II

109TH CONGRESS
1ST SESSION

S. 1150

To increase the security of radiation sources, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 26, 2005

Mrs. CLINTON introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To increase the security of radiation sources, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Dirty Bomb Prevention Act''.

SEC. 2. RADIATION SOURCE PROTECTION.

(a) AMENDMENT.—Chapter 14 of the Atomic Energy Act of 1954 (42 U.S.C. 2201 et seq.) is amended by adding at the end the following new section:

"SEC. 170C. RADIATION SOURCE PROTECTION. —

"a. NUCLEAR REGULATORY COMMISSION APPROVAL.—Not later than 180 days after the date of enactment of this section, the Nuclear Regulatory Commission shall issue regulations prohibiting a person from—

"(1) exporting a radiation source unless the Nuclear Regulatory Commission has specifically found, with respect to that export, that—

"(A) the appropriate regulatory agency in the recipient country—

"(i) has been informed of the proposed export; and

"(ii) has determined that the proposed export will be made in accordance with the recipient nation's laws and regulations;

"(B) the recipient nation has the appropriate technical and administrative capability, resources, and regulatory structure to ensure that the radiation source will be managed in a safe and secure manner; and

"(C) the person exporting the radiation source has made arrangements to retake possession of it when the recipient is no longer using it;

''(2) importing a radiation source unless the Nuclear Regulatory Commission has specifically found, with respect to that import, that—

''(A) the proposed recipient is authorized under law to receive the shipment; and

''(B) the shipment will be made in accordance with all applicable Federal and State laws and regulations; and

''(3) selling or otherwise transferring ownership of a radiation source unless the Nuclear Regulatory Commission has specifically found, with respect to that sale or transfer, that—

''(A) the proposed recipient is authorized under law to receive the radiation source; and

''(B) the transfer will be made in accordance with all applicable Federal and State laws and regulations.

''b. TRACKING SYSTEM.—Not later than 180 days after the date of enactment of this section, the Nuclear Regulatory Commission shall issue regulations establishing a mandatory tracking system for all radiation sources in the United States. Such system shall—

''(1) enable the identification of each radiation source by serial number or other unique identifier;

''(2) require reporting within 24 hours of any change of geographic location or ownership of a radiation source, including any change of geographic location that occurs while the radiation source is being transported;

''(3) require reporting within 24 hours of any loss of control of or accountability for a radiation source; and

''(4) provide for reporting through a secure Internet connection.

''c. PENALTY.—Each violation of regulations issued under subsection a. or b. shall be punishable by a civil penalty of up to $1,000,000.

''d. NATIONAL ACADEMY OF SCIENCES STUDY.—Not later than 60 days after the date of enactment of this section, the Nuclear Regulatory Commission shall enter into an arrangement with the National Academy of Sciences for a study of industrial, research, and commercial uses for radiation sources. The study shall review the current uses for radiation sources, identifying industrial or other processes that utilize radiation sources that could be replaced with economically and technically equivalent (or improved) processes that do not require the use of radiation sources, or that can be used with radiation sources that would pose a lesser risk to public health and safety in the

event of an accident or attack involving the radiation source. The Nuclear Regulatory Commission shall transmit the results of the study to Congress not later than 24 months after the date of enactment of this section.

''e. COMMISSION ACTIONS.—Not later than 60 days after receipt by Congress and the President of a report required under subsection f.(3)(B), the Nuclear Regulatory Commission, in accordance with the recommendations of the task force, shall take any appropriate actions, including commencing revision of its system for licensing radiation sources, and shall take necessary steps to ensure that States that have entered into an agreement under section 274 b. establish compatible programs in a timely manner.

''f. TASK FORCE ON RADIATION SOURCE PROTECTION AND SECURITY.—

''(1) ESTABLISHMENT.—There is hereby established a task force on radiation source protection and security.

''(2) MEMBERSHIP.—The task force shall be headed by the Chairman of the Nuclear Regulatory Commission or the Chairman's designee. Its members shall be the following:

''(A) The Secretary of Homeland Security or the Secretary's designee.

''(B) The Secretary of Defense or the Secretary's designee.

''(C) The Secretary of Energy or the Secretary's designee.

''(D) The Secretary of Transportation or the Secretary's designee.

''(E) The Attorney General or the Attorney General's designee.

''(F) The Secretary of State or the Secretary's designee.

''(G) The Director of National Intelligence or the Director's designee.

''(H) The Director of the Central Intelligence Agency or the Director's designee.

''(I) The Director of the Federal Emergency Management Agency or the Director's designee.

''(J) The Director of the Federal Bureau of Investigation or the Director's designee.

''(3) DUTIES.—

''(A) IN GENERAL.—The task force, in consultation with other State, Federal, and local agencies and appropriate members of the public, after public notice and an opportunity for public comment, shall evaluate and provide

recommendations to ensure the security of radiation sources from potential terrorist threats, including acts of sabotage, theft, or use of such radiation sources in a radiological dispersal device.

