

and manufacturing cycle required to carry out all phases of the joint nuclear weapons life cycle process, with respect to both the nuclear security enterprise and relevant elements of the Department of Defense.

(2) Identify, enhance, and transfer knowledge, skills, and direct experience with respect to all phases of the joint nuclear weapons life cycle process from one generation of nuclear weapon designers and engineers to the following generation.

(3) Periodically demonstrate stockpile responsiveness throughout the range of capabilities required, including prototypes, flight testing, and development of plans for certification without the need for nuclear explosive testing.

(4) Shorten design, certification, and manufacturing cycles and timelines to minimize the amount of time and costs leading to an engineering prototype and production.

(5) Continually exercise processes for the integration and coordination of all relevant elements and processes of the Administration and the Department of Defense required to ensure stockpile responsiveness.

(6) The retention of the ability, in consultation with the Director of National Intelligence, to assess and develop prototype nuclear weapons of foreign countries and, if necessary, to conduct no-yield testing of those prototypes.

(d) Joint nuclear weapons life cycle process defined

In this section, the term “joint nuclear weapons life cycle process” means the process developed and maintained by the Secretary of Defense and the Secretary of Energy for the development, production, maintenance, and retirement of nuclear weapons.

(Pub. L. 107–314, div. D, title XLII, §4220, as added Pub. L. 114–92, div. C, title XXXI, §3112(b)(1), Nov. 25, 2015, 129 Stat. 1189; amended Pub. L. 115–91, div. C, title XXXI, §3135(b), Dec. 12, 2017, 131 Stat. 1898.)

AMENDMENTS

2017—Subsec. (c)(6). Pub. L. 115–91 added par. (6).

§ 2538c. Long-term plan for meeting national security requirements for unencumbered uranium

(a) In general

Not later than December 31 of each even-numbered year through 2026, the Secretary of Energy shall submit to the congressional defense committees a plan for meeting national security requirements for unencumbered uranium through 2065.

(b) Plan requirements

The plan required by subsection (a) shall include the following:

(1) An inventory of unencumbered uranium (other than depleted uranium), by program source and enrichment level, that, as of the date of the plan, is allocated to national security requirements.

(2) An inventory of unencumbered uranium (other than depleted uranium), by program source and enrichment level, that, as of the

date of the plan, is not allocated to national security requirements but could be allocated to such requirements.

(3) An identification of national security requirements for unencumbered uranium, by program source and enrichment level.

(4) A description of any shortfall in obtaining unencumbered uranium to meet national security requirements and an assessment of whether that shortfall could be mitigated through the blending down of uranium that is of a higher enrichment level.

(5) An inventory of unencumbered depleted uranium, an assessment of the portion of that uranium that could be allocated to national security requirements through re-enrichment, and an estimate of the costs of re-enriching that uranium.

(6) A description of the swap and barter agreements involving unencumbered uranium needed to meet national security requirements that are in effect on the date of the plan.

(7) An assessment of whether additional enrichment of uranium will be required to meet national security requirements and an estimate of the time for production operations and the cost for each type of enrichment being considered.

(8) A description of changes in policy that would mitigate any shortfall in obtaining unencumbered uranium to meet national security requirements and the implications of those changes.

(c) Form of plan

The plan required by subsection (a) shall be submitted in unclassified form, but may include a classified annex.

(d) Definitions

In this section:

(1) The term “depleted”, with respect to uranium, means that the uranium is depleted in uranium-235 compared with natural uranium.

(2) The term “unencumbered”, with respect to uranium, means that the United States has no obligation to foreign governments to use the uranium for only peaceful purposes.

(Pub. L. 107–314, div. D, title XLII, §4221, as added Pub. L. 114–92, div. C, title XXXI, §3131(a), Nov. 25, 2015, 129 Stat. 1201; amended Pub. L. 115–91, div. C, title XXXI, §3133(e), Dec. 12, 2017, 131 Stat. 1897.)

AMENDMENTS

2017—Subsec. (a). Pub. L. 115–91 substituted “Not later than December 31 of each even-numbered year through 2026” for “Concurrent with the submission to Congress of the budget of the President under section 1105(a) of title 31, in each even-numbered year beginning in 2016 and ending in 2026”.

§ 2538d. Incorporation of integrated surety architecture

(a) Shipments

(1) The Administrator shall ensure that shipments described in paragraph (2) incorporate surety technologies relating to transportation and shipping developed by the Integrated Surety Architecture program of the Administration.

(2) A shipment described in this paragraph is an over-the-road shipment of the Administra-

tion that involves any nuclear weapon planned to be in the active stockpile after 2025.

(b) Certain programs

(1) The Administrator, in coordination with the Chairman of the Nuclear Weapons Council, shall ensure that each program described in paragraph (2) incorporates integrated designs compatible with the Integrated Surety Architecture program.

(2) A program described in this subsection is a program of the Administration that is a warhead development program, a life extension program, or a warhead major alteration program.

(c) Determination

(1) If, on a case-by-case basis, the Administrator determines that a shipment under subsection (a) will not incorporate some or all of the surety technologies described in such subsection, or that a program under subsection (b) will not incorporate some or all of the integrated designs described in such subsection, the Administrator shall submit such determination to the congressional defense committees, including the results of an analysis conducted pursuant to paragraph (2).

