

§ 7404. Research relating to fuels and vehicles

(a) Research programs; grants; contracts; pilot and demonstration plants; byproducts research

The Administrator shall give special emphasis to research and development into new and improved methods, having industry-wide application, for the prevention and control of air pollution resulting from the combustion of fuels. In furtherance of such research and development he shall—

(1) conduct and accelerate research programs directed toward development of improved, cost-effective techniques for—

(A) control of combustion byproducts of fuels,

(B) removal of potential air pollutants from fuels prior to combustion,

(C) control of emissions from the evaporation of fuels,

(D) improving the efficiency of fuels combustion so as to decrease atmospheric emissions, and

(E) producing synthetic or new fuels which, when used, result in decreased atmospheric emissions.¹

(2) provide for Federal grants to public or nonprofit agencies, institutions, and organizations and to individuals, and contracts with public or private agencies, institutions, or persons, for payment of (A) part of the cost of acquiring, constructing, or otherwise securing for research and development purposes, new or improved devices or methods having industry-wide application of preventing or controlling discharges into the air of various types of pollutants; (B) part of the cost of programs to develop low emission alternatives to the present internal combustion engine; (C) the cost to purchase vehicles and vehicle engines, or portions thereof, for research, development, and testing purposes; and (D) carrying out the other provisions of this section, without regard to section 3324(a) and (b) of title 31 and section 6101 of title 41: *Provided*, That research or demonstration contracts awarded pursuant to this subsection (including contracts for construction) may be made in accordance with, and subject to the limitations provided with respect to research contracts of the military departments in, section 2353² of title 10, except that the determination, approval, and certification required thereby shall be made by the Administrator; *Provided further*, That no grant may be made under this paragraph in excess of \$1,500,000;

(3) determine, by laboratory and pilot plant testing, the results of air pollution research and studies in order to develop new or improved processes and plant designs to the point where they can be demonstrated on a large and practical scale;

(4) construct, operate, and maintain, or assist in meeting the cost of the construction, operation, and maintenance of new or improved demonstration plants or processes

which have promise of accomplishing the purposes of this chapter;³

(5) study new or improved methods for the recovery and marketing of commercially valuable byproducts resulting from the removal of pollutants.

(b) Powers of Administrator in establishing research and development programs

In carrying out the provisions of this section, the Administrator may—

(1) conduct and accelerate research and development of cost-effective instrumentation techniques to facilitate determination of quantity and quality of air pollutant emissions, including, but not limited to, automotive emissions;

(2) utilize, on a reimbursable basis, the facilities of existing Federal scientific laboratories;

(3) establish and operate necessary facilities and test sites at which to carry on the research, testing, development, and programming necessary to effectuate the purposes of this section;

(4) acquire secret processes, technical data, inventions, patent applications, patents, licenses, and an interest in lands, plants, and facilities, and other property or rights by purchase, license, lease, or donation; and

(5) cause on-site inspections to be made of promising domestic and foreign projects, and cooperate and participate in their development in instances in which the purposes of the chapter will be served thereby.

(c) Clean alternative fuels

The Administrator shall conduct a research program to identify, characterize, and predict air emissions related to the production, distribution, storage, and use of clean alternative fuels to determine the risks and benefits to human health and the environment relative to those from using conventional gasoline and diesel fuels. The Administrator shall consult with other Federal agencies to ensure coordination and to avoid duplication of activities authorized under this subsection.

(July 14, 1955, ch. 360, title I, §104, as added Pub. L. 90-148, §2, Nov. 21, 1967, 81 Stat. 487; amended Pub. L. 91-137, Dec. 5, 1969, 83 Stat. 283; Pub. L. 91-604, §§2(b), (c), 13(a), 15(c)(2), Dec. 31, 1970, 84 Stat. 1676, 1677, 1709, 1713; Pub. L. 93-15, §1(a), Apr. 9, 1973, 87 Stat. 11; Pub. L. 93-319, §13(a), June 22, 1974, 88 Stat. 265; Pub. L. 101-549, title IX, §901(d), Nov. 15, 1990, 104 Stat. 2706.)

Editorial Notes

REFERENCES IN TEXT

Section 2353 of title 10, referred to in subsec. (a)(2), was renumbered section 4174 of title 10 by Pub. L. 116-283, div. A, title XVIII, §1844(b)(1), Jan. 1, 2021, 134 Stat. 4245, as amended by Pub. L. 117-81, div. A, title XVII, §1701(u)(6)(B), Dec. 27, 2021, 135 Stat. 2154.

CODIFICATION

In subsec. (a)(2)(D), “section 3324(a) and (b) of title 31 and section 6101 of title 41” substituted for “sections 3648 and 3709 of the Revised Statutes (31 U.S.C. 529; 41

¹ So in original. The period probably should be a semicolon.

² See References in Text note below.

³ So in original. The word “and” probably should appear.

U.S.C. 5)" on authority of Pub. L. 97-258, §4(b), Sept. 13, 1982, 96 Stat. 1067, which Act enacted Title 31, Money and Finance, and Pub. L. 111-350, §6(c), Jan. 4, 2011, 124 Stat. 3854, which Act enacted Title 41, Public Contracts.

Section was formerly classified to section 1857b-1 of this title.

PRIOR PROVISIONS

A prior section 104 of act July 14, 1955, was renumbered section 105 by Pub. L. 90-148 and is classified to section 7405 of this title.

AMENDMENTS

1990—Subsecs. (a)(1), (b)(1). Pub. L. 101-549, §901(d)(1), substituted "cost-effective" for "low-cost".

