

# **Australian Radiation Protection and Nuclear Safety Regulations 1999**

Statutory Rules No. 37, 1999

made under the

Australian Radiation Protection and Nuclear Safety Act 1998

# Compilation No. 18

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# About this compilation

#### This compilation

This is a compilation of the *Australian Radiation Protection and Nuclear Safety Regulations* 1999 that shows the text of the law as amended and in force on 1 July 2017 (the *compilation date*).

The notes at the end of this compilation (the *endnotes*) include information about amending laws and the amendment history of provisions of the compiled law.

#### Uncommenced amendments

The effect of uncommenced amendments is not shown in the text of the compiled law. Any uncommenced amendments affecting the law are accessible on the Legislation Register (www.legislation.gov.au). The details of amendments made up to, but not commenced at, the compilation date are underlined in the endnotes. For more information on any uncommenced amendments, see the series page on the Legislation Register for the compiled law.

#### Application, saving and transitional provisions for provisions and amendments

If the operation of a provision or amendment of the compiled law is affected by an application, saving or transitional provision that is not included in this compilation, details are included in the endnotes.

#### **Editorial changes**

For more information about any editorial changes made in this compilation, see the endnotes.

#### **Modifications**

If the compiled law is modified by another law, the compiled law operates as modified but the modification does not amend the text of the law. Accordingly, this compilation does not show the text of the compiled law as modified. For more information on any modifications, see the series page on the Legislation Register for the compiled law.

#### **Self-repealing provisions**

If a provision of the compiled law has been repealed in accordance with a provision of the law, details are included in the endnotes.

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# Part 1—Preliminary

#### 1 Name of regulations

These regulations are the Australian Radiation Protection and Nuclear Safety Regulations 1999.

#### 3 Definitions

Note: A number of expressions used in these regulations are defined in the Act, including the following:

- (a) controlled apparatus;
- (b) controlled facility;
- (c) controlled material;
- (d) controlled person;
- (e) deal with.

In these regulations:

*absorbed dose* means the energy absorbed per unit mass by matter from ionizing radiation that impinges upon it.

Note: See the Planned Exposure Code.

Act means the Australian Radiation Protection and Nuclear Safety Act 1998.

action level means an intervention level applied to exposure to radiation.

*application fee*, for a licence, includes the ordinary costs of processing the application for the licence, but does not include any additional expenses that may be incurred by the CEO in respect of any peer review or consultancy that the CEO considers necessary for the purpose of deciding whether to issue the licence.

AS/NZS IEC 60825.1:2014 means the Australian/New Zealand Standard AS/NZS IEC 60825.1:2014 Safety of laser products, Part 1: Equipment classification and requirements, published jointly by, or on behalf of, Standards Australia and Standards New Zealand, as existing on 1 July 2017.

AS/NZS IEC 60825.2:2011 means the Australian/New Zealand Standard AS/NZS IEC 60825.2:2011 Safety of laser products, Part 2: Safety of optical fibre communication systems (OFCS), published jointly by, or on behalf of, Standards Australia and Standards New Zealand, as existing on 1 July 2017.

**AS/NZS IEC 62471:2011** means the Australian/New Zealand Standard AS/NZS IEC 62471:2011 *Photobiological safety of lamp and lamp systems*, published jointly by, or on behalf of, Standards Australia and Standards New Zealand, as existing on 1 July 2017.

*committed effective dose* means the effective dose that a person is committed to receive from an intake of radioactive material.

#### Regulation 3

Note: See the Planned Exposure Code.

*Committee* means the Radiation Health Committee or the Nuclear Safety Committee.

*Council* means the Radiation Health and Safety Advisory Council created by section 19 of the Act.

**Disposal Code of Practice** means the Code of Practice for the Disposal of Radioactive Wastes by the User (1985), as existing on 1 July 2017.

Note: The Disposal Code of Practice could in 2017 be viewed on ARPANSA's website (http://www.arpansa.gov.au).

dose includes absorbed dose, equivalent dose or effective dose.

Note: See the Planned Exposure Code.

*effective dose* means a measure of dose that takes into account both the type of radiation involved and the radiological sensitivities of the organs and tissues irradiated.

Note: See the Planned Exposure Code.

*equivalent dose* means a measure of dose in organs and tissues that takes into account the type of radiation involved.

Note: See the Planned Exposure Code.

**excluded exposure**, for the definition of **occupational exposure**, means the component of exposure which arises from natural background radiation, provided that:

- (a) any relevant action level or levels for the workplace are not exceeded; and
- (b) the CEO does not prohibit the exclusion of that component.

exposure means the circumstance of being exposed to radiation.

*external exposure* means exposure to radiation from a source outside the human body.

*holder*, of a licence, means the controlled person to whom the licence is issued.

*irradiator* means a device that contains a controlled material that gives a controlled dose of radiation to any target material.

#### medical exposure means:

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- (a) the exposure of a person to radiation received:
  - (i) as a patient undergoing medical diagnosis or therapy; or
  - (ii) as a volunteer in medical research; or
- (b) non-occupational exposure received as a consequence of assisting an exposed patient.

Mining and Mineral Processing Code and Safety Guide means the Code of Practice and Safety Guide for Radiation Protection and Radioactive Waste

Australian Radiation Protection and Nuclear Safety Regulations 1999

Management in Mining and Mineral Processing (2005) (Radiation Protection Series No. 9), as existing on 1 July 2017.

Note: The Mining and Mineral Processing Code and Safety Guide could in 2017 be viewed on ARPANSA's website (http://www.arpansa.gov.au).

*occupational exposure* means exposure of a person to radiation that:

- (a) occurs in the course of the person's work; and
- (b) is not excluded exposure.

**Planned Exposure Code** means the Code for Radiation Protection in Planned Exposure Situations (2016) (Radiation Protection Series C-1), as existing on 1 July 2017.

Note: The Planned Exposure Code could in 2017 be viewed on ARPANSA's website (http://www.arpansa.gov.au).

*public exposure* means the exposure of a person to radiation that is neither occupational exposure nor medical exposure.

*same location*, in relation to a controlled apparatus or controlled material: see subregulation 40D(3).

*sealed source* means controlled material permanently contained in a capsule, or closely bound in a solid form, that is strong enough to be leak-tight for:

- (a) the intended use of the controlled material; and
- (b) any foreseeable abnormal events likely to affect the controlled material.

Security Code of Practice means the Code of Practice for the Security of Radioactive Sources (2007) (Radiation Protection Series No. 11), as existing on 1 July 2017.

Note: The Security Code of Practice could in 2017 be viewed on ARPANSA's website (http://www.arpansa.gov.au).

**Transport Code** means the Code for the Safe Transport of Radioactive Material (2014) (Radiation Protection Series C-2), as existing on 1 July 2017.

Note: The Transport Code could in 2017 be viewed on ARPANSA's website (http://www.arpansa.gov.au).

unsealed source means controlled material that is not a sealed source.

waste package, in relation to controlled material contained or to be contained in a radioactive waste storage facility or a radioactive waste disposal facility, means the waste form of the controlled material and its container as prepared for handling, transport, storage or disposal.

#### 3A Parent nuclides and progeny nuclides included in secular equilibrium

(1) For these regulations, in determining the activity of a parent nuclide mentioned in an item in the table in clause 3 of Schedule 2, include the activity of any progeny nuclide mentioned in that item that is included in secular equilibrium with the parent nuclide.

### Regulation 3A

Note: Parent nuclides are also marked <sup>a</sup> in the table in clause 2 of Schedule 2.

(2) Except for subregulation (1), the activity of a progeny nuclide mentioned in an item in the table in clause 3 of Schedule 2 is taken to be nil when included in secular equilibrium with a parent nuclide mentioned in that item.

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# Part 1A—ARPANSA

#### **3B** Functions of the CEO

For the purposes of paragraph 15(1)(i) of the Act, the following are functions of the CEO:

- (a) to grant permissions to export from Australia high activity radioactive sources under regulation 9AD of the *Customs (Prohibited Exports) Regulations 1958*;
- (b) to grant permissions to import into Australia radioactive substances under regulation 4R of the *Customs (Prohibited Imports) Regulations 1956*.

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# Part 2—Controlled apparatus and facilities

# **Division 1—Controlled apparatus**

#### 4 Kinds of apparatus that are controlled apparatus

- (1) *Controlled apparatus* is defined in section 13 of the Act, and includes an apparatus, prescribed by the regulations, that produces harmful non-ionizing radiation when energised.
- (2) Apparatus is controlled apparatus if:
  - (a) the apparatus is:
    - (i) a magnetic field non-destructive testing device; or
    - (ii) an induction heater or induction furnace; or
    - (iii) an industrial radiofrequency heater or welder; or
    - (iv) a radiofrequency plasma tube; or
    - (v) microwave or radiofrequency diathermy equipment; or
    - (vi) an industrial microwave or radiofrequency processing system; or
    - (vii) an optical source, other than a laser product, emitting ultraviolet radiation, infrared or visible light; or
    - (viii) a laser product with an accessible emission that exceeds the accessible emission limits of a Class 3R laser product, as set out in AS/NZS IEC 60825.1:2014; or
    - (ix) an optical fibre communication system exceeding Hazard Level 3R, as defined by AS/NZS IEC 60825.2:2011; and
  - (b) it produces non-ionizing radiation that could lead to a person being exposed to radiation levels in excess of the exposure limits mentioned in the table in clause 1 of Schedule 1; and
  - (c) the excess levels of radiation mentioned in paragraph (b) are readily accessible to persons:
    - (i) in the course of intended operations or procedures of the apparatus; or
    - (ii) under a reasonably foreseeable abnormal event involving the apparatus; or
    - (iii) under a reasonably foreseeable single element failure of the apparatus; or
    - (iv) without the use of tools or other specialised equipment required to remove protective barriers or access panels.
- (3) However, the CEO may declare, in writing, on a case by case basis, that an apparatus covered by subregulation (2) is not a controlled apparatus under that subregulation.
  - Note: A decision to refuse to make a declaration is reviewable under regulation 66.
- (3A) The CEO must not make a declaration under subregulation (3) unless the CEO is satisfied that:

- (a) the apparatus does not pose an unacceptable potential hazard to the health and safety of people or to the environment; or
- (b) it would be inappropriate, in all the circumstances, for the apparatus to be a controlled apparatus.
- (4) The CEO must publish the declaration in the *Gazette* as soon as practicable after making it.

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#### **Division 2—Controlled facilities**

#### 6 Prescribed radiation facility

- (1) For the definition of *prescribed radiation facility* in section 13 of the Act, the following facilities and installations are prescribed:
  - (a) a particle accelerator that:
    - (i) has, or is capable of having, a beam energy greater than 1 MeV; or
    - (ii) can produce neutrons;
  - (b) an irradiator that contains more than 10<sup>15</sup> Bq of a controlled material;
  - (c) an irradiator that contains more than  $10^{13}$  Bq but not more than  $10^{15}$  Bq of a controlled material and:
    - (i) does not include shielding as an integral part of its construction; or
    - (ii) if it does include shielding as an integral part of its construction—the shielding does not prevent a person from being exposed to the source; or
    - (iii) if it does include shielding as an integral part of its construction—has a source that is not inside shielding during the operation of the irradiator;
  - (d) a facility (other than a nuclear installation) used for the production, processing, use, storage, management or disposal of:
    - (i) unsealed sources for which the result worked out using the steps mentioned in subregulation (2) is greater than 10<sup>6</sup>; or
    - (ii) sealed sources for which the result worked out using the steps mentioned in subregulation (2) is greater than 10<sup>9</sup>.

Note: A prescribed radiation facility is a controlled facility, see the definition of *controlled facility* in section 13 of the Act.

- (2) For subparagraphs (1)(d)(i) and (ii), the steps are:
  - (a) divide the activity of each nuclide in the sources by the activity value mentioned in an item in the table in clause 2 of Schedule 2 for the nuclide; and
  - (b) if there is more than 1 nuclide in the sources—add the result for each nuclide worked out under paragraph (a).
- (3) However, the CEO may declare, in writing, on a case by case basis, that a facility is not a prescribed radiation facility.

Note: A decision to refuse to make a declaration is reviewable under regulation 66.

- (3A) The CEO must not make a declaration under subregulation (3) unless the CEO is satisfied that:
  - (a) the facility does not pose an unacceptable potential hazard to the health and safety of people or to the environment; and
  - (b) it would be inappropriate, in all the circumstances, for the facility to be a prescribed radiation facility.

(4) The CEO must publish the declaration in the *Gazette* as soon as practicable after making it.

### 6AA Prescribed legacy site

For the definition of *prescribed legacy site* in section 13 of the Act, the place known as the Little Forest Legacy Site, as shown labelled as "LFLS" on site plan drawing No. AO SK 127039 revision G dated 1 July 2015, Little Forest Road, Lucas Heights, in the local government area of Sutherland, Parish of Holsworthy, County of Cumberland, erected on part of the land contained in Certificate of Title folio identifier 1/106967, is prescribed.

Note 1: Site plan drawing No. AO SK 127039 revision G could in 2016 be viewed on the Australian Nuclear Science and Technology Organisation's website (http://www.ansto.gov.au).

Note 2: The Little Forest Legacy Site was previously known as the Little Forest Burial Ground.

Note 3: A prescribed legacy site is a controlled facility, see the definition of *controlled facility* in section 13 of the Act.

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# **Division 2A—Controlled person**

### **6A Prescribed Commonwealth place**

For paragraph (d) of the definition of *controlled person* in section 13 of the Act, the place known as Building 64, as shown on site plan drawing No. A3E 111993 dated November 1999, Lucas Heights Science and Research Centre, New Illawarra Road, Lucas Heights, in the local government area of Sutherland, Parish of Eckersley, County of Cumberland, erected on part of the land contained in Certificate of Title folio identifier 1/89876, is a prescribed Commonwealth place.

### **Division 3—Prescribed activity levels**

# 7 Nuclear installation—prescribed activity level for radioactive waste storage facilities

- (1) For paragraph (c) of the definition of *nuclear installation* in section 13 of the Act, the activity level, for a radioactive waste storage facility that contains, or is designed to contain, controlled materials, is:
  - (a) if the facility contains, or is designed to contain, unsealed sources, and the result worked out for a waste package of the unsealed sources, using the steps mentioned in subregulation (2) (the *activity concentration value steps*), is greater than 10<sup>4</sup>—the level at which the result worked out for the unsealed sources in the facility, using the steps mentioned in subregulation (3) (the *activity value steps*), is 10<sup>6</sup>; or
  - (b) if the facility contains, or is designed to contain, sealed sources—the level at which the result worked out for the sealed sources in the facility, using the steps mentioned in subregulation (3) (the *activity value steps*), is 10<sup>10</sup>.

Note: Under section 13 of the Act, a radioactive waste storage facility with an activity that is greater than the activity level prescribed is a nuclear installation.

- (2) For paragraph (1)(a), the activity concentration value steps are:
  - (a) divide the activity of each nuclide in the waste package by the mass of the waste package; and
  - (b) divide the result for each nuclide worked out under paragraph (a) by the activity concentration value mentioned in an item in the table in clause 2 of Schedule 2 for the nuclide; and
  - (c) if there is more than 1 nuclide in the waste package—add the result for each nuclide worked out under paragraph (b).
- (3) For paragraphs (1)(a) and (b), the activity value steps are:
  - (a) divide the activity of each nuclide in the sources in the facility by the activity value mentioned in an item in the table in clause 2 of Schedule 2 for the nuclide; and
  - (b) if there is more than 1 nuclide in the sources—add the result for each nuclide worked out under paragraph (a).

# 8 Nuclear installation—prescribed activity level for radioactive waste disposal facilities

- (1) This regulation applies to a radioactive waste disposal facility if:
  - (a) it contains, or is designed to contain, controlled materials; and
  - (b) the result worked out for a waste package of the controlled materials, using the steps mentioned in subregulation (3) (the *activity concentration value steps*), is greater than  $10^2$ .
- (2) For paragraph (c) of the definition of *nuclear installation* in section 13 of the Act, the activity level, for a radioactive waste disposal facility to which this

#### Regulation 11

regulation applies, is the level at which the result worked out for the controlled materials in the facility, using the steps mentioned in subregulation (4) (the *activity value steps*), is  $10^8$ .

Note: Under section 13 of the Act, a radioactive waste disposal facility with an activity that is greater than the activity level prescribed is a nuclear installation.

- (3) For paragraph (1)(b), the activity concentration value steps are:
  - (a) divide the activity of each nuclide in the waste package by the mass of the waste package; and
  - (b) divide the result for each nuclide worked out under paragraph (a) by the activity concentration value mentioned in an item in the table in clause 2 of Schedule 2 for the nuclide; and
  - (c) if there is more than 1 nuclide in the waste package—add the result for each nuclide worked out under paragraph (b).
- (4) For subregulation (2), the activity value steps are:
  - (a) divide the activity of each nuclide in the controlled materials in the facility by the activity value mentioned in an item in the table in clause 2 of Schedule 2 for the nuclide; and
  - (b) if there is more than 1 nuclide in the controlled materials—add the result for each nuclide worked out under paragraph (a).

# 11 Nuclear installation—prescribed activity level for facilities for production of radioisotopes

- (1) For paragraph (d) of the definition of *nuclear installation* in section 13 of the Act, the activity level, for a facility for production of radioisotopes, is:
  - (a) if the facility contains, or is designed to contain, unsealed sources—the level at which the result worked out for the unsealed sources using the steps mentioned in subregulation (2) is 10<sup>6</sup>; or
  - (b) if the facility contains, or is designed to contain, sealed sources—the level at which the result worked out for the sealed sources using the steps mentioned in subregulation (2) is  $10^{10}$ .

Note: Under section 13 of the Act, a facility for production of radioisotopes with an activity that is greater than the activity level prescribed is a nuclear installation.

- (2) For paragraphs (1)(a) and (b), the steps are:
  - (a) divide the activity of each nuclide in the sources by the activity value mentioned in an item in the table in clause 2 of Schedule 2 for the nuclide; and
  - (b) if there is more than 1 nuclide in the sources—add the result for each nuclide worked out under paragraph (a).

