- (C) neutrons:
- (D) gamma rays; or
- (E) accelerated ions or subatomic particles from accelerator machines.
- (17) The term "specified cancer" means any of the following:
 - (A) A specified disease, as that term is defined in section 4(b)(2) of the Radiation Exposure Compensation Act (42 U.S.C. 2210 note).
 - (B) Bone cancer.
 - (C) Renal cancers.
 - (D) Leukemia (other than chronic lymphocytic leukemia), if initial occupational exposure occurred before 21 years of age and onset occurred more than two years after initial occupational exposure.

(Pub. L. 106-398, §1 [div. C. title XXXVI, §3621]. Oct. 30, 2000, 114 Stat. 1654, 1654A-498; Pub. L. $107\text{--}20, \ \text{title II}, \ \S 2403(a), \ \text{July 24}, \ 2001, \ 115 \ \text{Stat}.$ 175; Pub. L. 107–107, div. C, title XXXI, §3151(a)(1), (4)(C), Dec. 28, 2001, 115 Stat. 1371, 1374; Pub. L. 108-375, div. C, title XXXI, §§ 3166(b)(2), 3168(a), Oct. 28, 2004, 118 Stat. 2189,

References in Text

Executive Order No. 12344, referred to in par. (12)(A), is set out as a note under section 2511 of Title 50, War and National Defense.

Section 4(b)(2) of the Radiation Exposure Compensation Act, referred to in par. (17)(A), is section 4(b)(2) of Pub. L. 101-426, which is set out in a note under section 2210 of this title.

AMENDMENTS

2004-Par. (3). Pub. L. 108-375, §3168(a), amended par. (3) generally. Prior to amendment, par. (3) read as follows: "The term 'atomic weapons employee' means an individual employed by an atomic weapons employer during a period when the employer was processing or producing, for the use by the United States, material that emitted radiation and was used in the production of an atomic weapon, excluding uranium mining and milling.

Par. (14)(C)(ii). Pub. L. 108–375, §3166(b)(2), substituted "30 days" for "180 days". 2001—Par. (17)(C). Pub. L. 107–20 added subpar. (C).

Par. (17)(D). Pub. L. 107–107, $\S3151(a)(1)$, added subpar. (D).

Par. (18). Pub. L. 107-107, $\S3151(a)(4)(C)$, struck out par. (18) which read as follows: "The term 'survivor' means any individual or individuals eligible to receive compensation pursuant to section 8133 of title 5.

EFFECTIVE DATE OF 2001 AMENDMENTS

Pub. L. 107–107, div. C, title XXXI, \$3151(a)(4)(D), Dec. 28, 2001, 115 Stat. 1374, provided that: "The amendments made by this paragraph [amending this section and sections 7384s and 7384u of this title] shall take effect on July 1, 2001.

Pub. L. 107-20, title II, §2403(b), July 24, 2001, 115 Stat. 175, provided that: "This section [amending this section] shall be effective on October 1, 2001.'

§ 7384m. Expansion of list of beryllium vendors

Not later than December 31, 2002, the President may, in consultation with the Secretary of Energy, designate as a beryllium vendor for purposes of section 7384l(6) of this title any vendor, processor, or producer of beryllium or related products not previously listed under or designated for purposes of such section 7384l(6) of this title if the President finds that such vendor, processor, or producer has been engaged in activities related to the production or processing of beryllium for sale to, or use by, the Department of Energy in a manner similar to the entities listed in such section 7384l(6) of this title.

(Pub. L. 106-398, §1 [div. C, title XXXVI, §3622], Oct. 30, 2000, 114 Stat. 1654, 1654A-502.)

DELEGATION OF FUNCTIONS

For delegation of certain functions of the President under this section, see Ex. Ord. No. 13179, Dec. 7, 2000, 65 F.R. 77487, set out as a note under section 7384 of this title.

§ 7384n. Exposure in the performance of duty (a) Beryllium

A covered beryllium employee shall, in the absence of substantial evidence to the contrary, be determined to have been exposed to beryllium in the performance of duty for the purposes of the compensation program if, and only if, the covered beryllium employee was-

- (1) employed at a Department of Energy facility: or
- (2) present at a Department of Energy facility, or a facility owned and operated by a beryllium vendor, because of employment by the United States, a beryllium vendor, or a contractor or subcontractor of the Department of

during a period when beryllium dust, particles, or vapor may have been present at such facility.

(b) Cancer

An individual with cancer specified in subclause (I), (II), or (III) of section 7384l(9)(B)(ii) of this title shall be determined to have sustained that cancer in the performance of duty for purposes of the compensation program if, and only if, the cancer specified in that subclause was at least as likely as not related to employment at the facility specified in that subclause, as determined in accordance with the guidelines established under subsection (c).