''(B) RECOMMENDATIONS TO CONGRESS AND THE PRESIDENT.—Not later than 1 year after the date of enactment of this section, and not less than once every 3 years thereafter, the task force shall submit a report to Congress and to the President, in unclassified form with a classified annex if necessary, providing recommendations, including recommendations for appropriate regulatory and legislative changes, for—

''(i) a list of additional radiation sources that should be required to be secured under this Act, based on their potential attractiveness to terrorists and the extent of the threat to public health and safety, taking into account radiation source radioactivity levels, dispersability, chemical and material form, and, for radiopharmaceuticals, the availability of these substances to physicians and patients whose

medical treatments relies on them, and other factors as appropriate;

''(ii) the establishment of or modifications to a national system for recovery of radiation sources that have been lost or stolen;

''(iii) the storage of radiation sources not currently in use in a safe and secure manner;

''(iv) modification to the national tracking system for radiation sources;

''(v) the establishment of or modifications to a national system to impose fees to be collected from users of radiation sources, to be refunded when the radiation sources are properly disposed of, or any other method to ensure the proper disposal of radiation sources;

''(vi) any modifications to export controls on radiation sources necessary to ensure that foreign recipients of radiation sources are able and willing to control United States-origin radiation sources in the same manner as United States recipients;

''(vii) whether alternative technologies are available that can perform some or all of the functions currently performed by devices or processes that employ radiation sources, and if so, the establishment of appropriate regulations and incentives for the replacement of such devices or processes with alternative technologies in order to reduce the number of radiation sources in the United States, or with radiation sources that would pose a lesser risk to public health and safety in the event of an accident or attack involving the radiation source; and

''(viii) the creation of or modifications to procedures for improving the security of radiation sources in use, transportation, and storage, which may include periodic Nuclear Regulatory Commission audits or inspections to ensure that radiation sources are properly secured and can be fully accounted for, Nuclear Regulatory Commission evaluation of security measures, increased fines for violations of Nuclear Regulatory Commission regulations

relating to security and safety measures applicable to licensees who possess radiation sources, criminal and security background checks for certain individuals with access to radiation sources (including individuals involved with transporting radiation sources), assurances of the physical security of facilities that contain radiation sources (including facilities used to temporarily store radiation sources being transported), requirements and a mechanism for effective and timely exchanges of information regarding the results of such criminal and security background checks between the Nuclear Regulatory Commission and States with which the Commission has entered into an agreement under section 274 b., and the screening of shipments to facilities particularly at risk for sabotage of radiation sources to ensure that they do not contain explosives.

''g. DEFINITION.—For purposes of this section, the term 'radiation source' means any sealed or unsealed source whose activity levels are within Category 1, Category 2, or Category 3 as defined under the Code of Con-

duct on the Safety and Security of Radioactive Sources, approved by the Board of Governors of the International Atomic Energy Agency on September 8, 2003.''.

(b) TABLE OF SECTIONS AMENDMENT.—The table of sections of the Atomic Energy Act of 1954 is amended by adding at the end of the items relating to chapter 14 the following new items:

''Sec. 170B. Uranium supply
''Sec. 170C. Radiation source protection''.

SEC. 3. TREATMENT OF ACCELERATOR-PRODUCED AND OTHER RADIOACTIVE MATERIAL AS BY-PRODUCT MATERIAL.

(a) DEFINITION OF BYPRODUCT MATERIAL.—Section 11 e. of the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)) is amended—

(1) by striking ''means (1) any radioactive'' and inserting ''means—

''(1) any radioactive'';

(2) by striking ''material, and (2) the tailings'' and inserting ''material;

''(2) the tailings''; and

(3) by striking ''content.'' and inserting ''content;

''(3)(A) any discrete source of radium that is produced, extracted, or converted after extraction, before, on, or after the date of enactment of this

paragraph for use in commercial, medical, or research activity; or

''(B) any material that—

''(i) has been made radioactive by use of a particle accelerator; and

''(ii) is produced, extracted, or converted after extraction, before, on, or after the date of enactment of this paragraph for use in commercial, medical, or research activity; and

''(4) any discrete source of naturally occurring radioactive material, other than source material, that—

''(A) has been removed from the natural environment and has been concentrated to levels greater than that found in the natural environment due to human activities; and

''(B) before, on, or after the date of enactment of this paragraph, is extracted or converted after extraction for use in commercial, medical, or research activity.''.

(b) AGREEMENTS.—Section 274 b. of the Atomic Energy Act of 1954 (42 U.S.C. 2021(b)) is amended—

(1) by amending paragraph (1) to read as follows:

''(1) byproduct materials (as defined in section 11 e.);'';

(2) by striking paragraph (2); and

(3) by redesignating paragraphs (3) and (4) as paragraphs (2) and (3), respectively.