# Part 3—The radiation health and safety advisory council and advisory committees

# **Division 1—Radiation Health and Safety Advisory Council**

#### 12 Radiation Health and Safety Advisory Council

- (1) The Radiation Health and Safety Advisory Council is established under section 19 of the Act.
- (2) Each member of the Council, other than the CEO, is appointed under subsection 21(2) of the Act.
- (3) The Chair of the Council is appointed under subsection 21(6) of the Act.
- (4) Under section 29 of the Act, the regulations may prescribe matters relating to the Council, including, but not limited to, the term of appointment of members, resignation of members, disclosure of interests by members and procedural matters.
- (5) This Division sets out some of the matters relating to the Council.

### 13 Term of appointment

- (1) A Council member is appointed for the term stated in the member's appointment.
- (2) The term stated in the appointment must not be greater than 3 years.
- (3) However, a Council member may be reappointed for further terms of up to 3 years.
- (4) The Chair of the Council is appointed as Chair for the term stated in the Chair's appointment.
- (5) The Chair of the Council may be reappointed for further terms.

#### 14 Resignation

A Council member may resign by signed notice of resignation given to the Minister.

#### 15 Disclosure of interests

A Council member must give written notice to the Minister of all interests, pecuniary or otherwise, that the member has or acquires and that could conflict with the proper performance of the member's functions.

#### 16 Termination of appointment

- (1) The Minister may terminate a Council member's appointment for:
  - (a) physical or mental incapacity; or
  - (b) misbehaviour; or
  - (c) incompetence; or
  - (d) inefficiency; or
  - (e) failing to comply, either recklessly or intentionally, with regulation 15.
- (2) The Minister must terminate the member's appointment if the member:
  - (a) becomes bankrupt; or
  - (b) applies to take the benefit of any law for the relief of bankrupt or insolvent debtors; or
  - (c) compounds with his or her creditors; or
  - (d) assigns his or her remuneration for the benefit of his or her creditors; or
  - (e) is convicted of an offence punishable by imprisonment for 1 year or longer; or
  - (f) is absent without leave of absence from 3 consecutive meetings of the Council

#### 17 Leave of absence

- (1) The Minister may grant leave of absence to the Chair of the Council.
- (2) The Chair may grant leave of absence to another Council member.

#### 18 Council procedures generally

- (1) In performing its functions, the Council:
  - (a) must act according to these regulations; and
  - (b) must act with as little formality and as quickly as the requirements of these regulations, and a proper consideration of the issues before the Council, allow; and
  - (c) is not bound by the rules of evidence; and
  - (d) may obtain information about an issue in any way it considers appropriate; and
  - (e) may receive information or submissions orally or in writing; and
  - (f) may consult anyone it considers appropriate.
- (2) However, the Council must comply with any directions given, in writing, to the Council by the Minister or the CEO about the Council's performance of its functions.

#### 19 Meetings

(1) The Minister or the CEO may, by written notice to the Council, direct the Council to hold meetings at the times and places, and to deal with matters in the manner, stated in the notice.

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- (2) If the Minister or the CEO has not given written notice to the Council under subregulation (1), the Council may hold the meetings at the times and places, and may deal with matters in the manner, that the Council considers necessary for the performance of its functions.
- (3) Subject to these regulations, the procedure of a Council's meeting is as decided by the Council.

#### 20 Presiding member

- (1) The Chair must preside at a Council meeting at which the Chair is present.
- (2) If the Chair is absent, the member chosen by the members present must preside.

### 21 Quorum

At a Council meeting, a majority of members forms a quorum.

#### 22 Voting

A decision made at a Council meeting by a majority of the votes of the members present and voting is a decision of the Council.

#### 23 Records and reports

- (1) The Council must keep a record of its proceedings.
- (2) The Council must prepare an annual report for the CEO on the Council's activities for the year.
- (3) The Council must prepare any other report that is requested by the Minister or the CEO.

# Division 2—Radiation Health Committee and Nuclear Safety Committee

#### 24 Radiation Health Committee and Nuclear Safety Committee

- (1) The Radiation Health Committee is established under section 22 of the Act and the Nuclear Safety Committee is established under section 25 of the Act.
- (2) Each member of the Radiation Health Committee, other than the CEO, is appointed under subsection 24(2) of the Act and the Chair of that Committee is appointed under subsection 24(6) of the Act.
- (3) Each member of the Nuclear Safety Committee, other than the CEO, is appointed under subsection 27(2) of the Act and the Chair of that Committee is appointed under subsection 27(6) of the Act.
- (4) Under section 29 of the Act, the regulations may prescribe matters relating to the Radiation Health Committee and the Nuclear Safety Committee, including, but not limited to, the term of appointment of members, resignation of members, disclosure of interests by members and procedural matters.
- (5) This Division sets out some of the matters relating to the Committees.

#### 25 Term of appointment

- (1) A Committee member is appointed for the term stated in the member's appointment.
- (2) The term stated in the appointment must not be greater than 3 years.
- (3) However, a Committee member may be reappointed for further terms of up to 3 years.
- (4) The Chair of a Committee is appointed as Chair for the term stated in the Chair's appointment.
- (5) The Chair of a Committee may be reappointed for further terms.

#### 26 Resignation

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A Committee member may resign by signed notice of resignation given to the CEO.

#### 27 Disclosure of interests

A Committee member must give written notice to the CEO of all interests, pecuniary or otherwise, that the member has or acquires and that could conflict with the proper performance of the member's functions.

#### 28 Termination of appointment

- (1) The CEO may terminate a Committee member's appointment for:
  - (a) physical or mental incapacity; or
  - (b) misbehaviour; or
  - (c) incompetence; or
  - (d) inefficiency; or
  - (e) failing to comply, either recklessly or intentionally, with regulation 27.
- (2) The CEO must terminate a Committee member's appointment if the member:
  - (a) becomes bankrupt; or
  - (b) applies to take the benefit of any law for the relief of bankrupt or insolvent debtors; or
  - (c) compounds with his or her creditors; or
  - (d) assigns his or her remuneration for the benefit of his or her creditors; or
  - (e) is convicted of an offence punishable by imprisonment for 1 year or longer; or
  - (f) is absent without leave of absence from 3 consecutive meetings of the Committee.

#### 29 Leave of absence

- (1) The CEO may grant leave of absence to the Chair of a Committee.
- (2) The Chair may grant leave of absence to another Committee member.

#### 30 Committee procedures generally

- (1) In performing its functions, a Committee:
  - (a) must act according to these regulations; and
  - (b) must act with as little formality and as quickly as the requirements of these regulations, and a proper consideration of the issues before the Committee, allow; and
  - (c) is not bound by the rules of evidence; and
  - (d) may obtain information about an issue in any way it considers appropriate; and
  - (e) may receive information or submissions orally or in writing; and
  - (f) may consult anyone it considers appropriate.
- (2) However, the Committee must comply with any directions given, in writing, to the Committee by the CEO about the Committee's performance of its functions.

#### 31 Meetings

(1) The CEO may, by written notice to the Committee, direct the Committee to hold meetings at the times and places, and to deal with matters in the manner, stated in the notice.

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#### Regulation 32

- (2) If the CEO has not given written notice to the Committee under subregulation (1), the Committee may hold the meetings at the times and places, and may deal with matters in the manner, that the Committee considers necessary for the performance of its functions.
- (3) Subject to these regulations, the procedure of a Committee's meeting is as decided by the Committee.

#### 32 Presiding member

- (1) The Chair must preside at a Committee meeting at which the Chair is present.
- (2) If the Chair is absent, the member chosen by the members present must preside.

#### 33 Quorum

At a Committee meeting, a majority of members forms a quorum.

#### 34 Voting

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A decision made at a Committee meeting by a majority of the votes of the members present and voting is a decision of the Committee.

#### 35 Records and reports

- (1) A Committee must keep a record of its proceedings.
- (2) A Committee must prepare any report that is requested by the CEO.
- (3) If a Committee prepares a report on any matter, it must give copies of the report to the CEO.

### Part 4—Licences

# **Division 1—Exemptions**

#### 37 Exempt people (facility licence)

(1) The CEO may declare, in writing, on a case by case basis, that conduct of a kind mentioned in paragraph 30(1)(a), (b), (c), (d), (e) or (ea) of the Act by a specified controlled person in relation to a specified controlled facility (including any future conduct by the controlled person in relation to the controlled facility) does not, or will not pose, an unacceptable potential hazard to the health and safety of people or to the environment.

Note: A decision to refuse to make a declaration is reviewable under regulation 66.

- (2) The CEO may also state in the declaration that:
  - (a) the declaration has effect only if circumstances mentioned in the declaration exist; or
  - (b) the declaration does not have effect if circumstances mentioned in the declaration exist.
- (3) The CEO must publish the declaration in the *Gazette* as soon as practicable after making it.
- (4) For paragraph 30(1)(g) of the Act, a controlled person is exempted in relation to conduct of a kind mentioned in paragraph 30(1)(a), (b), (c), (d), (e) or (ea) of the Act in relation to a controlled facility if:
  - (a) the controlled person, the kind of conduct and the controlled facility are specified in a declaration that is made and published under this regulation; and
  - (b) the declaration is in effect at the time the conduct is undertaken.

#### 37A Notice of intention to make a declaration

- (1) Before making a declaration under subregulation 37(1), the CEO must publish in the *Gazette* a notice of his or her intention to make the declaration.
- (2) The notice must include:
  - (a) a copy of the proposed declaration; or
  - (b) a description of the controlled person, the kind of conduct and the controlled facility that are to be the subject of the declaration, and the text of any statements permitted under subregulation 37(2).

#### 38 Prescribed dealings (source licence)

(1) For paragraph 31(1)(b) of the Act, a dealing that is described in an item in the table in clause 1 of Schedule 2 is an exempt dealing.

#### Regulation 38

- (3) However, the CEO may declare, in writing, on a case by case basis, that a dealing described in an item in the table in clause 1 of Schedule 2 is a dealing for which:
  - (a) the annual effective dose to an individual during normal operations is likely to be greater than 10 micro.Sv; or
  - (b) an accident, misuse or exceptional circumstance affecting the dealing is likely to produce a dose greater than the effective dose limit worked out under regulation 59 or 60.

Note: A decision to refuse to make a declaration is reviewable under regulation 66.

- (4) A dealing mentioned in a declaration under subregulation (3) is not exempt.
- (5) Also, the CEO may declare, in writing, on a case by case basis, that a dealing that is not described in an item in the table in clause 1 of Schedule 2 is a dealing for which:
  - (a) the annual effective dose to an individual during normal operations is likely to be not more than 10 micro.Sv; or
  - (b) an accident, misuse or exceptional circumstance affecting the dealing is not likely to produce a dose greater than the effective dose limit worked out under regulation 59 or 60.

Note: A decision to refuse to make a declaration is reviewable under regulation 66.

- (6) Also, the CEO may declare, in writing, on a case by case basis, that:
  - (a) a dealing that is not described in an item in the table in clause 1 of Schedule 2 is a dealing involving:
    - (i) a radiological emergency or its after effects; or
    - (ii) the after effects of a previous dealing; or
    - (iii) naturally occurring materials; or
    - (iv) bulk material with a mass of more than 1,000 kg; and
  - (b) an assessment of the magnitude of individual doses, the number of people exposed, and the likelihood that potential exposure will actually occur, justify the dealing being exempt.

Note: A decision to refuse to make a declaration is reviewable under regulation 66.

- (7) A dealing is exempt if it is mentioned in a declaration for subregulation (5) or (6).
- (8) The CEO must publish a declaration under subregulation (3), (5) or (6) in the *Gazette* as soon as practicable after making it.

# **Division 2—Applications for licences**

#### 39 Application form

- (1) Under paragraph 34(a) of the Act, an application for a facility licence, or a source licence, must be in a form approved by the CEO.
- (2) The CEO may ask an applicant for a facility licence to give:
  - (a) some or all of the information and documents mentioned in the table in clause 1 of Schedule 3; and
  - (b) other information about the application if it is appropriate.
- (3) The CEO may ask an applicant for a source licence to give:
  - (a) some or all of the information and documents mentioned in the table in clause 2 of Schedule 3; and
  - (b) other information about the application if it is appropriate.
- (4) An application made for a Department or Commonwealth body must be made:
  - (a) in the name of the Department or body; and
  - (b) by:
    - (i) the Secretary, chief executive, or an equivalent person for the Department or body; or
    - (ii) another person authorised by the Secretary, chief executive or equivalent person.

#### 40 Issue of facility licence—prior notice and consultation

- (1) This regulation applies if the CEO receives an application for a facility licence.
- (2) As soon as practicable after receiving the application, the CEO must publish a notice in a daily newspaper circulating nationally, and in the *Gazette*, stating that the CEO intends to make a decision on the application.
- (3) If the application relates to a nuclear installation, the CEO must also include in the notice:
  - (a) an invitation to people and bodies to make submissions about the application; and
  - (b) a period for making submissions; and
  - (c) procedures for making submissions.

# Division 2A—Licence application fees

#### 40A Purpose of Division 2A

For paragraph 34(b) of the Act, this Division prescribes:

- (a) the fee that must accompany an application for a facility licence; and
- (b) the fee that must accompany an application for a source licence.

#### 40B Facility licences—nuclear installations

- (1) This regulation applies to an application for a facility licence that authorises persons to do a thing mentioned in an item in the table in clause 1 of Schedule 3A in relation to a controlled facility that is a nuclear installation.
- (2) The amount of the application fee for the licence is the amount mentioned in the item.

#### 40C Facility licences—prescribed radiation facilities

- (1) This regulation applies to an application for a facility licence that authorises persons to do a thing mentioned in paragraph 30(1)(a), (b), (c), (d) or (e) of the Act in relation to a controlled facility that is a prescribed radiation facility of a kind mentioned in an item in the table in clause 1 of Schedule 3B.
- (2) The amount of the application fee for the licence is:
  - (a) subject to paragraph (b) and subregulation (3), the amount mentioned in the item mentioned in subregulation (1); or
  - (b) if the thing authorised to be done by the licence is mentioned in an item in the table in clause 2 of Schedule 3B (the *clause 2 item*)—the amount mentioned in the clause 2 item.
- (3) If the application is for a licence that authorises persons to do 2 or more of the things mentioned in paragraphs 30(1)(a), (b), (c), (d) and (e) of the Act in relation to the controlled facility, the amount of the application fee for the licence is the sum of the amounts of the application fees that would have been applicable under subregulation (2) if applications for separate licences had been made for each of those things.

#### 40CA Facility licences—prescribed legacy sites

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- (1) This regulation applies to an application for a facility licence that authorises persons to do a thing mentioned in an item in the table in clause 1 of Schedule 3BA in relation to a controlled facility that is a prescribed legacy site.
- (2) The amount of the application fee for the licence is the amount mentioned in the item.

#### **40D Source licences**

- (1) This regulation applies to an application for a source licence that authorises persons to deal with a controlled apparatus or a controlled material of a kind mentioned in an item in a Group in the table in clause 1 of Schedule 3C.
- (2) The amount of the application fee for the licence is:
  - (a) for an application for a licence to deal with controlled apparatus or controlled materials in the same location:
    - (i) if the controlled apparatus or controlled materials are from the same Group—the amount mentioned in the item in the table in clause 2 of Schedule 3C that relates to the number of controlled apparatus or controlled materials from that Group; and
    - (ii) if the controlled apparatus or controlled materials are from 2 or more Groups—the sum of the amounts mentioned in the items in the table in clause 2 of Schedule 3C that relate to the number of controlled apparatus or controlled materials from each of those Groups; and
  - (b) for an application for a licence to deal with controlled apparatus or controlled materials in 2 or more locations—the sum of the amounts mentioned in the items in the table in clause 2 of Schedule 3C that relate to the number of controlled apparatus or controlled materials from each Group that are to be dealt with in each location.
- (3) A controlled apparatus or controlled material (the *first controlled apparatus or controlled material*) is in the *same location* as another controlled apparatus or controlled material (the *other controlled apparatus or controlled material*) if the first controlled apparatus or controlled material is in an area within a radius of 5 kilometres of the other controlled apparatus or controlled material.

# Division 3—Deciding whether to issue licence

#### 41 Issue of facility licence—matters to be taken into account by CEO

- (1) The CEO may issue a facility licence to a controlled person.
- (2) In deciding whether to issue the licence, the CEO must take into account the matters (if any) specified in the regulations.
- (3) The matters are:
  - (a) whether the application includes the information asked for by the CEO; and
  - (b) whether the information establishes that the proposed conduct can be carried out without undue risk to the health and safety of people, and to the environment; and
  - (c) whether the applicant has shown that there is a net benefit from carrying out the conduct relating to the controlled facility; and
  - (d) whether the applicant has shown that the magnitude of individual doses, the number of people exposed, and the likelihood that exposure will happen, are as low as reasonably achievable, having regard to economic and social factors; and
  - (e) whether the applicant has shown a capacity for complying with these regulations and the licence conditions that would be imposed under section 35 of the Act; and
  - (f) whether the application has been signed by an office holder of the applicant, or a person authorised by an office holder of the applicant; and
  - (g) if the application is for a facility licence for a nuclear installation—the content of any submissions made by members of the public about the application.

#### 42 Issue of source licence—matters to be taken into account by CEO

- (1) The CEO may issue a source licence to a controlled person.
- (2) In deciding whether to issue the licence, the CEO must take into account the matters (if any) specified in the regulations.
- (3) The matters are:

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- (a) whether the application includes the information asked for by the CEO; and
- (b) whether the information establishes that the controlled apparatus or material can be dealt with without undue risk to the health and safety of people, and to the environment; and
- (c) whether the applicant has shown that there is a net benefit from dealing with the controlled apparatus or material; and
- (d) whether the applicant has shown that the magnitude of individual doses, the number of people exposed, and the likelihood that exposure will happen, are as low as reasonably achievable, having regard to economic and social factors; and

- (e) whether the applicant has shown a capacity for complying with these regulations and the licence conditions that would be imposed under section 35 of the Act; and
- (f) whether the application has been signed by an office holder of the applicant, or a person authorised by an office holder of the applicant.

# **Division 4—Licence conditions**

#### 43 Purpose of Division

- (1) Under paragraph 35(1)(b) of the Act, a facility or source licence is subject to the conditions prescribed by the regulations.
- (2) This Division prescribes the conditions.

#### 44 Holder of a licence must prevent breaches of conditions

The holder of a licence must take all reasonably practicable steps to prevent breaches of licence conditions.

