have as an integral part, permanently affixed, a blaze orange plug inserted in the barrel of such toy, look-alike, or imitation firearm. Such plug shall be recessed no more than 6 millimeters from the muzzle end of the barrel of such firearm.

(2) The Secretary of Commerce may provide for an alternate marking or device for any toy, look-alike, or imitation firearm not capable of being marked as provided in paragraph (1) and may waive the requirement of any such marking or device for any toy, look-alike, or imitation firearm that will only be used in the theatrical, movie or television industry.

(3) The Secretary is authorized to make adjustments and changes in the marking system provided for by this section, after consulting with interested persons.

(c) "Look-alike firearm" defined

For purposes of this section, the term "lookalike firearm" means any imitation of any original firearm which was manufactured, designed, and produced since 1898, including and limited to toy guns, water guns, replica nonguns, and air-soft guns firing nonmetallic projectiles. Such term does not include any look-alike, nonfiring, collector replica of an antique firearm developed prior to 1898, or traditional B-B, paint-ball, or pellet-firing air guns that expel a projectile through the force of air pressure.

(d) Study and report

The Director of the Bureau of Justice Statistics is authorized and directed to conduct a study of the criminal misuse of toy, look-alike and imitation firearms, including studying police reports of such incidences and shall report on such incidences relative to marked and unmarked firearms.

(c) ¹ Technical evaluation of marking systems

The Director of 2 National Institute of Justice is authorized and directed to conduct a technical evaluation of the marking systems provided for in subsection (b) to determine their effectiveness in police combat situations. The Director shall begin the study within 3 months after November 5, 1988, and such study shall be completed within 9 months after November 5, 1998.

(f) Effective date

This section shall become effective on the date 6 months after November 5, 1988, and shall apply to toy, look-alike, and imitation firearms manufactured or entered into commerce after November 5, 1988.

(g) Preemption of State or local laws or ordinances; exceptions

The provisions of this section shall supersede any provision of State or local laws or ordinances which provide for markings or identification inconsistent with provisions of this section provided that no State shall—

(i) prohibit the sale or manufacture of any look-alike, nonfiring, collector replica of an antique firearm developed prior to 1898, or

(ii) prohibit the sale (other than prohibiting the sale to minors) of traditional B-B, paint ball, or pellet-firing air guns that expel a projectile through the force of air pressure.

(Pub. L. 100-615, §4, Nov. 5, 1988, 102 Stat. 3190.)

CHAPTER 77—STEEL AND ALUMINUM ENERGY CONSERVATION AND TECHNOLOGY COMPETITIVENESS

Sec. 5101. Findings and purposes. 5102. Definitions.

5103. Establishment of scientific research and development program to develop competitive manufacturing technologies and increase energy efficiency in steel and aluminum in-

dustries.

5104. Protection of proprietary rights.

5105. Coordination. 5106. Repealed.

5106. Repealed. 5107. Reports.

5108. Authorization of appropriations.

5109. Relation of existing program.

5110. Drug-free workplace.

§ 5101. Findings and purposes

(a) Findings

The Congress finds that—

- (1) maintaining viable domestic steel, aluminum, copper, and other metals industries is vital to the national security and economic well being of the United States; and
- (2) the promotion of technology competitiveness and energy conservation in the American steel and aluminum industries by the Federal Government through a program of joint research and development will help maintain viable domestic steel and aluminum industries.

(b) Purposes

The purposes of this chapter are to—

(1) increase the energy efficiency and enhance the competitiveness of American steel, aluminum, and copper industries by providing Federal incentives for the establishment of public-private sector research and development partnerships to undertake scientific research and development to develop advanced technologies utilizing the expertise of the steel, aluminum, copper, and other metals industries, Government-owned laboratories of the Department of Energy and the National Institute of Standards and Technology, universities, State development agencies, and others; and

(2) continue steel research and development initiative efforts begun under title II of the Interior and Related Agencies portion of the joint resolution entitled "Joint Resolution making further continuing appropriations for the fiscal year 1986, and for other purposes", approved December 19, 1985 (Public Law 99–190).

(Pub. L. 100-680, §2, Nov. 17, 1988, 102 Stat. 4073.)

References in Text

Title II of the Interior and Related Agencies portion of the joint resolution entitled "Joint Resolution making further continuing appropriations for the fiscal year 1986, and for other purposes", approved December

¹So in original. Probably should be "(e)".