(c) REGULATIONS.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Nuclear Regulatory Commission, after consultation with States and other stakeholders, shall promulgate final regulations as the Commission considers necessary to implement this Act and the amendments made by this Act. Such regulations shall include a definition of the term ''discrete'' for purposes of paragraphs (3) and (4) of section 11 e. of the Atomic Energy Act of 1954 (as added by subsection (a)) that is designed to ensure that byproduct material is controlled in a manner consistent with other materials that pose the same threat to public health and safety and the common defense and security.

(2) COOPERATION.—The Commission shall cooperate with the States in formulating the regulations under paragraph (1), and to the extent practicable shall use existing State consensus standards.

(3) TRANSITION.—To ensure an orderly transition of regulatory authority with respect to byproduct material as defined in paragraphs (3) and (4) of section 11 e. of the Atomic Energy Act of 1954 (as added by subsection (a)), the regulations promulgated under paragraph (1) shall include a transition plan, developed in coordination with States, for—

(A) States that have not, before such plan is issued, entered into an agreement with the Commission under section 274 b. of the Atomic Energy Act of 1954 (42 U.S.C. 2021(b)); and

(B) States that have entered into such an agreement with the Commission, including, in the case of a State that has entered into such an agreement and has certified that it has an existing State program for licensing of the byproduct material defined in paragraphs (3) and (4) of section 11 e. of the Atomic Energy Act of 1954 (as added by subsection (a)) that is adequate to protect public health and safety, provision for assumption by the State of regulatory responsibility for such byproduct material through an administrative process that—

(i) provides interim provisional recognition of an existing State program for

licensing the byproduct material until adoption of an amended agreement under section 274 b.; and

(ii) requires that the byproduct material is included in the periodic reviews of the State programs for adequacy and compatibility required under section 274 j.(1).

(4) AVAILABILITY OF RADIOPHARMACEUTICALS.—In its promulgation of final rules under paragraph (1), the Commission shall consider the impact on the availability of radiopharmaceuticals to the physicians and patients whose medical treatment relies on them.

(d) WASTE DISPOSAL.—

(1) IN GENERAL.—Section 81 of the Atomic Energy Act of 1954 (42 U.S.C. 2111) is amended by adding at the end the following: ''Byproduct material may only be transferred to and disposed of in a disposal facility licensed by the Commission, if the disposal facility meets the licensing requirements of the Commission and is adequate to protect public health and safety, or a disposal facility licensed by a State that has entered into an agreement with the Commission under section 274 b., if the disposal facility meets requirements of the State that are com-

patible with the licensing requirements of the Commission and is adequate to protect public health and safety.''.

(2) BYPRODUCT MATERIAL NOT CONSIDERED LOW-LEVEL RADIOACTIVE WASTE.—Section 2(9) of the Low-Level Radioactive Waste Policy Act (42 U.S.C. 2021b(9)) is amended by adding after subparagraph (B) the following:

''Such term shall not include byproduct material as defined in paragraphs (3) and (4) of section 11 e. of the Atomic Energy Act of 1954.''.

(e) EFFECTIVE DATE.—Subsections (a), (b), and (d) shall take effect 1 year after the date of enactment of this Act.

SEC. 4. RADIATION SOURCES CONTROLLED BY DEPARTMENT OF ENERGY.

(a) NUCLEAR FUEL.—

(1) REPORT.—Not later than 6 months after the date of enactment of this Act, the Secretary of Energy shall transmit to Congress a report accounting for the location and status of all nuclear fuel that has been exported by the Federal Government.

(2) REACQUISITION.—

(A) IN GENERAL.—The Secretary of Energy shall, to the maximum extent practicable,

reacquire nuclear fuel described in paragraph (1) for disposal, giving highest priority to nuclear fuel that is—

(i) in a location that is not secure; or

(ii) in a country that does not have sufficient resources to either properly dispose of the nuclear fuel or return the nuclear fuel to the United States for disposal.

(B) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy $50,000,000 for each of the fiscal years 2006 through 2010 for carrying out subparagraph (A).

(b) RADIATION SOURCES AND SEALED SOURCES OF PLUTONIUM.—

(1) REPORT.—Not later than 6 months after the date of enactment of this Act, the Secretary of Energy shall transmit to Congress a report accounting for the location and status of all radiation sources (as defined in section 170C(g) of the Atomic Energy Act of 1954, as added by section 1 of this Act) and sealed sources of plutonium weighing more than 1 gram that have been exported by the Federal Government.

(2) REACQUISITION.—

(A) IN GENERAL.—The Secretary of Energy shall, to the maximum extent practicable, reacquire radiation sources and sealed sources of plutonium described in paragraph (1) for disposal that are—

(i) in a location that is not secure; or

(ii) in a country that does not have sufficient resources to either properly dispose of the radiation sources and sealed sources of plutonium or return the radiation sources and sealed sources of plutonium to the United States for disposal.

(B) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy $30,000,000 for each of the fiscal years 2006 through 2010 for carrying out subparagraph (A).

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