#### 45 Holder of a licence must investigate and rectify breaches of conditions

- (1) The holder of a licence must investigate suspected breaches of licence conditions.
- (2) If the holder of a licence identifies a breach, the holder of a licence must rectify the breach and any consequences of the breach as soon as reasonably practicable.
- (3) If the holder of a licence identifies a breach, the holder of a licence must also tell the CEO as soon as reasonably practicable.

#### 46 Holder of a licence to prevent, control and minimise accidents

- (1) The holder of a licence must take all reasonably practicable steps to prevent accidents involving controlled materials, controlled apparatus or controlled facilities described in the licence.
- (2) If an accident mentioned in subregulation (1) happens, the holder of a licence must:
  - (a) take all reasonably practicable steps to control the accident; and
  - (b) take all reasonably practicable steps to minimise the consequences of the accident, including injury to any person and damage or harm to the environment; and
  - (c) tell the CEO about the accident within 24 hours of it happening; and
  - (d) give the CEO a written report about the accident within 14 days of it happening.

#### 48 Compliance with Codes and Codes of Practice

Facility licences

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- (1) The holder of a facility licence must ensure that the following are complied with in relation to activities relating to the controlled facilities to which the licence relates:
  - (a) the Planned Exposure Code;

- (b) the Security Code of Practice;
- (c) the Transport Code.
- (2) If a facility licence authorises persons to deal with a controlled apparatus or a controlled material, the holder of the licence must ensure that the following are complied with in relation to dealings with the controlled apparatus or controlled material to which the licence relates:
  - (a) the Disposal Code of Practice;
  - (b) the Planned Exposure Code;
  - (c) the Security Code of Practice;
  - (d) the Transport Code.

#### Source licences

- (3) The holder of a source licence must ensure that the following are complied with in relation to dealings with the controlled apparatus or controlled material to which the licence relates:
  - (a) the Disposal Code of Practice;
  - (b) the Planned Exposure Code;
  - (c) the Security Code of Practice;
  - (d) the Transport Code.

Application of subregulations (2) and (3)

(4) Subregulations (2) and (3) do not apply in relation to dealings with an apparatus covered by paragraph (c) of the definition of *controlled apparatus* in section 13 of the Act.

Note: See subregulations 4(2) and (3).

#### 49 Managing safety

- (1) The holder of a facility licence must take all reasonably practicable steps to manage the safety of the facility, including:
  - (a) having in place plans and arrangements of the kind mentioned in item 4 of the table in clause 1 of Schedule 3; and
  - (b) ensuring that such plans and arrangements are implemented to the extent reasonably practicable.
- (2) The holder of a source licence must take all reasonably practicable steps to manage the safety of the source, including:
  - (a) having in place plans and arrangements of the kind mentioned in item 4 of the table in clause 2 of Schedule 3; and
  - (b) ensuring that such plans and arrangements are implemented to the extent reasonably practicable.

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#### 50 Reviewing and updating plans and arrangements for managing safety

- (1) The holder of a licence must, at least once every 3 years, review and update the plans and arrangements mentioned in regulation 49 in relation to the licence.
- (2) The holder of a licence must keep and maintain records of any changes made to the plans and arrangements.
- (3) Subregulation (1) does not apply to the extent that the licence makes other arrangements for a matter mentioned in that subregulation.

#### 51 CEO approval for certain changes

The holder of a licence must seek the CEO's prior approval to do either of the following things if it will have significant implications for safety:

- (a) change the details in the application for the licence;
- (b) modify the source or facility mentioned in the licence.

#### 52 Holder of a licence must tell CEO about other changes

- (1) The holder of a licence may do a thing mentioned in paragraph 51(a) or (b) that is unlikely to have significant implications for safety without the CEO's approval.
- (2) The holder of a licence must, within 3 months after doing a thing as mentioned in subregulation (1), tell the CEO about the thing.
- (3) However, subregulation (2) does not apply to the extent that the licence makes other arrangements for a matter mentioned in that subregulation.

# 53 Holder of a licence must tell CEO about movement of controlled apparatus, controlled materials and controlled facilities

- (1) The holder of a licence may only dispose of controlled apparatus or controlled materials with the approval of the CEO.
- (1A) The holder of a licence may only transfer controlled apparatus or controlled materials to another person (the *transferee*):
  - (a) with the approval of the CEO: or
  - (b) if both of the following apply:
    - (i) the transferee is the holder of a facility licence or a source licence;
    - (ii) the transferee's licence authorises the transferee to deal with the controlled apparatus or controlled materials.
  - (2) If the holder of a licence (the *transferor*) transfers controlled apparatus or controlled materials to another person (the *transferee*) under paragraph (1A)(b), the transferor must, within 7 days of the transfer, tell the CEO:
    - (a) that the transfer has happened; and
    - (b) the name of the transferee; and

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(c) the number of the licence held by the transferee; and

- (d) the location of the controlled apparatus or controlled materials after the transfer.
- (3) The holder of a licence must not dispose of, or transfer to the possession of another person, a controlled facility without the CEO's approval.
- (4) However, subregulations (1), (1A), (2) and (3) do not apply to the extent that the licence makes other arrangements for a matter mentioned in the subregulations.

#### 54 Approval required to construct safety item

The holder of a licence, or a person covered by a licence, must not construct an item that is important for safety, and that is identified in a safety analysis report, as part of the construction of a controlled facility, unless the CEO has given the holder, or the person, approval to construct the item.

#### 55 Approval required to load nuclear fuel

The holder of a licence, or a person covered by a licence, must not load nuclear fuel into a controlled facility, as part of the construction of the facility, unless the CEO has given the holder, or the person, approval to load the fuel.

# Division 5—Licence annual charges

#### 55A Time for payment of annual charge

The annual charge for a facility licence or a source licence must be paid:

- (a) for a licence held during the financial year ending on 30 June 2000—on or before 30 days after the commencement of this regulation; and
- (b) for a licence held during the financial year ending on 30 June 2001—on or before the later of:
  - (i) 30 days after the commencement of this regulation; and
  - (ii) 30 days after the date when the licence was issued; and
- (c) for a licence held during a later financial year—on or before the later of:
  - (i) 31 July in that financial year; and
  - (ii) 30 days after the date when the licence was issued.

#### 55B Pro-rating of annual charge

- (1) If a facility licence or source licence is not held during the whole of a financial year, the CEO may decide to make a pro-rata adjustment of the amount of the annual charge for the licence for the year.
- (2) If the CEO decides to make a pro-rata adjustment, the amount of the annual charge is:

$$AC \times \frac{M}{12}$$

where:

**AC** is the amount of the annual charge for the licence for the year.

**M** is the number of calendar months during which the licence is held.

Note: The amount of the annual charge for a facility licence or a source licence for a year is prescribed in the *Australian Radiation Protection and Nuclear Safety (Licence Charges) Regulations 2000*.

(3) For subregulation (2), a licence that is held for only part of a calendar month is taken to be held for the whole of the calendar month.

#### 55C Refund of annual charge

- (1) This regulation applies in relation to the annual charge for a facility licence or a source licence for a financial year if:
  - (a) either:
    - (i) the whole of the annual charge for the licence for the year has been paid; or

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- (ii) if regulation 55B applies in relation to the licence—the whole of the annual charge for the licence for the year, as adjusted under that regulation, has been paid; and
- (b) the licence is suspended, cancelled or surrendered before the end of the year.
- (2) The CEO may decide to refund to the holder of the licence part of the amount of the annual charge that has been paid for the licence for the year.
- (3) If the CEO decides to refund part of the amount of the annual charge, the amount of the refund is:

$$AC \times \frac{M1 - M2}{12}$$

Where:

**AC** is the amount of the annual charge for the licence for the year.

*M1* is the number of calendar months of the year in relation to which the annual charge was paid.

*M2* is the number of calendar months of the year during which the licence was held.

Note:

The amount of the annual charge for a facility licence or a source licence for a year is prescribed in the *Australian Radiation Protection and Nuclear Safety (Licence Charges) Regulations 2000*.

(4) For subregulation (3), a licence that is held for only part of a calendar month is taken to be held for the whole of the calendar month.

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## Part 5—Practices and procedures to be followed

## **Division 5.1—General**

## 56 Application of Part 5

This Part applies only to the extent that:

- (a) a holder of a licence, or a person covered by a licence, can comply with the licence without taking action that would constitute unlawful discrimination under the *Sex Discrimination Act 1984*; or
- (b) a holder of a licence, or a person covered by a licence, who cannot comply with the licence without taking action that would constitute unlawful discrimination under the *Sex Discrimination Act 1984* is exempted, under section 44 of that Act, from its operation.

## **Division 5.2—Dose limits**

## 57 Purpose of Division 5.2

For paragraph 85(2)(a) of the Act, this Division prescribes practices and procedures to be followed, and measures to be taken, in relation to dose limits by controlled persons in relation to activities relating to controlled facilities, and in relation to dealings with controlled apparatus or controlled material.

### 58 Prescribed practice

- (1) The holder of a facility licence for a controlled facility must ensure that the doses to which a person is exposed, inside or in connection with the facility, do not exceed the effective dose limits mentioned in regulation 59, and the equivalent dose limits mentioned in regulation 62.
- (3) The holder of a source licence for dealing with controlled apparatus or controlled material must ensure that the doses to which a person is exposed while the source in the apparatus or material is under the holder's control do not exceed the effective dose limits mentioned in regulation 59, and the equivalent dose limits mentioned in regulation 62.
- (4) The holder of a licence must ensure that radiation protection and safety of the following relating to the licence are optimised in order to achieve the outcome mentioned in subregulation (4A):
  - (a) controlled material;
  - (b) controlled apparatus (other than apparatus prescribed by these regulations that produce harmful non-ionizing radiation when energised);
  - (c) a controlled facility.
- (4A) For subregulation (4), the outcome is that the following are as low as reasonably achievable after taking into account economic and societal factors:
  - (a) the magnitude of individual doses;
  - (b) the number of people who are exposed;
  - (c) the likelihood of incurring exposures to radiation.
  - (5) The optimisation of radiation protection and safety mentioned in subregulation (4) must be in accordance with source-related dose constraints established in accordance with the Planned Exposure Code and agreed by the CEO.
  - (6) For apparatus prescribed by these regulations that produce harmful non-ionising radiation when energised, the holder of a licence must ensure that exposure to people is kept to the lowest level that can be achieved, consistent with best practice.

#### 59 Effective dose limits

- (1) The effective dose limit for occupational exposure is 20 mSv annually, averaged over 5 consecutive years.
- (2) However, the effective dose for a person subject to occupational exposure must not, in a year, be greater than 50 mSv.
- (3) The effective dose limit for public exposure is 1 mSv annually.
- (4) The effective dose limit for an unborn child is to be consistent with the effective dose limit for public exposure.

Note: See also the Planned Exposure Code for the obligation to consider additional controls in relation to female employees who are pregnant.

#### **60** Effective doses

- (1) For regulation 59, a person's effective dose for a relevant period is the sum of:
  - (a) the effective dose that the person receives, from external exposure, during the relevant period; and
  - (b) the person's committed effective dose, received from intakes during the relevant period, for the next 50 years.
- (2) However, if the person is under 18, the committed effective dose must be worked out on the basis of the number of years calculated by subtracting the person's age, at the time of the calculation, from 70.
- (3) For subregulation (1), a *relevant period* is:
  - (a) for a controlled person—5 years; or
  - (b) for a member of the public—1 year.

## 61 Dealings with controlled apparatus generating non-ionizing radiation

The holder of a source licence must ensure that all dealings with controlled apparatus generating non-ionizing radiation comply with the appropriate exposure limits set out in the standards and codes mentioned in the table in clause 1 of Schedule 1.

### 62 Annual equivalent dose limit

- (1) For occupational exposure, the equivalent dose limit to the lens of the eye is 20 mSv annually, averaged over 5 consecutive years.
- (1A) However, the equivalent dose to the lens of the eye for a person subject to occupational exposure must not, in a year, be greater than 50 mSv.
- (1B) The equivalent dose to the lens of the eye for a person subject to public exposure must not, in a year, be greater than 15 mSv.
  - (2) For occupational exposure, the annual equivalent dose limit to the hands and feet is 500 mSv.

- (3) The annual equivalent dose limit to the skin is:
  - (a) for occupational exposure—500 mSv; and
  - (b) for public exposure—50 mSv.
- (4) The annual equivalent dose limit to the skin applies to the average dose received by any 1 cm<sup>2</sup> of skin.

## **Division 5.3—Practices and procedures**

## 62A Practices and procedures

- (1) For paragraph 85(2)(a) of the Act, the practices and procedures described in the codes mentioned in subregulation (2) must, to the extent that they are relevant, be followed by controlled persons in relation to activities relating to controlled facilities, and in relation to dealings with controlled apparatus or controlled material.
- (2) For subregulation (1), the codes are the following:
  - (a) the Mining and Mineral Processing Code of Practice and Safety Guide;
  - (b) the Security Code of Practice;
  - (c) the Transport Code.

# Part 6—Reporting and inspection for controlled facilities, apparatus and materials

## 63 Reporting guidelines to be published by CEO

- (1) For paragraph 15(1)(i) of the Act, the CEO must make guidelines about:
  - (a) how the CEO will report on the operations of the Agency; and
  - (b) how licence holders will report their compliance with the Act, these regulations and licence conditions; and
  - (c) how inspection of controlled facilities, controlled apparatus and controlled materials will be conducted.
- (2) The CEO must publish a draft of the guidelines, and invite public comments on the draft, within 12 months of the commencement of these regulations.

Note: These regulations commence on gazettal: see regulation 2.

## 64 Inspector's identity card

- (1) Under subsection 62(1) of the Act, the CEO may appoint certain people as inspectors.
- (2) Under subsection 62(3) of the Act, the CEO must issue an identity card to an inspector, in the form prescribed by the regulations.
- (3) The identity card must be in the form set out in Schedule 4.

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## Part 7—Miscellaneous

#### 65 International agreements

For subsection 84(3) of the Act, each international agreement mentioned in Schedule 5 is prescribed.

#### 65A Non-applicable State and Territory laws

For section 83 of the Act, each State or Territory law, or provision of each State or Territory law, mentioned in Schedule 6 is prescribed.

## 66 Review of decisions by CEO

- (1) A controlled person who is affected by a decision of the CEO to refuse to make a declaration under subregulation 4(3), 6(3), 37(1), 38(3), 38(5) or 38(6) may request that the Minister reconsider the CEO's decision.
- (2) The request must be:
  - (a) in writing; and
  - (b) given to the Minister within 28 days after the making of the decision.
- (3) The Minister must reconsider the CEO's decision and confirm, vary or set aside the decision.

Note:

Under section 27A of the *Administrative Appeals Tribunal Act 1975*, the Minister must give, to any person whose interests are affected by the decision, notice, in writing or otherwise, of the making of the decision and of the person's right to have the decision reviewed. In giving that notice, the Minister must have regard to the Code of Practice determined under section 27B of that Act (Gazette No. S 432, 7 December 1994) and available at <a href="http://www.comlaw.gov.au">http://www.comlaw.gov.au</a> (registration number F2006B11660).

- (4) The Minister is taken to have confirmed the CEO's decision under subregulation (3) if the Minister does not give written notice of the Minister's decision under that subregulation within 60 days after the request is received.
- (5) Application may be made to the Administrative Appeals Tribunal for review of a decision of the Minister under subregulation (3) to confirm, vary or set aside the CEO's decision.

# Schedule 1—Exposure limits for non-ionizing radiation

(regulations 4 and 61)

## 1 Exposure limits for non-ionizing radiation

The following table sets out exposure limits for non-ionizing radiation.

Exposu	re limits for non-ionizing radiation
Item	Exposure limits
1	The reference levels mentioned in the International Commission on Non-Ionizing Radiation Protection Guidelines for Limiting Exposure to Time-Varying Electric and Magnetic Fields (1 Hz to 100 kHz), published in <i>Health Physics</i> 99(6):818-836; 2010.
3	The maximum exposure levels mentioned in the <i>Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields—3 kHz to 300 GHz (2002) (Radiation Protection Series No. 3).</i>
4	The maximum permissible exposure limits mentioned in AS/NZS IEC 60825.1:2014
5	The exposure limits mentioned in AS/NZS IEC 62471:2011
6	The exposure limits mentioned in the Radiation Protection Standard for Occupational Exposure to Ultraviolet Radiation (2006) (Radiation Protection Series No. 12).
7	For static magnetic fields—the limits mentioned in the International Commission on Non-Ionizing Radiation Protection <i>Guidelines on limits of exposure to static magnetic fields</i> , published in <i>Health Physics</i> 96(4):504-514; 2009.

Note: The documents mentioned in items 1, 3 and 6 of the table could in 2017 be viewed on ARPANSA's website (http://www.arpansa.gov.au).

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Australian Radiation Protection and Nuclear Safety Regulations 1999

# Schedule 2—Exempt dealings

(regulations 3A, 6, 7, 8, 11 and 38 and Schedules 3B and 3C)

## Part 1—Exempt dealings

## 1 Exempt dealings

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The following table sets out dealings that are exempt dealings.