(c) Guidelines

- (1) For purposes of the compensation program, the President shall by regulation establish guidelines for making the determinations required by subsection (b).
- (2) The President shall establish such guidelines after technical review by the Advisory Board on Radiation and Worker Health under section 73840 of this title.
 - (3) Such guidelines shall-
 - (A) be based on the radiation dose received by the employee (or a group of employees performing similar work) at such facility and the upper 99 percent confidence interval of the probability of causation in the radioepidemiological tables published under section 7(b) of the Orphan Drug Act (42 U.S.C. 241 note), as such tables may be updated under section 7(b)(3) of such Act from time to time;
 - (B) incorporate the methods established under subsection (d); and
 - (C) take into consideration the type of cancer, past health-related activities (such as smoking), information on the risk of developing a radiation-related cancer from workplace exposure, and other relevant factors.

- (4) In the case of an atomic weapons employee described in section 7384l(3)(B) of this title, the following doses of radiation shall be treated, for purposes of paragraph (3)(A) of this subsection, as part of the radiation dose received by the employee at such facility:
 - (A) Any dose of ionizing radiation received by that employee from facilities, materials, devices, or byproducts used or generated in the research, development, production, dismantlement, transportation, or testing of nuclear weapons, or from any activities to research, produce, process, store, remediate, or dispose of radioactive materials by or on behalf of the Department of Energy (except for activities covered by Executive Order No. 12344, dated February 1, 1982 (42 U.S.C. 7158 note) pertaining to the Naval Nuclear Propulsion Program).
 - (B) Any dose of ionizing radiation received by that employee from a source not covered by subparagraph (A) that is not distinguishable through reliable documentation from a dose covered by subparagraph (A).

(d) Methods for radiation dose reconstructions

- (1) The President shall, through any Federal agency (other than the Department of Energy) or official (other than the Secretary of Energy or any other official within the Department of Energy) that the President may designate, establish by regulation methods for arriving at reasonable estimates of the radiation doses received by an individual specified in subparagraph (B) of section 7384/(9) of this title at a facility specified in that subparagraph by each of the following employees:
 - (A) An employee who was not monitored for exposure to radiation at such facility.
 - (B) An employee who was monitored inadequately for exposure to radiation at such facility.
 - (C) An employee whose records of exposure to radiation at such facility are missing or incomplete.
- (2) The President shall establish an independent review process using the Advisory Board on Radiation and Worker Health to—
 - (A) assess the methods established under paragraph (1); and
 - (B) verify a reasonable sample of the doses established under paragraph (1).

(e) Information on radiation doses

- (1) The Secretary of Energy shall provide, to each covered employee with cancer specified in section 7384l(9)(B) of this title, information specifying the estimated radiation dose of that employee during each employment specified in section 7384l(9)(B) of this title, whether established by a dosimetry reading, by a method established under subsection (d), or by both a dosimetry reading and such method.
- (2) The Secretary of Health and Human Services and the Secretary of Energy shall each make available to researchers and the general public information on the assumptions, methodology, and data used in establishing radiation doses under subsection (d). The actions taken under this paragraph shall be consistent with the protection of private medical records.

(Pub. L. 106–398, §1 [div. C, title XXXVI, §3623], Oct. 30, 2000, 114 Stat. 1654, 1654A–502; Pub. L. 108–375, div. C, title XXXI, §3168(b), Oct. 28, 2004, 118 Stat. 2190.)

References in Text

Section 7(b) of the Orphan Drug Act, referred to in subsec. (c)(3)(A), is section 7(b) of Pub. L. 97–414, which is set out in a note under section 241 of this title.

AMENDMENTS

2004—Subsec. (c)(4). Pub. L. 108-375 added par. (4).

DELEGATION OF FUNCTIONS

For delegation of certain functions of the President under this section, see Ex. Ord. No. 13179, Dec. 7, 2000, 65 F.R. 77487, set out as a note under section 7384 of this title.

§ 7384o. Advisory Board on Radiation and Worker Health

(a) Establishment

- (1) Not later than 120 days after October 30, 2000, the President shall establish and appoint an Advisory Board on Radiation and Worker Health (in this section referred to as the "Board").
- (2) The President shall make appointments to the Board in consultation with organizations with expertise on worker health issues in order to ensure that the membership of the Board reflects a balance of scientific, medical, and worker perspectives.
- (3) The President shall designate a Chair for the Board from among its members.

(b) Duties

The Board shall advise the President on-

- (1) the development of guidelines under section 7384n(c) of this title;
- (2) the scientific validity and quality of dose estimation and reconstruction efforts being performed for purposes of the compensation program; and
- (3) such other matters related to radiation and worker health in Department of Energy facilities as the President considers appropriate.

(c) Staff

- (1) The President shall appoint a staff to facilitate the work of the Board. The staff shall be headed by a Director who shall be appointed under subchapter VIII of chapter 33 of title 5.
- (2) The President may accept as staff of the Board personnel on detail from other Federal agencies. The detail of personnel under this paragraph may be on a nonreimbursable basis.

(d) Expenses

Members of the Board, other than full-time employees of the United States, while attending meetings of the Board or while otherwise serving at the request of the President, while serving away from their homes or regular places of business, shall be allowed travel and meal expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5 for individuals in the Government serving without pay.

(e) Security clearances

(1) The Secretary of Energy shall ensure that the members and staff of the Board, and the con-