Subsec. (c). Pub. L. 101-549, §901(d)(2), amended subsec. (c) generally. Prior to amendment, subsec. (c) read as follows: "For the purposes of this section there are authorized to be appropriated \$75,000,000 for the fiscal year ending June 30, 1971, \$125,000,000 for the fiscal year ending June 30, 1972, \$150,000,000 for the fiscal year ending June 30, 1973, and \$150,000,000 for the fiscal year ending June 30, 1974, and \$150,000,000 for the fiscal year ending June 30, 1975. Amounts appropriated pursuant to this subsection shall remain available until expended."

1974—Subsec. (c). Pub. L. 93-319 authorized appropriation of \$150,000,000 for fiscal year ending June 30, 1975.

1973—Subsec. (c). Pub. L. 93-15 authorized appropriation of \$150,000,000 for fiscal year ending June 30, 1974.

1970—Subsec. (a). Pub. L. 91-604, §15(c)(2), substituted "Administrator" for "Secretary".

Subsec. (a)(1). Pub. L. 91-604, §2(b), inserted provisions authorizing research programs directed toward development of techniques for improving the efficiency of fuels combustion so as to decrease atmospheric emissions, and producing synthetic or new fuels which result in decreased atmospheric emissions.

Subsec. (a)(2). Pub. L. 91-604, §2(c), added cls. (B) and (C) and redesignated former cl. (B) as (D).

Subsec. (b). Pub. L. 91-604, §15(c)(2), substituted "Administrator" for "Secretary".

Subsec. (c). Pub. L. 91-604, §13(a), substituted provisions authorizing appropriations for fiscal years ending June 30, 1971, 1972, and 1973, for provisions authorizing appropriations for fiscal years ending June 30, 1968 and 1969.

1969—Subsec. (c). Pub. L. 91-137 authorized appropriation of \$45,000,000 for fiscal year ending June 30, 1970.

Statutory Notes and Related Subsidiaries

HYDROGEN FUEL CELL VEHICLE STUDY AND TEST PROGRAM

Pub. L. 101-549, title VIII, §807, Nov. 15, 1990, 104 Stat. 2689, provided that the Administrator of the Environmental Protection Agency, in conjunction with the National Aeronautics and Space Administration and the Department of Energy, would conduct a study, performed in the university or universities which are best exhibiting the facilities and expertise to develop such a fuel cell vehicle and test program on the development of a hydrogen fuel cell electric vehicle, to determine how best to transfer existing NASA hydrogen fuel cell technology into the form of a mass-producible, cost effective hydrogen fuel cell vehicle and include at a minimum a feasibility-design study, the construction of a prototype, and a demonstration, and provided that the study and test program were to be completed and a report submitted to Congress within 3 years after Nov. 15, 1990.

COMBUSTION OF CONTAMINATED USED OIL IN SHIPS

Pub. L. 101-549, title VIII, §813, Nov. 15, 1990, 104 Stat. 2693, directed that within 2 years after Nov. 15, 1990, the Administrator of the Environmental Protection Agency was to complete a study and submit a report to Congress evaluating the health and environmental impacts of the combustion of contaminated used oil in ships,

the reasons for using such oil, the alternatives, and the costs of such alternatives, and other relevant factors and impacts.

EXTENSION TO AUG. 31, 1970 OF AUTHORIZATION PERIOD FOR FISCAL YEAR 1970

Pub. L. 91-316, July 10, 1970, 84 Stat. 416, provided in part that the authorization contained in section 104(c) of the Clean Air Act [subsec. (c) of this section] for the fiscal year ending June 30, 1970, should remain available through Aug. 31, 1970, notwithstanding any provisions of this section.

§ 7405. Grants for support of air pollution planning and control programs

(a) Amounts; limitations; assurances of plan development capability

(1)(A) The Administrator may make grants to air pollution control agencies, within the meaning of paragraph (1), (2), (3), (4), or (5) of section 7602 of this title, in an amount up to three-fifths of the cost of implementing programs for the prevention and control of air pollution or implementation of national primary and secondary ambient air quality standards. For the purpose of this section, "implementing" means any activity related to the planning, developing, establishing, carrying-out, improving, or maintaining of such programs.

(B) Subject to subsections (b) and (c) of this section, an air pollution control agency which receives a grant under subparagraph (A) and which contributes less than the required two-fifths minimum shall have 3 years following November 15, 1990, in which to contribute such amount. If such an agency fails to meet and maintain this required level, the Administrator shall reduce the amount of the Federal contribution accordingly.

(C) With respect to any air quality control region or portion thereof for which there is an applicable implementation plan under section 7410 of this title, grants under subparagraph (A) may be made only to air pollution control agencies which have substantial responsibilities for carrying out such applicable implementation plan.

(2) Before approving any grant under this subsection to any air pollution control agency within the meaning of sections 7602(b)(2) and 7602(b)(4) of this title, the Administrator shall receive assurances that such agency provides for adequate representation of appropriate State, interstate, local, and (when appropriate) international, interests in the air quality control region.

(3) Before approving any planning grant under this subsection to any air pollution control agency within the meaning of sections 7602(b)(2) and 7602(b)(4) of this title, the Administrator shall receive assurances that such agency has the capability of developing a comprehensive air quality plan for the air quality control region, which plan shall include (when appropriate) a recommended system of alerts to avert and reduce the risk of situations in which there may be imminent and serious danger to the public health or welfare from air pollutants and the various aspects relevant to the establishment of air quality standards for such air quality control region, including the concentration of industries, other commercial establishments, pop-