Exempt de	ealings
Item	Description of dealing
1	The dealing involves a controlled material that has:
	(a) an activity concentration less than the activity concentration value for the material set out in an item in the table in clause 2; or
	(b) an activity less than the activity value for the material set out in that item.
2	The dealing is mixing 2 or more controlled materials.
	The activity for each material being mixed is divided by:
	(a) the activity value for the material set out in an item in the table in clause 2; or
	(b) the activity concentration value for the material set out in that item, and then divided by the total mass of the mixture.
	The results for all of the materials are added.
	The total is 1 or less.
3	The dealing involves naturally occurring radon-222 with an activity concentration of less than 1000 Bq/m <sup>3</sup> in the special case of exposure in the workplace.
	If the dealing includes any other controlled material, the use of the other material must also be an exempt dealing.
4	The dealing involves depleted uranium and no other controlled material.
	The uranium:
	(a) is being used as radiation shielding in a container for controlled materials; and
	(b) is completely contained in an appropriate metallic sheath; and
	(c) is in a container for controlled materials that complies with the requirements in the Transport Code.
5	The dealing involves depleted uranium and no other controlled material.
	The depleted uranium is in solid massive form that is used for ballast.
6	The dealing involves a smoke detector designed and made in accordance with Australian Standard AS 3786:2014: <i>Smoke Alarms using scattered light, transmitted light or ionization</i> , as existing on 1 July 2017.
	The dealing is not repair or maintenance of the detector.
7	The dealing involves any of the following items and no other controlled apparatus or controlled material:
	(b) a gaseous tritium light device that:
	<ul><li>(i) is used solely for safety purposes; and</li><li>(ii) includes less than 74 GBq of tritium;</li></ul>

Exempt de	ealings
Item	Description of dealing
	(c) a television receiver;
	(d) a visual display terminal;
	(e) a cathode ray tube;
	(f) an electron microscope;
	(g) arc welding equipment;
	(h) an electron capture detector or similar device used in gas chromatography containing:
	<ul><li>(i) a nickel-63 sealed source with activity not more than 750 MBq; or</li><li>(ii) a tritium source with activity not more than 20 GBq;</li></ul>
	(i) lighting products that include krypton-85.
9	The dealing involves a sealed radioactive source used for teaching the characteristics and properties of radiation or radiation sources, and the sealed source contains one or more of the following:
	(a) Cobalt-60 with an activity not greater than 200 kBq;
	(b) Strontium-90 with an activity not greater than 80 kBq;
	(c) Caesium-137 with an activity not greater than 200 kBq;
	(d) Radium-226 with an activity not greater than 20 kBq;
	(e) Americium-241 with an activity not greater than 40 kBq.
10	The dealing involves a geological sample that:
	(a) contains radioactive material that emits radiation at a level not exceeding 5 micrograys an hour, measured at a distance of 10 cm from its surface; and
	(b) is being used as a sample in teaching or for display as a geological specimen.

# Part 2—Activity concentration values and activity values for nuclides

## 2 Activity concentration values and activity values for nuclides

The following table sets out activity concentration values and activity values for nuclides.

- Note 1: The activity of a progeny nuclide included in secular equilibrium with a parent nuclide is dealt with in regulation 3A. Parent nuclides and progeny nuclides are set out in the table in clause 3, and parent nuclides are also marked <sup>a</sup> in the following table.
- Note 2: A nuclide marked m or m' in the following table indicates a metastable state of the nuclide, with the metastable state m' indicating a state of higher energy than the metastable state m.

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
1	H-3	$1 \times 10^6$	1 x 10 <sup>9</sup>
2	Be-7	$1 \times 10^{3}$	$1 \times 10^{7}$
3	Be-10	$1 \times 10^4$	$1 \times 10^{6}$
4	C-11	$1 \times 10^{1}$	$1 \times 10^{6}$
5	C-14	$1 \times 10^4$	$1 \times 10^{7}$
6	N-13	$1 \times 10^2$	1 x 10 <sup>9</sup>
7	Ne-19	$1 \times 10^2$	1 x 10 <sup>9</sup>
8	O-15	$1 \times 10^2$	1 x 10 <sup>9</sup>
9	F-18	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
10	Na-22	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
11	Na-24	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
12	Mg-28	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
13	Al-26	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
14	Si-31	$1 \times 10^3$	1 x 10 <sup>6</sup>
15	Si-32	$1 \times 10^3$	1 x 10 <sup>6</sup>
16	P-32	$1 \times 10^3$	1 x 10 <sup>5</sup>
17	P-33	$1 \times 10^5$	1 x 10 <sup>8</sup>
18	S-35	1 x 10 <sup>5</sup>	1 x 10 <sup>8</sup>
19	Cl-36	1 x 10 <sup>4</sup>	1 x 10 <sup>6</sup>
20	C1-38	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
21	C1-39	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
22	Ar-37	1 x 10 <sup>6</sup>	1 x 10 <sup>8</sup>
23	Ar-39	$1 \times 10^{7}$	1 x 10 <sup>4</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
24	Ar-41	$1 \times 10^{2}$	1 x 10 <sup>9</sup>
25	K-40	$1 \times 10^2$	1 x 10 <sup>6</sup>
26	K-42	$1 \times 10^2$	$1 \times 10^{6}$
27	K-43	$1 \times 10^{1}$	$1 \times 10^{6}$
28	K-44	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
29	K-45	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
30	Ca-41	$1 \times 10^{5}$	$1 \times 10^{7}$
31	Ca-45	$1 \times 10^4$	$1 \times 10^{7}$
32	Ca-47	$1 \times 10^{1}$	$1 \times 10^{6}$
33	Sc-43	$1 \times 10^{1}$	$1 \times 10^6$
34	Sc-44	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
35	Sc-45	$1 \times 10^2$	1 x 10 <sup>7</sup>
36	Sc-46	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
37	Sc-47	$1 \times 10^2$	$1 \times 10^{6}$
38	Sc-48	$1 \times 10^{1}$	$1 \times 10^{5}$
39	Sc-49	$1 \times 10^3$	1 x 10 <sup>5</sup>
40	Ti-44	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
41	Ti-45	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
42	V-47	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
43	V-48	$1 \times 10^{1}$	$1 \times 10^{5}$
44	V-49	$1 \times 10^4$	$1 \times 10^{7}$
45	Cr-48	$1 \times 10^2$	$1 \times 10^{6}$
46	Cr-49	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
47	Cr-51	$1 \times 10^3$	$1 \times 10^{7}$
48	Mn-51	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
49	Mn-52	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
50	Mn-52m	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
51	Mn-53	1 x 10 <sup>4</sup>	1 x 10 <sup>9</sup>
52	Mn-54	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
53	Mn-56	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
54	Fe-52	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
55	Fe-55	1 x 10 <sup>4</sup>	1 x 10 <sup>6</sup>
56	Fe-59	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
57	Fe-60	1 x 10 <sup>2</sup>	1 x 10 <sup>5</sup>
58	Co-55	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
59	Co-56	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
60	Co-57	$1 \times 10^{2}$	$1 \times 10^6$
61	Co-58	$1 \times 10^{1}$	$1 \times 10^6$
62	Co-58m	$1 \times 10^4$	1 x 10 <sup>7</sup>
63	Co-60	$1 \times 10^{1}$	$1 \times 10^{5}$
64	Co-60m	$1 \times 10^{3}$	$1 \times 10^{6}$
65	Co-61	$1 \times 10^2$	1 x 10 <sup>6</sup>
66	Co-62m	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
67	Ni-56	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
68	Ni-57	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
69	Ni-59	1 x 10 <sup>4</sup>	$1 \times 10^{8}$
70	Ni-63	$1 \times 10^5$	$1 \times 10^{8}$
71	Ni-65	$1 \times 10^{1}$	$1 \times 10^6$
72	Ni-66	1 x 10 <sup>4</sup>	1 x 10 <sup>7</sup>
73	Cu-60	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
74	Cu-61	$1 \times 10^{1}$	$1 \times 10^6$
75	Cu-64	$1 \times 10^{2}$	1 x 10 <sup>6</sup>
76	Cu-67	$1 \times 10^{2}$	1 x 10 <sup>6</sup>
77	Zn-62	$1 \times 10^{2}$	1 x 10 <sup>6</sup>
78	Zn-63	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
79	Zn-65	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
80	Zn-69	1 x 10 <sup>4</sup>	1 x 10 <sup>6</sup>
81	Zn-69m	$1 \times 10^{2}$	1 x 10 <sup>6</sup>
82	Zn-71m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
83	Zn-72	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
84	Ga-65	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
85	Ga-66	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
86	Ga-67	$1 \times 10^{2}$	1 x 10 <sup>6</sup>
87	Ga-68	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
88	Ga-70	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
89	Ga-72	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
90	Ga-73	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
91	Ge-66	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
92	Ge-67	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
93	Ge-68 <sup>a</sup>	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
94	Ge-69	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
95	Ge-71	1 x 10 <sup>4</sup>	1 x 10 <sup>8</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
96	Ge-75	$1 \times 10^3$	1 x 10 <sup>6</sup>
97	Ge-77	$1 \times 10^{1}$	$1 \times 10^{5}$
98	Ge-78	$1 \times 10^2$	$1 \times 10^{6}$
99	As-69	$1 \times 10^{1}$	$1 \times 10^{5}$
100	As-70	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
101	As-71	$1 \times 10^{1}$	$1 \times 10^{6}$
102	As-72	$1 \times 10^{1}$	$1 \times 10^{5}$
103	As-73	$1 \times 10^{3}$	$1 \times 10^{7}$
104	As-74	$1 \times 10^{1}$	$1 \times 10^{6}$
105	As-76	$1 \times 10^2$	1 x 10 <sup>5</sup>
106	As-77	$1 \times 10^{3}$	$1 \times 10^{6}$
107	As-78	$1 \times 10^{1}$	$1 \times 10^{5}$
108	Se-70	$1 \times 10^{1}$	$1 \times 10^{6}$
109	Se-73	$1 \times 10^{1}$	$1 \times 10^{6}$
110	Se-73m	$1 \times 10^2$	$1 \times 10^{6}$
111	Se-75	$1 \times 10^2$	$1 \times 10^{6}$
112	Se-79	$1 \times 10^4$	$1 \times 10^{7}$
113	Se-81	$1 \times 10^{3}$	$1 \times 10^{6}$
114	Se-81m	$1 \times 10^{3}$	$1 \times 10^{7}$
115	Se-83	$1 \times 10^{1}$	$1 \times 10^{5}$
116	Br-74	$1 \times 10^{1}$	$1 \times 10^{5}$
117	Br-74m	$1 \times 10^{1}$	$1 \times 10^{5}$
118	Br-75	$1 \times 10^{1}$	$1 \times 10^{6}$
119	Br-76	$1 \times 10^{1}$	$1 \times 10^{5}$
120	Br-77	$1 \times 10^2$	$1 \times 10^{6}$
121	Br-80	$1 \times 10^2$	$1 \times 10^{5}$
122	Br-80m	$1 \times 10^3$	$1 \times 10^{7}$
123	Br-82	$1 \times 10^{1}$	$1 \times 10^{6}$
124	Br-83	$1 \times 10^3$	$1 \times 10^{6}$
125	Br-84	$1 \times 10^{1}$	$1 \times 10^{5}$
126	Kr-74	$1 \times 10^2$	1 x 10 <sup>9</sup>
127	Kr-76	$1 \times 10^{2}$	1 x 10 <sup>9</sup>
128	Kr-77	$1 \times 10^2$	1 x 10 <sup>9</sup>
129	Kr-79	$1 \times 10^3$	1 x 10 <sup>5</sup>
130	Kr-81	1 x 10 <sup>4</sup>	1 x 10 <sup>7</sup>
131	Kr-81m	1 x 10 <sup>3</sup>	1 x 10 <sup>10</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
132	Kr-83m	$1 \times 10^5$	$1 \times 10^{12}$
133	Kr-85	$1 \times 10^5$	$1 \times 10^{4}$
134	Kr-85m	$1 \times 10^{3}$	$1 \times 10^{10}$
135	Kr-87	$1 \times 10^2$	1 x 10 <sup>9</sup>
136	Kr-88	$1 \times 10^2$	$1 \times 10^{9}$
137	Rb-79	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
138	Rb-81	$1 \times 10^{1}$	$1 \times 10^{6}$
139	Rb-81m	$1 \times 10^3$	$1 \times 10^{7}$
140	Rb-82m	$1 \times 10^{1}$	$1 \times 10^{6}$
141	Rb-83 <sup>a</sup>	$1 \times 10^2$	$1 \times 10^{6}$
142	Rb-84	$1 \times 10^{1}$	$1 \times 10^{6}$
143	Rb-86	$1 \times 10^{2}$	$1 \times 10^{5}$
144	Rb-87	$1 \times 10^3$	$1 \times 10^{7}$
145	Rb-88	$1 \times 10^{2}$	$1 \times 10^{5}$
146	Rb-89	$1 \times 10^2$	$1 \times 10^{5}$
147	Sr-80	$1 \times 10^{3}$	$1 \times 10^{7}$
148	Sr-81	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
149	Sr-82 <sup>a</sup>	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
150	Sr-83	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
151	Sr-85	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
152	Sr-85m	$1 \times 10^{2}$	1 x 10 <sup>7</sup>
153	Sr-87m	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
154	Sr-89	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
155	Sr-90 <sup>a</sup>	1 x 10 <sup>2</sup>	1 x 10 <sup>4</sup>
156	Sr-91	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
157	Sr-92	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
158	Y-86	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
159	Y-86m	1 x 10 <sup>2</sup>	1 x 10 <sup>7</sup>
160	Y-87 <sup>a</sup>	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
161	Y-88	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
162	Y-90	1 x 10 <sup>3</sup>	1 x 10 <sup>5</sup>
163	Y-90m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
164	Y-91	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
165	Y-91m	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
166	Y-92	1 x 10 <sup>2</sup>	1 x 10 <sup>5</sup>
167	Y-93	$1 \times 10^{2}$	1 x 10 <sup>5</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
168	Y-94	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
169	Y-95	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
170	Zr-86	$1 \times 10^2$	$1 \times 10^{7}$
171	Zr-88	$1 \times 10^2$	$1 \times 10^{6}$
172	Zr-89	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
173	Zr-93 <sup>a</sup>	$1 \times 10^3$	$1 \times 10^{7}$
174	Zr-95	$1 \times 10^{1}$	$1 \times 10^{6}$
175	Zr-97 <sup>a</sup>	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
176	Nb-88	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
177	Nb-89	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
178	Nb-89m	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
179	Nb-90	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
180	Nb-93m	1 x 10 <sup>4</sup>	$1 \times 10^{7}$
181	Nb-94	$1 \times 10^{1}$	$1 \times 10^{6}$
182	Nb-95	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
183	Nb-95m	$1 \times 10^2$	$1 \times 10^{7}$
184	Nb-96	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
185	Nb-97	$1 \times 10^{1}$	$1 \times 10^{6}$
186	Nb-98	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
187	Mo-90	$1 \times 10^{1}$	$1 \times 10^{6}$
188	Mo-93	$1 \times 10^{3}$	1 x 10 <sup>8</sup>
189	Mo-93m	$1 \times 10^{1}$	$1 \times 10^{6}$
190	Mo-99	$1 \times 10^2$	$1 \times 10^{6}$
191	Mo-101	$1 \times 10^{1}$	$1 \times 10^{6}$
192	Tc-93	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
193	Tc-93m	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
194	Tc-94	$1 \times 10^{1}$	$1 \times 10^{6}$
195	Tc-94m	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
196	Tc-95	$1 \times 10^{1}$	$1 \times 10^{6}$
197	Tc-95m	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
198	Tc-96	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
199	Tc-96m	$1 \times 10^3$	1 x 10 <sup>7</sup>
200	Tc-97	$1 \times 10^3$	1 x 10 <sup>8</sup>
201	Tc-97m	$1 \times 10^3$	1 x 10 <sup>7</sup>
202	Tc-98	$1 \times 10^{1}$	$1 \times 10^{6}$
203	Tc-99	1 x 10 <sup>4</sup>	$1 \times 10^{7}$