²So in original. Probably should be "of the".

19, 1985 (Public Law 99–190), referred to in subsec. (b)(2), is Pub. L. 99–190, §101(d) [title II], Dec. 19, 1985, 99 Stat. 1224, 1244. The provisions relating to steel research and development are not classified to the Code.

SHORT TITLE

Pub. L. 100-680, §1, Nov. 17, 1988, 102 Stat. 4073, provided that: "This Act [enacting this chapter] may be cited as the 'Steel and Aluminum Energy Conservation and Technology Competitiveness Act of 1988'."

§ 5102. Definitions

As used in this chapter—

- (1) the term "Secretary" means the Secretary of Energy;
- (2) the term "domestic company" means a company which is substantially involved in the United States domestic production, processing, or use of steel, aluminum, copper, or other metals and has a substantial percentage of its operations located within the United States;
- (3) the terms "management plan" and "plan" mean the Steel Initiative Management Plan issued on April 1, 1987, by the Department of Energy, which establishes the management framework for the steel research and development initiative, and updates to that plan; and
- (4) the term "research plan" means the Steel Initiative Research Plan issued in April 1988 by the Department of Energy, and updates to that plan.

(Pub. L. 100-680, §3, Nov. 17, 1988, 102 Stat. 4073.)

§ 5103. Establishment of scientific research and development program to develop competitive manufacturing technologies and increase energy efficiency in steel and aluminum industries

(a) General authority

The Secretary, pursuant to the authority provided under provisions of the Federal Nonnuclear Research and Development Act of 1974 (42 U.S.C. 5901, et seq.), shall reestablish an industrial energy conservation and competitive technology program to conduct scientific research and development of steel and aluminum technologies to carry out the purposes of this chapter. Such program shall provide the financial and technical assistance and other incentives which, in the judgment of the Secretary, are necessary to carry out the purposes of this chapter.

(b) Management plan

Within 6 months after November 17, 1988, the Secretary shall publish an update of the management plan to expand the steel research and development initiative to include aluminum and to carry out the purposes of this chapter. The Secretary, from time to time, may further update the management plan. The management plan shall be subject to the following conditions:

- (1) For newly initiated research and development proposals submitted under the revised management plan, the non-Federal financial share shall equal at least 30 percent of the total cost of any project.
- (2) Existing facilities, equipment, supplies, and other property may be included in the

non-Federal share under this section only when they are directly relevant to the project.

- (3) The knowledge resulting from research and development activities conducted under this chapter shall be developed for the benefit of the domestic companies who provide financial resources to the program.
- (4) The Secretary, for a period of up to 5 years after the development of information that—
 - (A) results from research and development activities conducted under this chapter; and
 - (B) would be a trade secret or commercial or financial information that is privileged or confidential, as described in section 5104(a) of this title, if the information had been obtained from a domestic company,

may provide appropriate protections against the dissemination of such information, including exemption from subchapter II of chapter 5 of title 5.

(5) The plan shall assure basic research support, for the research carried out under the research plan, from independent laboratories, universities, and nonprofit organizations, by coordinating activities under the research plan with the basic research efforts of the Department of Energy, such as the Energy Conversion and Utilization Technologies Program and the Materials Processing and Sensor and Controls programs within the Office of Industrial Technologies.

(c) Priorities

Within 6 months after November 17, 1988, the Secretary shall publish an update of the research plan. In reviewing research and development activities for possible inclusion in the research plan, the Secretary shall consider the following:

(1) Steel projects

- (A) The direct production of liquid steel from domestic materials.
- (B) The production of near-net shape forms from liquid, powder, or solid steel.
- (C) The development of universal grades of steel.
- (D) The application of automatic processing technology.
- (E) The removal of residual elements from steel scrap.
- (F) The treatment and storage of waste materials and other byproducts from steel production and processing.
- (G) The development of super-plastic steel processing.
- (H) The development of advanced sheet and bar steels.
- (I) The development of technologies and equipment related to the production of steel that enhance the protection of the environment and the safety and health of workers.
- (J) Other steel technologies which, in the judgment of the Secretary, further the purposes of this chapter.
- (K) The development of technologies which reduce greenhouse gas emissions.

(2) Aluminum and other projects

- (A) The production of aluminum.
- (B) The application of automatic processing technology.