## § 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 stateof-the-art

Not later than January 1, 1982, the Secretary shall develop data assessing the current stateof-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 costsharing 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 costsharing 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.