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
204	Tc-99m	$1 \times 10^2$	1 x 10 <sup>7</sup>
205	Tc-101	$1 \times 10^2$	1 x 10 <sup>6</sup>
206	Tc-104	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
207	Ru-94	$1 \times 10^2$	$1 \times 10^{6}$
208	Ru-97	$1 \times 10^2$	$1 \times 10^{7}$
209	Ru-103	$1 \times 10^2$	1 x 10 <sup>6</sup>
210	Ru-105	$1 \times 10^{1}$	$1 \times 10^{6}$
211	Ru-106 <sup>a</sup>	$1 \times 10^2$	1 x 10 <sup>5</sup>
212	Rh-99	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
213	Rh-99m	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
214	Rh-100	$1 \times 10^{1}$	$1 \times 10^{6}$
215	Rh-101	$1 \times 10^2$	$1 \times 10^{7}$
216	Rh-101m	$1 \times 10^2$	$1 \times 10^{7}$
217	Rh-102	$1 \times 10^{1}$	$1 \times 10^{6}$
218	Rh-102m	$1 \times 10^2$	$1 \times 10^{6}$
219	Rh-103m	1 x 10 <sup>4</sup>	1 x 10 <sup>8</sup>
220	Rh-105	$1 \times 10^2$	$1 \times 10^{7}$
221	Rh-106m	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
222	Rh-107	$1 \times 10^2$	1 x 10 <sup>6</sup>
223	Pd-100	$1 \times 10^2$	1 x 10 <sup>7</sup>
224	Pd-101	$1 \times 10^2$	$1 \times 10^{6}$
225	Pd-103	$1 \times 10^{3}$	1 x 10 <sup>8</sup>
226	Pd-107	1 x 10 <sup>5</sup>	1 x 10 <sup>8</sup>
227	Pd-109	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
228	Ag-102	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
229	Ag-103	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
230	Ag-104	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
231	Ag-104m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
232	Ag-105	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
233	Ag-106	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
234	Ag-106m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
235	Ag-108m <sup>a</sup>	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
236	Ag-110m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
237	Ag-111	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
238	Ag-112	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
239	Ag-115	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
240	Cd-104	$1 \times 10^{2}$	1 x 10 <sup>7</sup>
241	Cd-107	$1 \times 10^{3}$	$1 \times 10^{7}$
242	Cd-109	$1 \times 10^4$	$1 \times 10^{6}$
243	Cd-113	$1 \times 10^{3}$	$1 \times 10^{6}$
244	Cd-113m	$1 \times 10^{3}$	$1 \times 10^{6}$
245	Cd-115	$1 \times 10^{2}$	$1 \times 10^{6}$
246	Cd-115m	$1 \times 10^3$	$1 \times 10^{6}$
247	Cd-117	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
248	Cd-117m	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
249	In-109	1 x 10 <sup>1</sup>	$1 \times 10^6$
250	In-110	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
251	In-110m	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
252	In-111	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
253	In-112	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
254	In-113m	$1 \times 10^2$	1 x 10 <sup>6</sup>
255	In-114	1 x 10 <sup>3</sup>	1 x 10 <sup>5</sup>
256	In-114m	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
257	In-115	1 x 10 <sup>3</sup>	1 x 10 <sup>5</sup>
258	In-115m	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
259	In-116m	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
260	In-117	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
261	In-117m	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
262	In-119m	1 x 10 <sup>2</sup>	1 x 10 <sup>5</sup>
263	Sn-110	1 x 10 <sup>2</sup>	1 x 10 <sup>7</sup>
264	Sn-111	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
265	Sn-113	1 x 10 <sup>3</sup>	1 x 10 <sup>7</sup>
266	Sn-117m	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
267	Sn-119m	1 x 10 <sup>3</sup>	1 x 10 <sup>7</sup>
268	Sn-121	1 x 10 <sup>5</sup>	1 x 10 <sup>7</sup>
269	Sn-121m <sup>a</sup>	1 x 10 <sup>3</sup>	1 x 10 <sup>7</sup>
270	Sn-123	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
271	Sn-123m	$1 \times 10^2$	1 x 10 <sup>6</sup>
272	Sn-125	$1 \times 10^{2}$	1 x 10 <sup>5</sup>
273	Sn-126 <sup>a</sup>	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
274	Sn-127	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
275	Sn-128	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
276	Sb-115	1 x 10 <sup>1</sup>	$1 \times 10^6$
277	Sb-116	$1 \times 10^{1}$	$1 \times 10^{6}$
278	Sb-116m	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
279	Sb-117	$1 \times 10^2$	$1 \times 10^{7}$
280	Sb-118m	$1 \times 10^{1}$	$1 \times 10^{6}$
281	Sb-119	$1 \times 10^{3}$	$1 \times 10^{7}$
282	Sb-120	$1 \times 10^{2}$	$1 \times 10^{6}$
283	Sb-120m	$1 \times 10^{1}$	$1 \times 10^{6}$
284	Sb-122	$1 \times 10^2$	1 x 10 <sup>4</sup>
285	Sb-124	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
286	Sb-124m	$1 \times 10^{2}$	$1 \times 10^{6}$
287	Sb-125	$1 \times 10^{2}$	$1 \times 10^{6}$
288	Sb-126	1 x 10 <sup>1</sup>	$1 \times 10^{5}$
289	Sb-126m	1 x 10 <sup>1</sup>	$1 \times 10^{5}$
290	Sb-127	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
291	Sb-128	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
292	Sb-128m	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
293	Sb-129	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
294	Sb-130	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
295	Sb-131	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
296	Te-116	$1 \times 10^{2}$	$1 \times 10^{7}$
297	Te-121	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
298	Te-121m	$1 \times 10^2$	1 x 10 <sup>6</sup>
299	Te-123	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
300	Te-123m	1 x 10 <sup>2</sup>	1 x 10 <sup>7</sup>
301	Te-125m	1 x 10 <sup>3</sup>	1 x 10 <sup>7</sup>
302	Te-127	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
303	Te-127m	1 x 10 <sup>3</sup>	1 x 10 <sup>7</sup>
304	Te-129	$1 \times 10^2$	1 x 10 <sup>6</sup>
305	Te-129m	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
306	Te-131	1 x 10 <sup>2</sup>	1 x 10 <sup>5</sup>
307	Te-131m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
308	Te-132	$1 \times 10^2$	1 x 10 <sup>7</sup>
309	Te-133	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
310	Te-133m	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
311	Te-134	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
312	I-120	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
313	I-120m	$1 \times 10^{1}$	$1 \times 10^{5}$
314	I-121	$1 \times 10^2$	$1 \times 10^{6}$
315	I-123	$1 \times 10^2$	$1 \times 10^{7}$
316	I-124	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
317	I-125	$1 \times 10^{3}$	$1 \times 10^{6}$
318	I-126	$1 \times 10^2$	$1 \times 10^{6}$
319	I-128	$1 \times 10^2$	1 x 10 <sup>5</sup>
320	I-129	$1 \times 10^2$	1 x 10 <sup>5</sup>
321	I-130	1 x 10 <sup>1</sup>	$1 \times 10^6$
322	I-131	$1 \times 10^2$	$1 \times 10^{6}$
323	I-132	1 x 10 <sup>1</sup>	$1 \times 10^{5}$
324	I-132m	$1 \times 10^2$	1 x 10 <sup>6</sup>
325	I-133	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
326	I-134	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
327	I-135	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
328	Xe-120	$1 \times 10^2$	1 x 10 <sup>9</sup>
329	Xe-121	$1 \times 10^2$	1 x 10 <sup>9</sup>
330	Xe-122 <sup>a</sup>	$1 \times 10^2$	1 x 10 <sup>9</sup>
331	Xe-123	$1 \times 10^2$	1 x 10 <sup>9</sup>
332	Xe-125	1 x 10 <sup>3</sup>	1 x 10 <sup>9</sup>
333	Xe-127	1 x 10 <sup>3</sup>	1 x 10 <sup>5</sup>
334	Xe-129m	1 x 10 <sup>3</sup>	1 x 10 <sup>4</sup>
335	Xe-131m	1 x 10 <sup>4</sup>	1 x 10 <sup>4</sup>
336	Xe-133m	$1 \times 10^{3}$	1 x 10 <sup>4</sup>
337	Xe-133	1 x 10 <sup>3</sup>	1 x 10 <sup>4</sup>
338	Xe-135	$1 \times 10^{3}$	$1 \times 10^{10}$
339	Xe-135m	1 x 10 <sup>2</sup>	1 x 10 <sup>9</sup>
340	Xe-138	1 x 10 <sup>2</sup>	1 x 10 <sup>9</sup>
341	Cs-125	1 x 10 <sup>1</sup>	1 x 10 <sup>4</sup>
342	Cs-127	1 x 10 <sup>2</sup>	1 x 10 <sup>5</sup>
343	Cs-129	1 x 10 <sup>2</sup>	1 x 10 <sup>5</sup>
344	Cs-130	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
345	Cs-131	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
346	Cs-132	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
347	Cs-134m	1 x 10 <sup>3</sup>	1 x 10 <sup>5</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
348	Cs-134	1 x 10 <sup>1</sup>	1 x 10 <sup>4</sup>
349	Cs-135	1 x 10 <sup>4</sup>	$1 \times 10^{7}$
350	Cs-135m	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
351	Cs-136	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
352	Cs-137 <sup>a</sup>	$1 \times 10^{1}$	1 x 10 <sup>4</sup>
353	Cs-138	$1 \times 10^{1}$	1 x 10 <sup>4</sup>
354	Ba-126	$1 \times 10^2$	$1 \times 10^{7}$
355	Ba-128	$1 \times 10^2$	$1 \times 10^{7}$
356	Ba-131	$1 \times 10^2$	$1 \times 10^{6}$
357	Ba-131m	$1 \times 10^2$	1 x 10 <sup>7</sup>
358	Ba-133	$1 \times 10^2$	1 x 10 <sup>6</sup>
359	Ba-133m	$1 \times 10^{2}$	1 x 10 <sup>6</sup>
360	Ba-135m	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
361	Ba-137m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
362	Ba-139	$1 \times 10^2$	1 x 10 <sup>5</sup>
363	Ba-140 <sup>a</sup>	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
364	Ba-141	1 x 10 <sup>2</sup>	1 x 10 <sup>5</sup>
365	Ba-142	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
366	La-131	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
367	La-132	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
368	La-135	1 x 10 <sup>3</sup>	1 x 10 <sup>7</sup>
369	La-137	1 x 10 <sup>3</sup>	1 x 10 <sup>7</sup>
370	La-138	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
371	La-140	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
372	La-141	1 x 10 <sup>2</sup>	1 x 10 <sup>5</sup>
373	La-142	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
374	La-143	1 x 10 <sup>2</sup>	1 x 10 <sup>5</sup>
375	Ce-134	1 x 10 <sup>3</sup>	1 x 10 <sup>7</sup>
376	Ce-135	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
377	Ce-137	1 x 10 <sup>3</sup>	1 x 10 <sup>7</sup>
378	Ce-137m	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
379	Ce-139	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
380	Ce-141	$1 \times 10^{2}$	1 x 10 <sup>7</sup>
381	Ce-143	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
382	Ce-144 <sup>a</sup>	$1 \times 10^2$	1 x 10 <sup>5</sup>
383	Pr-136	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
384	Pr-137	$1 \times 10^{2}$	$1 \times 10^6$
385	Pr-138m	$1 \times 10^{1}$	$1 \times 10^{6}$
386	Pr-139	$1 \times 10^{2}$	$1 \times 10^{7}$
387	Pr-142	$1 \times 10^{2}$	$1 \times 10^{5}$
388	Pr-142m	$1 \times 10^{7}$	1 x 10 <sup>9</sup>
389	Pr-143	$1 \times 10^4$	1 x 10 <sup>6</sup>
390	Pr-144	$1 \times 10^{2}$	$1 \times 10^{5}$
391	Pr-145	$1 \times 10^{3}$	$1 \times 10^{5}$
392	Pr-147	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
393	Nd-136	$1 \times 10^{2}$	$1 \times 10^{6}$
394	Nd-138	$1 \times 10^{3}$	$1 \times 10^{7}$
395	Nd-139	$1 \times 10^2$	$1 \times 10^{6}$
396	Nd-139m	$1 \times 10^{1}$	$1 \times 10^{6}$
397	Nd-141	$1 \times 10^{2}$	$1 \times 10^{7}$
398	Nd-147	$1 \times 10^{2}$	$1 \times 10^{6}$
399	Nd-149	$1 \times 10^{2}$	$1 \times 10^{6}$
400	Nd-151	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
401	Pm-141	$1 \times 10^{1}$	$1 \times 10^{5}$
402	Pm-143	$1 \times 10^{2}$	$1 \times 10^{6}$
403	Pm-144	$1 \times 10^{1}$	$1 \times 10^{6}$
404	Pm-145	$1 \times 10^{3}$	$1 \times 10^{7}$
405	Pm-146	$1 \times 10^{1}$	$1 \times 10^{6}$
406	Pm-147	$1 \times 10^4$	$1 \times 10^{7}$
407	Pm-148	$1 \times 10^{1}$	$1 \times 10^{5}$
408	Pm-148m	$1 \times 10^{1}$	$1 \times 10^{6}$
409	Pm-149	$1 \times 10^{3}$	$1 \times 10^{6}$
410	Pm-150	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
411	Pm-151	$1 \times 10^{2}$	$1 \times 10^{6}$
412	Sm-141	$1 \times 10^{1}$	$1 \times 10^{5}$
413	Sm-141m	$1 \times 10^{1}$	$1 \times 10^6$
414	Sm-142	$1 \times 10^{2}$	1 x 10 <sup>7</sup>
415	Sm-145	$1 \times 10^{2}$	1 x 10 <sup>7</sup>
416	Sm-146	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
417	Sm-147	$1 \times 10^{1}$	1 x 10 <sup>4</sup>
418	Sm-151	$1 \times 10^4$	1 x 10 <sup>8</sup>
419	Sm-153	$1 \times 10^{2}$	1 x 10 <sup>6</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
420	Sm-155	$1 \times 10^2$	$1 \times 10^{6}$
421	Sm-156	$1 \times 10^2$	$1 \times 10^{6}$
422	Eu-145	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
423	Eu-146	$1 \times 10^{1}$	$1 \times 10^{6}$
424	Eu-147	$1 \times 10^2$	$1 \times 10^{6}$
425	Eu-148	$1 \times 10^{1}$	$1 \times 10^{6}$
426	Eu-149	$1 \times 10^2$	$1 \times 10^{7}$
427	Eu-150	$1 \times 10^{1}$	$1 \times 10^{6}$
428	Eu-150m	$1 \times 10^3$	$1 \times 10^{6}$
429	Eu-152	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
430	Eu-152m	$1 \times 10^2$	1 x 10 <sup>6</sup>
431	Eu-154	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
432	Eu-155	$1 \times 10^2$	1 x 10 <sup>7</sup>
433	Eu-156	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
434	Eu-157	$1 \times 10^2$	1 x 10 <sup>6</sup>
435	Eu-158	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
436	Gd-145	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
437	Gd-146 <sup>a</sup>	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
438	Gd-147	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
439	Gd-148	1 x 10 <sup>1</sup>	1 x 10 <sup>4</sup>
440	Gd-149	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
441	Gd-151	1 x 10 <sup>2</sup>	1 x 10 <sup>7</sup>
442	Gd-152	1 x 10 <sup>1</sup>	1 x 10 <sup>4</sup>
443	Gd-153	1 x 10 <sup>2</sup>	1 x 10 <sup>7</sup>
444	Gd-159	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
445	Tb-147	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
446	Tb-149	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
447	Tb-150	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
448	Tb-151	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
449	Tb-153	$1 \times 10^2$	1 x 10 <sup>7</sup>
450	Tb-154	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
451	Tb-155	$1 \times 10^2$	1 x 10 <sup>7</sup>
452	Tb-156	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
453	Tb-156 (24.4 h)	$1 \times 10^{3}$	1 x 10 <sup>7</sup>
454	Tb-156m' (5 h)	1 x 10 <sup>4</sup>	1 x 10 <sup>7</sup>
455	Tb-157	$1 \times 10^4$	1 x 10 <sup>7</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
456	Tb-158	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
457	Tb-160	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
458	Tb-161	$1 \times 10^{3}$	$1 \times 10^{6}$
459	Dy-155	$1 \times 10^{1}$	$1 \times 10^{6}$
460	Dy-157	$1 \times 10^2$	$1 \times 10^{6}$
461	Dy-159	$1 \times 10^{3}$	$1 \times 10^{7}$
462	Dy-165	$1 \times 10^{3}$	$1 \times 10^{6}$
463	Dy-166	$1 \times 10^{3}$	$1 \times 10^{6}$
464	Ho-155	$1 \times 10^2$	$1 \times 10^{6}$
465	Ho-157	$1 \times 10^2$	1 x 10 <sup>6</sup>
466	Ho-159	$1 \times 10^2$	$1 \times 10^{6}$
467	Ho-161	$1 \times 10^2$	$1 \times 10^{7}$
468	Ho-162	$1 \times 10^2$	$1 \times 10^{7}$
469	Ho-162m	$1 \times 10^{1}$	$1 \times 10^{6}$
470	Ho-164	$1 \times 10^3$	$1 \times 10^{6}$
471	Ho-164m	$1 \times 10^{3}$	$1 \times 10^{7}$
472	Ho-166	$1 \times 10^{3}$	1 x 10 <sup>5</sup>
473	Ho-166m	$1 \times 10^{1}$	$1 \times 10^{6}$
474	Ho-167	$1 \times 10^2$	$1 \times 10^{6}$
475	Er-161	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
476	Er-165	$1 \times 10^{3}$	$1 \times 10^{7}$
477	Er-169	1 x 10 <sup>4</sup>	$1 \times 10^{7}$
478	Er-171	$1 \times 10^2$	$1 \times 10^{6}$
479	Er-172	$1 \times 10^2$	$1 \times 10^{6}$
480	Tm-162	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
481	Tm-166	$1 \times 10^{1}$	$1 \times 10^{6}$
482	Tm-167	$1 \times 10^2$	$1 \times 10^{6}$
483	Tm-170	$1 \times 10^{3}$	$1 \times 10^{6}$
484	Tm-171	1 x 10 <sup>4</sup>	1 x 10 <sup>8</sup>
485	Tm-172	$1 \times 10^{2}$	1 x 10 <sup>6</sup>
486	Tm-173	$1 \times 10^{2}$	1 x 10 <sup>6</sup>
487	Tm-175	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
488	Yb-162	$1 \times 10^{2}$	1 x 10 <sup>7</sup>
489	Yb-166	$1 \times 10^{2}$	1 x 10 <sup>7</sup>
490	Yb-167	$1 \times 10^{2}$	1 x 10 <sup>6</sup>
491	Yb-169	$1 \times 10^2$	$1 \times 10^{7}$