(2) Each determination made under paragraph (1) shall be based on a documented, system risk analysis that considers security risk reduction, operational impacts, and technical risk.

(d) Termination

The requirements of subsections (a) and (b) shall terminate on December 31, 2029.

(Pub. L. 107-314, div. D, title XLII, §4222, as added Pub. L. 115-91, div. C, title XXXI, §3112(a), Dec. 12, 2017, 131 Stat. 1883.)

PART B—TRITIUM

§ 2541. Tritium production program

(a) Establishment of program

The Secretary of Energy shall establish a tritium production program that is capable of meeting the tritium requirements of the United States for nuclear weapons.

(b) Location of tritium production facility

The Secretary shall locate any new tritium production facility of the Department of Energy at the Savannah River Site, South Carolina.

(c) In-reactor tests

The Secretary may perform in-reactor tests of tritium target rods as part of the activities carried out under the commercial light water reactor program.

(Pub. L. 107-314, div. D, title XLII, §4231, formerly Pub. L. 104-106, div. C, title XXXI, §3133, Feb. 10, 1996, 110 Stat. 618; renumbered Pub. L. 107-314, div. D, title XLII, §4231, and amended Pub. L. 108-136, div. C, title XXXI, §3141(e)(16), Nov. 24, 2003, 117 Stat. 1761; Pub. L. 112-239, div. C, title XXXI, §3131(h), Jan. 2, 2013, 126 Stat. 2182; Pub. L. 113-66, div. C, title XXXI, §3146(c)(11)(A), Dec. 26, 2013, 127 Stat. 1075.)

CODIFICATION

Section was formerly set out as a note under section 2121 of Title 42, The Public Health and Welfare, prior to renumbering by Pub. L. 108-136.

Subsec. (b) of section 2543 of this title, which was transferred to the end of this section and redesignated subsec. (c) by Pub. L. 113-66, §3146(c)(11)(A), was based on Pub. L. 107-314, div. D, title XLII, §4233, formerly Pub. L. 104-201, div. C, title XXXI, §3133(c), (d), Sept. 23, 1996, 110 Stat. 2830; renumbered Pub. L. 107-314, div. D, title XLII, §4233, and amended Pub. L. 108-136, div. C, title XXXI, §3141(e)(18), Nov. 24, 2003, 117 Stat. 1761.

AMENDMENTS

2013—Pub. L. 112-239 amended section generally. Prior to amendment, section related to tritium production program.

Subsec. (c). Pub. L. 113-66 transferred subsec. (b) of section 2543 of this title to the end of this section and redesignated it subsec. (c). See Codification note above.

2003—Subsec. (a)(1). Pub. L. 108-136, §3141(e)(16)(D)(i), substituted “February 10, 1996” for “the date of the enactment of this Act”.

Subsec. (b). Pub. L. 108-136, §3141(e)(16)(D)(ii), inserted “of the National Defense Authorization Act for Fiscal Year 1996 (Public Law 104-106)” after “section 3101”.

Subsecs. (d)(2)(B), (e). Pub. L. 108-136, §3141(e)(16)(D)(i), substituted “February 10, 1996” for “the date of the enactment of this Act”.

§ 2542. Tritium recycling

(a) In general

Except as provided in subsection (b), the following activities shall be carried out at the Savannah River Site, South Carolina:

(1) All tritium recycling for weapons, including tritium refitting.

(2) All activities regarding tritium formerly carried out at the Mound Plant, Ohio.

(b) Exception

The following activities may be carried out at the Los Alamos National Laboratory, New Mexico:

(1) Research on tritium.

(2) Work on tritium in support of the defense inertial confinement fusion program.

(3) Provision of technical assistance to the Savannah River Site regarding the weapons surveillance program.

(Pub. L. 107-314, div. D, title XLII, §4232, formerly Pub. L. 104-106, div. C, title XXXI, §3136, Feb. 10, 1996, 110 Stat. 620; renumbered Pub. L. 107-314, div. D, title XLII, §4232, by Pub. L. 108-136, div. C, title XXXI, §3141(e)(17), Nov. 24, 2003, 117 Stat. 1761.)

§ 2543. Repealed. Pub. L. 113-66, div. C, title XXXI, § 3146(c)(11)(B), Dec. 26, 2013, 127 Stat. 1075

Section, Pub. L. 107-314, div. D, title XLII, §4233, formerly Pub. L. 104-201, div. C, title XXXI, §3133(c), (d), Sept. 23, 1996, 110 Stat. 2830; renumbered Pub. L. 107-314, div. D, title XLII, §4233, and amended Pub. L. 108-136, div. C, title XXXI, §3141(e)(18), Nov. 24, 2003, 117 Stat. 1761; Pub. L. 113-66, div. C, title XXXI, §3146(c)(11)(A), Dec. 26, 2013, 127 Stat. 1075, related to tritium production.

§ 2544. Modernization and consolidation of tritium recycling facilities

The Secretary of Energy shall carry out activities at the Savannah River Site, South Carolina, to—

(1) modernize and consolidate the facilities for recycling tritium from weapons; and