorizing the Secretary or any other official with respect to any activity pursuant to this chapter to modify or waive the application of any Federal, State or local laws dealing with

the production, transportation, storage, safety, use or pricing of methane.

(b) Nothing in this chapter shall be construed as granting the Secretary or any other Federal official any authority to promulgate rules of general application to regulate the production,

transportation, storage, safety, use or pricing of methane as a transportation fuel or vehicles which use methane as a transportation fuel.

(Pub. L. 96-512, § 11, Dec. 12, 1980, 94 Stat. 2833.)