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
492	Yb-175	$1 \times 10^{3}$	$1 \times 10^{7}$
493	Yb-177	$1 \times 10^{2}$	$1 \times 10^{6}$
494	Yb-178	$1 \times 10^{3}$	1 x 10 <sup>6</sup>
495	Lu-169	$1 \times 10^{1}$	$1 \times 10^{6}$
496	Lu-170	$1 \times 10^{1}$	$1 \times 10^{6}$
497	Lu-171	$1 \times 10^{1}$	$1 \times 10^{6}$
498	Lu-172	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
499	Lu-173	$1 \times 10^2$	$1 \times 10^{7}$
500	Lu-174	$1 \times 10^2$	$1 \times 10^{7}$
501	Lu-174m	$1 \times 10^2$	1 x 10 <sup>7</sup>
502	Lu-176	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
503	Lu-176m	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
504	Lu-177	1 x 10 <sup>3</sup>	1 x 10 <sup>7</sup>
505	Lu-177m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
506	Lu-178	$1 \times 10^2$	1 x 10 <sup>5</sup>
507	Lu-178m	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
508	Lu-179	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
509	Hf-170	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
510	Hf-172 <sup>a</sup>	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
511	Hf-173	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
512	Hf-175	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
513	Hf-177m	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
514	Hf-178m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
515	Hf-179m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
516	Hf-180m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
517	Hf-181	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
518	Hf-182	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
519	Hf-182m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
520	Hf-183	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
521	Hf-184	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
522	Ta-172	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
523	Ta-173	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
524	Ta-174	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
525	Ta-175	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
526	Ta-176	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
527	Ta-177	1 x 10 <sup>2</sup>	1 x 10 <sup>7</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
528	Ta-178	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
529	Ta-179	$1 \times 10^{3}$	$1 \times 10^{7}$
530	Ta-180	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
531	Ta-180m	$1 \times 10^{3}$	$1 \times 10^{7}$
532	Ta-182	1 x 10 <sup>1</sup>	1 x 10 <sup>4</sup>
533	Ta-182m	$1 \times 10^2$	$1 \times 10^{6}$
534	Ta-183	$1 \times 10^2$	$1 \times 10^{6}$
535	Ta-184	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
536	Ta-185	$1 \times 10^2$	1 x 10 <sup>5</sup>
537	Ta-186	$1 \times 10^{1}$	$1 \times 10^{5}$
538	W-176	$1 \times 10^2$	$1 \times 10^6$
539	W-177	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
540	W-178 <sup>a</sup>	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
541	W-179	$1 \times 10^2$	$1 \times 10^{7}$
542	W-181	$1 \times 10^{3}$	1 x 10 <sup>7</sup>
543	W-185	1 x 10 <sup>4</sup>	$1 \times 10^{7}$
544	W-187	$1 \times 10^2$	1 x 10 <sup>6</sup>
545	W-188 <sup>a</sup>	$1 \times 10^2$	1 x 10 <sup>5</sup>
546	Re-177	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
547	Re-178	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
548	Re-181	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
549	Re-182	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
550	Re-182m	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
551	Re-184	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
552	Re-184m	$1 \times 10^2$	$1 \times 10^6$
553	Re-186	$1 \times 10^{3}$	$1 \times 10^6$
554	Re-186m	$1 \times 10^{3}$	$1 \times 10^{7}$
555	Re-187	$1 \times 10^{6}$	1 x 10 <sup>9</sup>
556	Re-188	$1 \times 10^2$	$1 \times 10^5$
557	Re-188m	$1 \times 10^2$	1 x 10 <sup>7</sup>
558	Re-189 <sup>a</sup>	$1 \times 10^2$	$1 \times 10^6$
559	Os-180	$1 \times 10^2$	$1 \times 10^{7}$
560	Os-181	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
561	Os-182	$1 \times 10^2$	1 x 10 <sup>6</sup>
562	Os-185	$1 \times 10^{1}$	$1 \times 10^6$
563	Os-189m	1 x 10 <sup>4</sup>	1 x 10 <sup>7</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
564	Os-191	$1 \times 10^2$	$1 \times 10^{7}$
565	Os-191m	$1 \times 10^{3}$	$1 \times 10^{7}$
566	Os-193	$1 \times 10^2$	$1 \times 10^{6}$
567	Os-194 <sup>a</sup>	$1 \times 10^2$	$1 \times 10^{5}$
568	Ir-182	$1 \times 10^{1}$	$1 \times 10^{5}$
569	Ir-184	$1 \times 10^{1}$	$1 \times 10^{6}$
570	Ir-185	$1 \times 10^{1}$	$1 \times 10^{6}$
571	Ir-186	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
572	Ir-186m	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
573	Ir-187	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
574	Ir-188	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
575	Ir-189 <sup>a</sup>	1 x 10 <sup>2</sup>	1 x 10 <sup>7</sup>
576	Ir-190	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
577	Ir-190m (3.1 h)	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
578	Ir-190m' (1.2 h)	1 x 10 <sup>4</sup>	1 x 10 <sup>7</sup>
579	Ir-192	1 x 10 <sup>1</sup>	1 x 10 <sup>4</sup>
580	Ir-192m	1 x 10 <sup>2</sup>	1 x 10 <sup>7</sup>
581	Ir-193m	1 x 10 <sup>4</sup>	1 x 10 <sup>7</sup>
582	Ir-194	1 x 10 <sup>2</sup>	1 x 10 <sup>5</sup>
583	Ir-194m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
584	Ir-195	$1 \times 10^{2}$	1 x 10 <sup>6</sup>
585	Ir-195m	$1 \times 10^2$	1 x 10 <sup>6</sup>
586	Pt-186	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
587	Pt-188 <sup>a</sup>	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
588	Pt-189	1 x 10 <sup>2</sup>	$1 \times 10^6$
589	Pt-191	$1 \times 10^2$	1 x 10 <sup>6</sup>
590	Pt-193	1 x 10 <sup>4</sup>	1 x 10 <sup>7</sup>
591	Pt-193m	1 x 10 <sup>3</sup>	$1 \times 10^{7}$
592	Pt-195m	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
593	Pt-197	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
594	Pt-197m	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
595	Pt-199	$1 \times 10^{2}$	1 x 10 <sup>6</sup>
596	Pt-200	$1 \times 10^2$	1 x 10 <sup>6</sup>
597	Au-193	$1 \times 10^2$	1 x 10 <sup>7</sup>
598	Au-194	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
599	Au-195	$1 \times 10^2$	1 x 10 <sup>7</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
600	Au-198	$1 \times 10^2$	$1 \times 10^{6}$
601	Au-198m	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
602	Au-199	$1 \times 10^2$	1 x 10 <sup>6</sup>
603	Au-200	$1 \times 10^2$	$1 \times 10^{5}$
604	Au-200m	$1 \times 10^{1}$	$1 \times 10^{6}$
605	Au-201	$1 \times 10^2$	$1 \times 10^{6}$
606	Hg-193	$1 \times 10^{2}$	$1 \times 10^{6}$
607	Hg-193m	$1 \times 10^{1}$	$1 \times 10^{6}$
608	Hg-194 <sup>a</sup>	$1 \times 10^{1}$	$1 \times 10^{6}$
609	Hg-195	$1 \times 10^{2}$	$1 \times 10^{6}$
610	Hg-195m <sup>a</sup>	$1 \times 10^{2}$	$1 \times 10^{6}$
611	Hg-197	$1 \times 10^2$	$1 \times 10^{7}$
612	Hg-197m	$1 \times 10^{2}$	$1 \times 10^{6}$
613	Hg-199m	$1 \times 10^{2}$	$1 \times 10^{6}$
614	Hg-203	$1 \times 10^{2}$	$1 \times 10^{5}$
615	Tl-194	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
616	Tl-194m	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
617	Tl-195	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
618	Tl-197	$1 \times 10^2$	$1 \times 10^{6}$
619	Tl-198	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
620	Tl-198m	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
621	Tl-199	$1 \times 10^2$	$1 \times 10^{6}$
622	T1-200	$1 \times 10^{1}$	$1 \times 10^{6}$
623	T1-201	$1 \times 10^2$	1 x 10 <sup>6</sup>
624	T1-202	$1 \times 10^2$	$1 \times 10^{6}$
625	T1-204	$1 \times 10^4$	$1 \times 10^{4}$
626	Pb-195m	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
627	Pb-198	$1 \times 10^{2}$	$1 \times 10^{6}$
628	Pb-199	$1 \times 10^{1}$	$1 \times 10^{6}$
629	Pb-200	$1 \times 10^2$	$1 \times 10^{6}$
630	Pb-201	$1 \times 10^{1}$	$1 \times 10^{6}$
631	Pb-202	$1 \times 10^{3}$	1 x 10 <sup>6</sup>
632	Pb-202m	$1 \times 10^{1}$	$1 \times 10^{6}$
633	Pb-203	$1 \times 10^2$	$1 \times 10^{6}$
634	Pb-205	$1 \times 10^4$	1 x 10 <sup>7</sup>
635	Pb-209	$1 \times 10^{5}$	$1 \times 10^{6}$

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
636	Pb-210 <sup>a</sup>	1 x 10 <sup>1</sup>	1 x 10 <sup>4</sup>
637	Pb-211	$1 \times 10^{2}$	$1 \times 10^{6}$
638	Pb-212 <sup>a</sup>	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
639	Pb-214	$1 \times 10^2$	$1 \times 10^{6}$
640	Bi-200	$1 \times 10^{1}$	$1 \times 10^{6}$
641	Bi-201	$1 \times 10^{1}$	$1 \times 10^{6}$
642	Bi-202	$1 \times 10^{1}$	$1 \times 10^{6}$
643	Bi-203	$1 \times 10^{1}$	$1 \times 10^{6}$
644	Bi-205	$1 \times 10^{1}$	$1 \times 10^{6}$
645	Bi-206	$1 \times 10^{1}$	1 x 10 <sup>5</sup>
646	Bi-207	$1 \times 10^{1}$	$1 \times 10^6$
647	Bi-210	$1 \times 10^{3}$	$1 \times 10^6$
648	Bi-210m <sup>a</sup>	1 x 10 <sup>1</sup>	$1 \times 10^{5}$
649	Bi-212 <sup>a</sup>	$1 \times 10^{1}$	$1 \times 10^{5}$
650	Bi-213	$1 \times 10^{2}$	$1 \times 10^{6}$
651	Bi-214	$1 \times 10^{1}$	$1 \times 10^{5}$
652	Po-203	$1 \times 10^{1}$	$1 \times 10^{6}$
653	Po-205	1 x 10 <sup>1</sup>	$1 \times 10^{6}$
654	Po-206	$1 \times 10^{1}$	$1 \times 10^{6}$
655	Po-207	$1 \times 10^{1}$	$1 \times 10^{6}$
656	Po-208	1 x 10 <sup>1</sup>	$1 \times 10^{4}$
657	Po-209	$1 \times 10^{1}$	$1 \times 10^{4}$
658	Po-210	$1 \times 10^{1}$	$1 \times 10^{4}$
659	At-207	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
660	At-211	1 x 10 <sup>3</sup>	1 x 10 <sup>7</sup>
661	Fr-222	1 x 10 <sup>3</sup>	1 x 10 <sup>5</sup>
662	Fr-223	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
663	Rn-220 <sup>a</sup>	1 x 10 <sup>4</sup>	1 x 10 <sup>7</sup>
664	Rn-222 <sup>a</sup>	$1 \times 10^{1}$	1 x 10 <sup>8</sup>
665	Ra-223 <sup>a</sup>	1 x 10 <sup>2</sup>	1 x 10 <sup>5</sup>
666	Ra-224 <sup>a</sup>	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
667	Ra-225	1 x 10 <sup>2</sup>	1 x 10 <sup>5</sup>
668	Ra-226 <sup>a</sup>	1 x 10 <sup>1</sup>	1 x 10 <sup>4</sup>
669	Ra-227	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
670	Ra-228 <sup>a</sup>	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
671	Ac-224	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
672	Ac-225 <sup>a</sup>	$1 \times 10^{1}$	1 x 10 <sup>4</sup>
673	Ac-226	$1 \times 10^2$	1 x 10 <sup>5</sup>
674	Ac-227 <sup>a</sup>	1 x 10 <sup>-1</sup>	$1 \times 10^{3}$
675	Ac-228	$1 \times 10^{1}$	$1 \times 10^{6}$
676	Th-226 <sup>a</sup>	$1 \times 10^{3}$	$1 \times 10^{7}$
677	Th-227	$1 \times 10^{1}$	1 x 10 <sup>4</sup>
678	Th-228 <sup>a</sup>	$1 \times 10^{0}$	1 x 10 <sup>4</sup>
679	Th-229 <sup>a</sup>	$1 \times 10^{0}$	$1 \times 10^{3}$
680	Th-230	$1 \times 10^{0}$	1 x 10 <sup>4</sup>
681	Th-231	$1 \times 10^{3}$	1 x 10 <sup>7</sup>
682	Th-232	$1 \times 10^{1}$	1 x 10 <sup>4</sup>
683	Th-nat <sup>a</sup>	$1 \times 10^{0}$	$1 \times 10^{3}$
684	Th-234 <sup>a</sup>	$1 \times 10^{3}$	1 x 10 <sup>5</sup>
685	Pa-227	$1 \times 10^{1}$	$1 \times 10^{6}$
686	Pa228	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
687	Pa-230	$1 \times 10^{1}$	$1 \times 10^{6}$
688	Pa-231	$1 \times 10^{0}$	$1 \times 10^{3}$
689	Pa-232	$1 \times 10^{1}$	$1 \times 10^{6}$
690	Pa-233	$1 \times 10^2$	$1 \times 10^{7}$
691	Pa-234	$1 \times 10^{1}$	$1 \times 10^{6}$
692	U-230 <sup>a</sup>	$1 \times 10^{1}$	$1 \times 10^{5}$
693	U-231	$1 \times 10^2$	$1 \times 10^{7}$
694	U-232 <sup>a</sup>	$1 \times 10^{0}$	$1 \times 10^{3}$
695	U-233	$1 \times 10^{1}$	$1 \times 10^{4}$
696	U-234	$1 \times 10^{1}$	$1 \times 10^4$
697	U-235 <sup>a</sup>	$1 \times 10^{1}$	$1 \times 10^4$
698	U-236	$1 \times 10^{1}$	1 x 10 <sup>4</sup>
699	U-237	$1 \times 10^2$	$1 \times 10^{6}$
700	U-238 <sup>a</sup>	$1 \times 10^{1}$	$1 \times 10^{4}$
701	U-nat <sup>a</sup>	$1 \times 10^{0}$	$1 \times 10^{3}$
702	U-239	$1 \times 10^2$	$1 \times 10^{6}$
703	U-240	$1 \times 10^3$	1 x 10 <sup>7</sup>
704	U-240 <sup>a</sup>	$1 \times 10^{1}$	$1 \times 10^{6}$
705	Np-232	$1 \times 10^{1}$	$1 \times 10^6$
706	Np-233	$1 \times 10^2$	1 x 10 <sup>7</sup>
707	Np-234	$1 \times 10^{1}$	$1 \times 10^{6}$

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
708	Np-235	$1 \times 10^{3}$	$1 \times 10^{7}$
709	Np-236	$1 \times 10^2$	$1 \times 10^{5}$
710	Np-236m	$1 \times 10^{3}$	1 x 10 <sup>7</sup>
711	Np-237 <sup>a</sup>	$1 \times 10^{0}$	$1 \times 10^{3}$
712	Np-238	$1 \times 10^2$	$1 \times 10^{6}$
713	Np-239	$1 \times 10^2$	$1 \times 10^{7}$
714	Np-240	$1 \times 10^{1}$	$1 \times 10^{6}$
715	Pu-234	$1 \times 10^2$	$1 \times 10^{7}$
716	Pu-235	$1 \times 10^2$	$1 \times 10^{7}$
717	Pu-236	$1 \times 10^{1}$	$1 \times 10^4$
718	Pu-237	$1 \times 10^{3}$	$1 \times 10^{7}$
719	Pu-238	$1 \times 10^{0}$	1 x 10 <sup>4</sup>
720	Pu-239	$1 \times 10^{0}$	1 x 10 <sup>4</sup>
721	Pu-240	$1 \times 10^{0}$	$1 \times 10^{3}$
722	Pu-241	$1 \times 10^2$	1 x 10 <sup>5</sup>
723	Pu-242	$1 \times 10^{0}$	1 x 10 <sup>4</sup>
724	Pu-243	$1 \times 10^{3}$	1 x 10 <sup>7</sup>
725	Pu-244	$1 \times 10^{0}$	1 x 10 <sup>4</sup>
726	Pu-245	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
727	Pu-246	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
728	Am-237	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
729	Am-238	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
730	Am-239	1 x 10 <sup>2</sup>	1 x 10 <sup>6</sup>
731	Am-240	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
732	Am-241	1 x 10 <sup>0</sup>	1 x 10 <sup>4</sup>
733	Am-242	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
734	Am-242m <sup>a</sup>	1 x 10 <sup>0</sup>	1 x 10 <sup>4</sup>
735	Am-243 <sup>a</sup>	1 x 10 <sup>0</sup>	$1 \times 10^{3}$
736	Am-244	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
737	Am-244m	1 x 10 <sup>4</sup>	1 x 10 <sup>7</sup>
738	Am-245	1 x 10 <sup>3</sup>	1 x 10 <sup>6</sup>
739	Am-246	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
740	Am-246m	1 x 10 <sup>1</sup>	1 x 10 <sup>6</sup>
741	Cm-238	1 x 10 <sup>2</sup>	1 x 10 <sup>7</sup>
742	Cm-240	$1 \times 10^2$	1 x 10 <sup>5</sup>
743	Cm-241	$1 \times 10^2$	1 x 10 <sup>6</sup>

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
744	Cm-242	$1 \times 10^2$	1 x 10 <sup>5</sup>
745	Cm-243	$1 \times 10^{0}$	1 x 10 <sup>4</sup>
746	Cm-244	$1 \times 10^{1}$	1 x 10 <sup>4</sup>
747	Cm-245	$1 \times 10^{0}$	$1 \times 10^{3}$
748	Cm-246	$1 \times 10^{0}$	$1 \times 10^{3}$
749	Cm-247	$1 \times 10^{0}$	1 x 10 <sup>4</sup>
750	Cm-248	$1 \times 10^{0}$	$1 \times 10^{3}$
751	Cm-249	$1 \times 10^3$	1 x 10 <sup>6</sup>
752	Cm-250	1 x 10 <sup>-1</sup>	$1 \times 10^{3}$
753	Bk-245	$1 \times 10^2$	1 x 10 <sup>6</sup>
754	Bk-246	$1 \times 10^{1}$	1 x 10 <sup>6</sup>
755	Bk-247	$1 \times 10^{0}$	$1 \times 10^4$
756	Bk-249	$1 \times 10^3$	$1 \times 10^{6}$
757	Bk-250	$1 \times 10^{1}$	$1 \times 10^{6}$
758	Cf-244	$1 \times 10^4$	$1 \times 10^{7}$
759	Cf-246	$1 \times 10^3$	$1 \times 10^{6}$
760	Cf-248	$1 \times 10^{1}$	1 x 10 <sup>4</sup>
761	Cf-249	$1 \times 10^{0}$	$1 \times 10^{3}$
762	Cf-250	$1 \times 10^{1}$	$1 \times 10^{4}$
763	Cf-251	$1 \times 10^{0}$	$1 \times 10^{3}$
764	Cf-252	$1 \times 10^{1}$	$1 \times 10^{4}$
765	Cf-253	$1 \times 10^2$	$1 \times 10^{5}$
766	Cf-254	$1 \times 10^{0}$	$1 \times 10^{3}$
767	Es-250	$1 \times 10^2$	$1 \times 10^{6}$
768	Es-251	$1 \times 10^2$	$1 \times 10^{7}$
769	Es-253	$1 \times 10^2$	1 x 10 <sup>5</sup>
770	Es-254	$1 \times 10^{1}$	1 x 10 <sup>4</sup>
771	Es-254m	$1 \times 10^2$	1 x 10 <sup>6</sup>
772	Fm-252	$1 \times 10^3$	1 x 10 <sup>6</sup>
773	Fm-253	$1 \times 10^2$	1 x 10 <sup>6</sup>
774	Fm-254	1 x 10 <sup>4</sup>	1 x 10 <sup>7</sup>
775	Fm-255	$1 \times 10^3$	1 x 10 <sup>6</sup>
776	Fm-257	1 x 10 <sup>1</sup>	1 x 10 <sup>5</sup>
777	Md-257	$1 \times 10^2$	1 x 10 <sup>7</sup>
778	Md-258	$1 \times 10^2$	1 x 10 <sup>5</sup>
779	An alpha-emitting nuclide not	$1 \times 10^{0}$	$1 \times 10^{3}$

Item	Nuclide	Activity concentration value (Bq/g)	Activity value (Bq)
	mentioned in another item		
780	A nuclide that is not alpha-emitting and not mentioned in another item	1 x 10 <sup>1</sup>	1 x 10 <sup>4</sup>

# Part 3—Parent nuclides and progeny nuclides

## 3 Parent nuclides and progeny nuclides

The following table sets out progeny nuclides for parent nuclides included in secular equilibrium.

The activity of a progeny nuclide included in secular equilibrium with a parent nuclide Note 1:

is dealt with in regulation 3A.

Parent nuclides are also marked <sup>a</sup> in the table in clause 2. Note 2:

Parent r	Parent nuclides and progeny nuclides	
Item	Parent nuclide	Progeny nuclide
1	Ge-68	Ga-68
2	Rb-83	Kr-83m
3	Sr-82	Rb-82
4	Sr-90	Y-90
5	Y-87	Sr-87m
6	Zr-93	Nb-93m
7	Zr-97	Nb-97
8	Ru-106	Rh-106
9	Ag-108m	Ag-108
10	Sn-121m	Sn-121 (0.776)
11	Sn-126	Sb-126m
12	Xe-122	I-122
13	Cs-137	Ba-137m
14	Ba-140	La-140
15	Ce-144	Pr-144
16	Gd-146	Eu-146
17	Hf-172	Lu-172
18	W-178	Ta-178
19	W-188	Re-188
20	Re-189	Os-189m (0.241)
21	Os-194	Ir-194
22	Ir-189	Os-189m
23	Pt-188	Ir-188
24	Hg-194	Au-194
25	Hg-195m	Hg-195 (0.542)
26	Pb-210	Bi-210
		Po-210

## Part 3 Parent nuclides and progeny nuclides

Parent nuclides and progeny nuclides  Item Parent nuclide Progeny nuclide		
		ž ,
27	Pb-212	Bi-212
		Tl-208 (0.36)
		Po-212 (0.64)
28	Bi-210m	Tl-206
29	Bi-212	Tl-208 (0.36)
		Po-212 (0.64)
30	Rn-220	Po-216
31	Rn-222	Po-218
		Pb-214
		Bi-214
		Po-214
32	Ra-223	Rn-219
		Po-215
		Pb-211
		Bi-211
		Tl-207
33	Ra-224	Rn-220
		Po-216
		Pb-212
		Bi-212
		Tl-208 (0.36)
2.4	D 00/	Po-212 (0.64)
34	Ra-226	Rn-222
		Po-218 Pb-214
		Bi-214
		Po-214
		Pb-210
		Bi-210
		Po-210
35	Ra-228	Ac-228
36	Ac-225	Fr-221
		At-217
		Bi-213
		Po-213 (0.978)
		T1-209 (0.0216)
		Pb-209 (0.978)
37	Ac-227	Fr-223 (0.0138)
38	Th-226	Ra-222
		Rn-218
		Po-214
39	Th-228	Ra-224
		Rn-220
		Po-216
		Pb-212

	nuclides and progeny nuclides	
Item	Parent nuclide	Progeny nuclide
		Bi-212
		Tl-208 (0.36)
		Po-212 (0.64)
40	Th-229	Ra-225
		Ac-225
		Fr-221
		At-217
		Bi-213
		Po-213
		Pb-209
41	Th-nat	Ra-228
		Ac-228
		Th-228
		Ra-224
		Rn-220
		Po-216
		Pb-212
		Bi-212
		T1-208 (0.36)
		Po-212 (0.64)
42	Th-234	Pa-234m
43	U-230	Th-226
		Ra-222
		Rn-218
		Po-214
44	U-232	Th-228
		Ra-224
		Rn-220
		Po-216
		Pb-212
		Bi-212
		Tl-208 (0.36)
		Po-212 (0.64)
45	U-235	Th-231
46	U-238	Th-234
		Pa-234m
47	U-nat	Th-234
		Pa-234m
		U-234
		Th-230
		Ra-226
		Rn-222
		Po-218
		Pb-214
		Bi-214

Parent nuclides and progeny nuclides			
Item	Parent nuclide	Progeny nuclide	
		Po-214	
		Pb-210	
		Bi-210	
		Po-210	
48	U-240	Np-240m	
49	Np-237	Pa-233	
50	Am-242m	Am-242	
51	Am-243	Np-239	

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# Schedule 3—Information that may be requested by the CEO

(regulation 39)

# Part 1—Facility licence

## 1 Facility licence—information and documents that may be requested by CEO

The following table sets out information and documents that the CEO may ask an applicant for a facility licence to give.

Information and documents	Facility licence—information and documents that may be requested by CEO			
1 The applicant's full name, position and business address. 2 A description of the purpose of the facility that is to be authorised by the facility licence. 3 A detailed description of the controlled facility and the site for that facility. 4 Plans and arrangements describing how the applicant proposes to manage the controlled facility to ensure the health and safety of people, and the protection of the environment including the following information: (a) the applicant's arrangements for maintaining effective control of the facility; (b) the safety management plan for the controlled facility; (c) the radiation protection plan for the controlled facility; (d) the radioactive waste management plan for the controlled facility; (e) the security plan for the controlled facility; (f) the emergency plan for the controlled facility; (g) the environment protection plan for the controlled facility.  Authorisation for preparing a site for a controlled facility  5 A detailed site evaluation establishing the suitability of the site.  6 The characteristics of the site, including the extent to which the site may be affected by natural and man-made events.  7 Any environmental impact statement requested or required by a government agency, and the outcome of the environmental assessment.  Authorisation to construct a controlled facility  8 The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site.  9 Any fundamental difficulties that will need to be resolved before any future authorisation is given.	Item	Information and documents		
A description of the purpose of the facility that is to be authorised by the facility licence.  A detailed description of the controlled facility and the site for that facility.  Plans and arrangements describing how the applicant proposes to manage the controlled facility to ensure the health and safety of people, and the protection of the environment including the following information:  (a) the applicant's arrangements for maintaining effective control of the facility;  (b) the safety management plan for the controlled facility;  (c) the radiation protection plan for the controlled facility;  (d) the radioactive waste management plan for the controlled facility;  (e) the security plan for the controlled facility;  (f) the emergency plan for the controlled facility;  (g) the environment protection plan for the controlled facility.  Authorisation for preparing a site for a controlled facility  Authorisation for preparing a site for a controlled facility  Authorisation for preparing a site for a controlled facility  Any environmental impact statement requested or required by a government agency, and the outcome of the environmental assessment.  Authorisation to construct a controlled facility  The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site.	General info	General information		
licence.  A detailed description of the controlled facility and the site for that facility.  Plans and arrangements describing how the applicant proposes to manage the controlled facility to ensure the health and safety of people, and the protection of the environment including the following information:  (a) the applicant's arrangements for maintaining effective control of the facility;  (b) the safety management plan for the controlled facility;  (c) the radiation protection plan for the controlled facility;  (d) the radioactive waste management plan for the controlled facility;  (e) the security plan for the controlled facility;  (f) the emergency plan for the controlled facility;  (g) the environment protection plan for the controlled facility.  Authorisation for preparing a site for a controlled facility  Authorisation for preparing a site for a controlled facility  Authorisation for preparing a site for a controlled facility  Authorisation for preparing a site for a controlled facility  Authorisation to construct a controlled facility  The design of the environmental assessment.  Authorisation to construct a controlled facility  The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site.	1	The applicant's full name, position and business address.		
Plans and arrangements describing how the applicant proposes to manage the controlled facility to ensure the health and safety of people, and the protection of the environment including the following information:  (a) the applicant's arrangements for maintaining effective control of the facility; (b) the safety management plan for the controlled facility; (c) the radiation protection plan for the controlled facility; (d) the radioactive waste management plan for the controlled facility; (e) the security plan for the controlled facility; (f) the emergency plan for the controlled facility; (g) the environment protection plan for the controlled facility.  Authorisation for preparing a site for a controlled facility  Authorisation for preparing a site for a controlled facility of the site.  The characteristics of the site, including the extent to which the site may be affected by natural and man-made events.  Any environmental impact statement requested or required by a government agency, and the outcome of the environmental assessment.  Authorisation to construct a controlled facility  The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site.  Any fundamental difficulties that will need to be resolved before any future authorisation is given.	2			
controlled facility to ensure the health and safety of people, and the protection of the environment including the following information:  (a) the applicant's arrangements for maintaining effective control of the facility; (b) the safety management plan for the controlled facility; (c) the radiation protection plan for the controlled facility; (d) the radioactive waste management plan for the controlled facility; (e) the security plan for the controlled facility; (f) the emergency plan for the controlled facility; (g) the environment protection plan for the controlled facility.  Authorisation for preparing a site for a controlled facility  A detailed site evaluation establishing the suitability of the site.  The characteristics of the site, including the extent to which the site may be affected by natural and man-made events.  Any environmental impact statement requested or required by a government agency, and the outcome of the environmental assessment.  Authorisation to construct a controlled facility  The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site.  Any fundamental difficulties that will need to be resolved before any future authorisation is given.	3	A detailed description of the controlled facility and the site for that facility.		
(c) the radiation protection plan for the controlled facility; (d) the radioactive waste management plan for the controlled facility; (e) the security plan for the controlled facility; (f) the emergency plan for the controlled facility; (g) the environment protection plan for the controlled facility.  Authorisation for preparing a site for a controlled facility  5 A detailed site evaluation establishing the suitability of the site.  6 The characteristics of the site, including the extent to which the site may be affected by natural and man-made events.  7 Any environmental impact statement requested or required by a government agency, and the outcome of the environmental assessment.  Authorisation to construct a controlled facility  8 The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site.  9 Any fundamental difficulties that will need to be resolved before any future authorisation is given.	4	controlled facility to ensure the health and safety of people, and the protection of the environment including the following information:		
(d) the radioactive waste management plan for the controlled facility; (e) the security plan for the controlled facility; (f) the emergency plan for the controlled facility; (g) the environment protection plan for the controlled facility.  Authorisation for preparing a site for a controlled facility  5 A detailed site evaluation establishing the suitability of the site.  6 The characteristics of the site, including the extent to which the site may be affected by natural and man-made events.  7 Any environmental impact statement requested or required by a government agency, and the outcome of the environmental assessment.  Authorisation to construct a controlled facility  8 The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site.  9 Any fundamental difficulties that will need to be resolved before any future authorisation is given.		(b) the safety management plan for the controlled facility;		
(e) the security plan for the controlled facility; (f) the emergency plan for the controlled facility; (g) the environment protection plan for the controlled facility.  Authorisation for preparing a site for a controlled facility  5 A detailed site evaluation establishing the suitability of the site.  6 The characteristics of the site, including the extent to which the site may be affected by natural and man-made events.  7 Any environmental impact statement requested or required by a government agency, and the outcome of the environmental assessment.  Authorisation to construct a controlled facility  8 The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site.  9 Any fundamental difficulties that will need to be resolved before any future authorisation is given.		(c) the radiation protection plan for the controlled facility;		
(f) the emergency plan for the controlled facility; (g) the environment protection plan for the controlled facility.  Authorisation for preparing a site for a controlled facility  5 A detailed site evaluation establishing the suitability of the site.  6 The characteristics of the site, including the extent to which the site may be affected by natural and man-made events.  7 Any environmental impact statement requested or required by a government agency, and the outcome of the environmental assessment.  Authorisation to construct a controlled facility  8 The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site.  9 Any fundamental difficulties that will need to be resolved before any future authorisation is given.		(d) the radioactive waste management plan for the controlled facility;		
(g) the environment protection plan for the controlled facility.  Authorisation for preparing a site for a controlled facility  5		(e) the security plan for the controlled facility;		
Authorisation for preparing a site for a controlled facility  5		(f) the emergency plan for the controlled facility;		
5 A detailed site evaluation establishing the suitability of the site. 6 The characteristics of the site, including the extent to which the site may be affected by natural and man-made events. 7 Any environmental impact statement requested or required by a government agency, and the outcome of the environmental assessment.  Authorisation to construct a controlled facility  8 The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site. 9 Any fundamental difficulties that will need to be resolved before any future authorisation is given.		(g) the environment protection plan for the controlled facility.		
The characteristics of the site, including the extent to which the site may be affected by natural and man-made events.  Any environmental impact statement requested or required by a government agency, and the outcome of the environmental assessment.  Authorisation to construct a controlled facility  The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site.  Any fundamental difficulties that will need to be resolved before any future authorisation is given.	Authorisation	on for preparing a site for a controlled facility		
by natural and man-made events.  Any environmental impact statement requested or required by a government agency, and the outcome of the environmental assessment.  Authorisation to construct a controlled facility  The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site.  Any fundamental difficulties that will need to be resolved before any future authorisation is given.	5	A detailed site evaluation establishing the suitability of the site.		
and the outcome of the environmental assessment.  Authorisation to construct a controlled facility  8 The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site.  9 Any fundamental difficulties that will need to be resolved before any future authorisation is given.	6			
The design of the controlled facility, including ways in which the design deals with the physical and environmental characteristics of the site.  Any fundamental difficulties that will need to be resolved before any future authorisation is given.	7			
the physical and environmental characteristics of the site.  9 Any fundamental difficulties that will need to be resolved before any future authorisation is given.	Authorisation	on to construct a controlled facility		
authorisation is given.	8			
The construction plan and schedule.	9			
	10	The construction plan and schedule.		

Facility licence—information and documents that may be requested by CEO			
Item	Information and documents		
11	A preliminary safety analysis report that demonstrates the adequacy of the design of the facility and identifies structure, components and systems that are safety related items.		
12	The arrangements for testing and commissioning safety related items.		
Authorisatio	on to possess or control a controlled facility		
13	The arrangements for maintaining criticality safety during loading, moving or storing nuclear fuel and other fissile materials at the controlled facility.		
14	The arrangements for safe storage of controlled material and maintaining the controlled facility.		
Authorisatio	on to operate a controlled facility		
15	A description of the structures, components, systems and equipment of the controlled facility as they have been constructed.		
16	A final safety analysis report that demonstrates the adequacy of the design of the controlled facility, and includes the results of commissioning tests.		
17	The operational limits and conditions of the controlled facility.		
18	The arrangements for commissioning the controlled facility.		
19	The arrangements for operating the controlled facility.		
Authorisatio	on for decommissioning a controlled facility		
20	The decommissioning plan for the controlled facility.		
21	The schedule for decommissioning the controlled facility.		
Authorisatio	Authorisation for abandoning a controlled facility		
22	The results of decommissioning activities at the controlled facility.		
23	Details of any environmental monitoring program proposed for the site.		

# Part 2—Source licence

## 2 Source licence—information and documents that may be requested by CEO

The following table sets out information and documents that the CEO may ask an applicant for a source licence to give.

Source licence-	information and documents that may be requested by CEO
Item	Information and documents
1	The applicant's full name, position and business address.
2	A description of the purpose of the proposed source licence.
3	A detailed description of the dealing that is to be authorised by the source licence.
4	Plans and arrangements describing how the applicant proposes to manage the controlled material or apparatus to ensure the health and safety of people and the protection of the environment including the following information:
	(a) the applicant's arrangements for maintaining effective control of the controlled material or controlled apparatus;
	(b) the safety management plan for the controlled material or controlled apparatus;
	(c) the radiation protection plan for the controlled material or controlled apparatus;
	(d) the radioactive waste management plan for the controlled material or controlled apparatus;
	(e) the plan for ultimate disposal or transfer of the controlled material or controlled apparatus;
	(f) the security plan for the controlled material or controlled apparatus;
	(g) the emergency plan for the controlled material or controlled apparatus.
5	If the dealing involves a sealed source of a controlled material:
	(a) the nuclide, activity, chemical form, encapsulation material and physical form of the sealed source; and
	(b) the purpose and identification details of the sealed source; and
	(c) the place where the sealed source is located; and
	(d) a copy of any sealed source certificate for the sealed source.
6	If the dealing involves an unsealed source of a controlled material:
	(a) the nuclide, chemical form and physical form of the unsealed source; and
	(b) the purpose and identification details of the unsealed source; and
	(c) the maximum activity of each nuclide to be held on the premises at any 1 time; and
	(d) the place where the unsealed source is to be located.
7	If the dealing involves a controlled apparatus that produces ionizing radiation:
	(a) the purpose and identification details of the controlled apparatus; and
	(b) the maximum kilovoltage; and
	(c) the place where the controlled apparatus is used.
8	If the dealing involves a controlled apparatus that produces non-ionizing radiation:

Source licence—information and documents that may be requested by CEO		
Item Information and documents		
	(a) the purpose and identification details of the controlled apparatus; and	
	(b) the likely exposure levels including the nature of the radiation; and	
	(c) all output parameters relevant to the likely exposure conditions; and	
(d) the place where the controlled apparatus is used.		

# Schedule 3A—Facility licence application fees—nuclear installations

(regulation 40B)

## 1 Facility licence application fees—nuclear installations

The following table sets out the amount of the application fee for a facility licence that authorises a person to do a thing mentioned in an item in the table in relation to a controlled facility that is a nuclear installation.

Facilit	Facility licence application fees—nuclear installations		
Item	Thing authorised to be done by licence	Amount (\$)	
1	Preparing a site for a controlled facility, being a nuclear reactor that is designed:		
	<ul><li>(a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and</li></ul>	29,438	
	(b) to have maximum thermal power of less than 1 megawatt		
2	Constructing a controlled facility, being a nuclear reactor that is designed:		
	<ul><li>(a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and</li></ul>	183,999	
	(b) to have maximum thermal power of less than 1 megawatt		
3	Possessing or controlling a controlled facility, being a nuclear reactor:		
	<ul><li>(a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and</li></ul>	147,200	
	(b) with maximum thermal power of less than 1 megawatt		
4	Operating a controlled facility, being a nuclear reactor:		
	<ul><li>(a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and</li></ul>	73,598	
	(b) with maximum thermal power of less than 1 megawatt		
5	De-commissioning, disposing of or abandoning a controlled facility, being a nuclear reactor that:		
	<ul><li>(a) was used for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and</li></ul>	73,598	
	(b) had maximum thermal power of less than 1 megawatt		
6	Preparing a site for a controlled facility, being a nuclear reactor that is designed:		
	(a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and	147,200	
	(b) to have maximum thermal power of 1 megawatt or more		
7	Constructing a controlled facility, being a nuclear reactor that is designed:		
	(a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and	588,802	

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	Facility licence application fees—nuclear installations	
Item	Thing authorised to be done by licence	Amount (\$)
	(b) to have maximum thermal power of 1 megawatt or more	
8	Possessing or controlling a controlled facility, being a nuclear reactor:	
	<ul><li>(a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and</li></ul>	147,200
	(b) with maximum thermal power of 1 megawatt or more	
9	Operating a controlled facility, being a nuclear reactor:	
	<ul><li>(a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and</li></ul>	630,862
	(b) with maximum thermal power of 1 megawatt or more	
10	De-commissioning, disposing of or abandoning a controlled facility, being a nuclear reactor that:	
	<ul> <li>(a) was used for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and</li> </ul>	147,200
	(b) had maximum thermal power of 1 megawatt or more	
11	Preparing a site for a controlled facility, being a plant for preparing or storing fuel for use in a nuclear reactor of a kind mentioned in any of items 1 to 9	14,718
12	Constructing a controlled facility, being a plant for preparing or storing fuel for use in a nuclear reactor of a kind mentioned in any of items 1 to 9	66,238
13	Possessing or controlling a controlled facility, being a plant for preparing or storing fuel for use in a nuclear reactor of a kind mentioned in any of items 1 to 9	14,718
14	Operating a controlled facility, being a plant for preparing or storing fuel for use in a nuclear reactor of a kind mentioned in any of items 1 to 9	66,238
15	De-commissioning, disposing of or abandoning a controlled facility, being a plant that was used for preparing or storing fuel for use in a nuclear reactor of a kind mentioned in any of items 1 to 9	29,438
16	Preparing a site for a controlled facility, being:	
	(a) a radioactive waste storage facility that is designed to contain controlled materials with an activity that is greater than the applicable activity level prescribed by regulation 7; or	350,479
	(b) a radioactive waste disposal facility that is designed to contain controlled materials with an activity that is greater than the applicable activity level prescribed by regulation 8	
17	Constructing a controlled facility, being:	
	(a) a radioactive waste storage facility that is designed to contain controlled materials with an activity that is greater than the applicable activity level prescribed by regulation 7; or	420,574
	(b) a radioactive waste disposal facility that is designed to contain controlled materials with an activity that is greater than the applicable activity level prescribed by regulation 8	
18	Possessing or controlling a controlled facility, being:  (a) a radioactive waste storage facility that contains controlled materials	14,718

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Facility	Facility licence application fees—nuclear installations		
Item	Thing authorised to be done by licence	Amount (\$)	
	with an activity that is greater than the applicable activity level prescribed by regulation 7; or		
	(b) a radioactive waste disposal facility that contains controlled materials with an activity that is greater than the applicable activity level prescribed by regulation 8		
19	Operating a controlled facility, being:		
	(a) a radioactive waste storage facility that contains controlled materials with an activity that is greater than the applicable activity level prescribed by regulation 7; or	220,801	
	(b) a radioactive waste disposal facility that contains controlled materials with an activity that is greater than the applicable activity level prescribed by regulation 8		
20	De-commissioning, disposing of or abandoning a controlled facility, being:		
	(a) a radioactive waste storage facility that formerly contained controlled materials with an activity that was greater than the applicable activity level prescribed by regulation 7; or	29,438	
	(b) a radioactive waste disposal facility that formerly contained controlled materials with an activity that was greater than the applicable activity level prescribed by regulation 8		
21	Preparing a site for a controlled facility, being a facility to produce radioisotopes, that is designed to contain controlled materials with an activity that is greater than the applicable activity level prescribed by regulation 11	73,598	
22	Constructing a controlled facility, being a facility to produce radioisotopes, that is designed to contain controlled materials with an activity that is greater than the applicable activity level prescribed by regulation 11	147,200	
23	Possessing or controlling a controlled facility, being a facility producing radioisotopes and containing controlled materials with an activity that is greater than the applicable activity level prescribed by regulation 11	14,718	
24	Operating a controlled facility, being a facility producing radioisotopes and containing controlled materials with an activity that is greater than the applicable activity level prescribed by regulation 11	132,480	
25	De-commissioning, disposing of, or abandoning a controlled facility, being a facility that formerly produced radioisotopes and contained controlled materials with an activity that was greater than the applicable activity level prescribed by regulation 11	29,438	

# Schedule 3B—Facility licence application fees—prescribed radiation facilities

(regulation 40C)

# Part 1—Fees—general

### 1 Facility licence application fees—prescribed radiation facilities (general)

The following table sets out the amount of the application fee for a facility licence that authorises a person to do a thing in relation to a controlled facility that is a prescribed radiation facility of a kind mentioned in an item in the table (except if the thing is mentioned in an item in the table in clause 2).

Facility	Facility licence application fees—prescribed radiation facilities (general)		
Item	Kind of prescribed radiation facility	Amount (\$)	
1	Particle accelerator with a beam energy of more than 1 MeV	13,246	
2	Particle accelerator capable of producing neutrons	13,246	
3	Irradiator containing more than 10 <sup>15</sup> Bq of a controlled material	13,246	
4	Irradiator containing more than $10^{13}$ Bq of a controlled material but not including shielding as an integral part of its construction	13,246	
5	Irradiator containing more than 10 <sup>13</sup> Bq of a controlled material and including shielding as an integral part of its construction, but the shielding does not prevent a person from being exposed to the source	13,246	
6	Irradiator containing more than 10 <sup>13</sup> Bq of a controlled material and including shielding as an integral part of its construction, and with a source that is not inside the shielding during the operation of the irradiator	13,246	
7	Facility for the production, processing, use, storage, management or disposal of:		
	(a) unsealed sources for which the result worked out using the steps mentioned in subregulation 6(2) is greater than 10 <sup>6</sup> ; or	26,495	
	(b) sealed sources for which the result worked out using the steps mentioned in subregulation $6(2)$ is greater than $10^9$		

Note:

If the application is for a licence that authorises persons to do 2 or more of the things mentioned in paragraphs 30(1)(a), (b), (c), (d) and (e) of the Act in relation to the prescribed radiation facility, the amount of the application fee for the licence is the sum of the amounts of the application fees that would have been applicable if applications for separate licences had been made for each of those things—see subregulation 40C(3).

# Part 2—Fees—other

## 2 Facility licence application fees—prescribed radiation facilities (other)

The following table sets out the amount of the application fee for a facility licence that authorises a person to do a thing mentioned in an item in the table in relation to a prescribed radiation facility.

Facility licence application fees—prescribed radiation facilities (other)		
Item	Thing authorised to be done by licence	Amount (\$)
1	De-commissioning a controlled facility, being a prescribed radiation facility that was formerly used as a nuclear or atomic weapon test site	44,158
2	Disposing of or abandoning a controlled facility, being a prescribed radiation facility that was formerly used as a nuclear or atomic weapon test site	29,438
3	De-commissioning a controlled facility, being a prescribed radiation facility that was formerly used for the mining, processing, use, storage, management or disposal of radioactive ores	44,158
4	Disposing of or abandoning a controlled facility, being a prescribed radiation facility that was formerly used for the mining, processing, use, storage, management or disposal of radioactive ores	29,438

# Schedule 3BA—Facility licence application fees—prescribed legacy sites

Note: See regulation 40CA.

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### 1 Facility licence application fees—prescribed legacy sites

The following table sets out the amount of the application fee for a facility licence that authorises a person to do a thing mentioned in an item in the table in relation to a prescribed legacy site.

Facility licence application fees—prescribed legacy sites		
Item	Thing authorised to be done by licence	Amount (\$)
1	Possess or control a controlled facility that is a prescribed legacy site	14,332
2	Remediate a controlled facility that is a prescribed legacy site	214,996
3	Abandon a controlled facility that is a prescribed legacy site	28,665

# Schedule 3C—Source licence application fees

(regulation 40D)

# Part 1—Kinds of controlled apparatus or controlled material

# 1 Source licence application fees—kinds of controlled apparatus or controlled material

The following table sets out kinds of controlled apparatus and controlled materials for the purpose of determining the amount of an application fee for a source licence.

Source	Source licence application fees—kinds of controlled apparatus or controlled material		
Item	Controlled apparatus or controlled material		
Group	1		
1	Sealed source for calibration purposes of activity of 40 MBq or less		
2	Sealed source in a fully enclosed analytical device		
3	Sealed source with activity of 400 MBq or less in a fixed gauge		
4	Sealed source in a blood irradiator		
5	Sealed source in a bone densitometer		
6	Sealed source that:		
	(a) is in storage and awaiting disposal; and		
	(b) has a nuclide with a maximum activity of not more than 10 <sup>9</sup> times the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2		
7	Unsealed source, or sources, in a laboratory or premises, having nuclides of 1 kind only with a maximum activity not more than 100 times the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2		
8	Unsealed source, or sources, in a laboratory or premises, having nuclides such that when the maximum activity of each nuclide in the source, or sources, is divided by the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2, the total of the results for all nuclides in the source, or sources, is not more than 100		
9	Mammographic x-ray unit		
10	Conventional dental x-ray unit		
11	X-ray unit used for bone densitometry		
12	X-ray unit used for veterinary radiography		
13	Fully enclosed x-ray analysis unit		
14	Baggage inspection x-ray unit		
15	Mobile or portable medical x-ray unit		
16	Magnetic field non-destructive testing device		
17	Induction heater or induction furnace		
18	Industrial radiofrequency heater or welder		

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Source	Source licence application fees—kinds of controlled apparatus or controlled material		
Item	Controlled apparatus or controlled material		
19	Radiofrequency plasma tube		
20	Microwave or radiofrequency diathermy equipment		
21	Industrial microwave or radiofrequency processing system		
22	Optical source, other than a laser product, emitting ultraviolet radiation, infra-red or visible light.		
23	Laser product with an accessible emission that exceeds the accessible emission limits of a Class 3R laser product, as set out in AS/NZS IEC 60825.1:2014		
24	Optical fibre communication system exceeding Hazard Level 3R, as defined by AS/NZS IEC 60825.2:2011		
24A	Sealed source of controlled material not mentioned in another item of this Schedule, dealings with which have the potential for accidental exposure but the exposure would be unlikely to exceed the dose limits mentioned in regulations 59 and 62		
24B	Controlled apparatus that produces ionizing radiation not mentioned in another item of this Schedule, dealings with which have the potential for accidental exposure but the exposure would be unlikely to exceed the dose limits mentioned in regulations 59 and 62		
Group	2		
25	Sealed source for calibration purposes of activity of more than 40 MBq		
26	Sealed source in a partially enclosed analytical device		
27	Sealed source of activity of more than 400 MBq in a fixed gauge		
28	Sealed source in a mobile gauge		
29	Sealed source for medical or veterinary diagnostic nuclear medicine use		
30	Unsealed source, or sources, in a laboratory or premises, having nuclides of 1 kind only with a maximum activity of more than 100, but not more than 10 000, times the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2		
31	Unsealed source, or sources, in a laboratory or premises, having nuclides such that when the maximum activity of each nuclide in the source, or sources, is divided by the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2, the total of the results for all nuclides in the source, or sources, is more than 100 but not more than 10 000		
32	Unsealed sources used for tracer studies in the environment		
33	Industrial radiography x-ray unit		
34	Fixed medical x-ray unit, including a unit used for fluoroscopy, tomography and chiropractic radiography		
35	Partially enclosed x-ray analysis unit		
36	Medical therapy simulator		
37	CT scanner		
37A	Sealed source of controlled material not mentioned in another item of this Schedule, dealings with which have the potential for accidental exposure that is likely to exceed a dose limit mentioned in regulations 59 and 62 but that is unlikely to result in acute effects		
37B	Controlled apparatus that produces ionizing radiation not mentioned in another item of this Schedule, dealings with which have the potential for accidental exposure that is likely to exceed a dose limit mentioned in regulations 59 and 62 but that is unlikely to result in acute effects		

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Source licence application fees—kinds of controlled apparatus or controlled material		
Item	Controlled apparatus or controlled material	
Group	3	
38	Sealed source for industrial radiography	
39	Sealed source for medical and veterinary radiotherapy	
40	Sealed source in a bore hole logger	
41	Sealed source of controlled material not mentioned in another item of this Schedule, dealings with which have the potential for accidental exposure that is likely to exceed a dose limit mentioned in regulations 59 and 62 and that is likely to result in acute effects	
42	Unsealed source, or sources, in a laboratory or premises, having nuclides of 1 kind only with a maximum activity of more than 10 000, but not more than 1 000 000, times the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2	
43	Unsealed source, or sources, in a laboratory or premises, having nuclides such that when the maximum activity of each nuclide in the source, or sources, is divided by the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2, the total of the results for all nuclides in the source, or sources, is more than 1 0 000 but not more than 1 000 000	
44	Veterinary or medical radiotherapy unit	
45	Controlled apparatus that produces ionizing radiation not mentioned in another item of this Schedule, dealings with which have the potential for accidental exposure that is likely to exceed a dose limit mentioned in regulations 59 and 62 and that is likely to result in acute effects	

Note: Regulation 3 defines *sealed source* and *unsealed source*.

# Part 2—Fees

## 2 Source licence application fees—amount of fees

The following table sets out amounts for the purpose of determining the amount of an application fee for a source licence.

Note: The amount of an application fee for a source licence is based on:

- (a) the number of controlled apparatus or controlled materials in the same location to be dealt with under the application; and
- (b) the Group in the table in clause 1 that covers the controlled apparatus or controlled materials.

Source licence application fees—amount of fees		
Item	Number of controlled apparatus or controlled materials in the same location to be dealt with under application	Amount (\$)
1	For less than 4 controlled apparatus or controlled materials from:	
	(a) Group 1	734
	(b) Group 2	2,942
	(c) Group 3	8,829
2	For more than 3, but less than 11, controlled apparatus or controlled materials from:	
	(a) Group 1	1,910
	(b) Group 2	5,887
	(c) Group 3	17,661
3	For 11 or more controlled apparatus or controlled materials from:	
	(a) Group 1	3,679
	(b) Group 2	11,065
	(c) Group 3	32,382

# Schedule 4—Identity card

(regulation 64)

Australian Radiation Protection and Nuclear Safety Act 1998

This identifies (name of inspector), whose photograph and signature appear below, as an inspector appointed by the CEO of the Australian Radiation Protection and Nuclear Safety Agency under subsection 62(1) of the Australian Radiation Protection and Nuclear Safety Act 1998.

1990.	
	(photograph)
	(signature of inspector)
	(signature of the CEO)
Valid until (date when appointment ceases)	

Dated

# **Schedule 5—International agreements**

Note: See regulation 65.

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## 1 International agreements

The following table sets out relevant international agreements.

Item	Title of agreement	Date agreement signed on behalf of Australia
1	Treaty on the Non-Proliferation of Nuclear Weapons	27 February 1970
2	Agreement between Australia and the International Atomic Energy Agency for the Application of Safeguards in connection with the Treaty on the Non-Proliferation of Nuclear Weapons	10 July 1974
3	Convention on the Physical Protection of Nuclear Material	22 February 1984
4	Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency	26 September 1986
5	Convention on Early Notification of a Nuclear Accident	26 September 1986
6	Convention on Nuclear Safety	20 September 1994
7	Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management	13 November 1998
8	Agreement for cooperation between the Government of Australia and the Government of the United States of America concerning technology for the separation of isotopes of uranium by laser excitation, with annexes, exchange of notes and agreed minutes	28 October 1999
9	International Convention for the Suppression of Acts of Nuclear Terrorism	14 September 2005

# Schedule 6—Non-applicable State and Territory laws

(regulation 65A)

- 1. Radiation Control Act 1990 (NSW).
- 2. Radiation Act 2005 (Vic).
- 3. Radiation Safety Act 1999 (Qld).
- 4. Radiation Safety Act 1975 (WA).
- 5. Radiation Protection and Control Act 1982 (SA).
- 6. Radiation Protection Act 2005 (Tas).
- 7. Radiation Protection Act 2006 (ACT).
- 8. Radiation Protection Act (NT).

#### **Endnotes**

#### **Endnote 1—About the endnotes**

The endnotes provide information about this compilation and the compiled law.

The following endnotes are included in every compilation:

Endnote 1—About the endnotes

Endnote 2—Abbreviation key

Endnote 3—Legislation history

Endnote 4—Amendment history

#### Abbreviation key—Endnote 2

The abbreviation key sets out abbreviations that may be used in the endnotes.

#### Legislation history and amendment history—Endnotes 3 and 4

Amending laws are annotated in the legislation history and amendment history.

The legislation history in endnote 3 provides information about each law that has amended (or will amend) the compiled law. The information includes commencement details for amending laws and details of any application, saving or transitional provisions that are not included in this compilation.

The amendment history in endnote 4 provides information about amendments at the provision (generally section or equivalent) level. It also includes information about any provision of the compiled law that has been repealed in accordance with a provision of the law.

#### **Editorial changes**

The *Legislation Act 2003* authorises First Parliamentary Counsel to make editorial and presentational changes to a compiled law in preparing a compilation of the law for registration. The changes must not change the effect of the law. Editorial changes take effect from the compilation registration date.

If the compilation includes editorial changes, the endnotes include a brief outline of the changes in general terms. Full details of any changes can be obtained from the Office of Parliamentary Counsel.

#### Misdescribed amendments

A misdescribed amendment is an amendment that does not accurately describe the amendment to be made. If, despite the misdescription, the amendment can be given effect as intended, the amendment is incorporated into the compiled law and the abbreviation "(md)" added to the details of the amendment included in the amendment history.

If a misdescribed amendment cannot be given effect as intended, the abbreviation "(md not incorp)" is added to the details of the amendment included in the amendment history.

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Compilation date: 1/7/17

## **Endnote 2—Abbreviation key**

ad = added or inserted

am = amended

amdt = amendment

c = clause(s)

C[x] = Compilation No. x

Ch = Chapter(s)

def = definition(s)

Dict = Dictionary

disallowed = disallowed by Parliament

Div = Division(s)

ed = editorial change

exp = expires/expired or ceases/ceased to have

effect

F = Federal Register of Legislation

gaz = gazette

LA = Legislation Act 2003

LIA = Legislative Instruments Act 2003

(md) = misdescribed amendment can be given

effect

(md not incorp) = misdescribed amendment

cannot be given effect

mod = modified/modification

No. = Number(s)

o = order(s)

Ord = Ordinance

orig = original

par = paragraph(s)/subparagraph(s)

/sub-subparagraph(s)

pres = present

prev = previous

(prev...) = previously

Pt = Part(s)

r = regulation(s)/rule(s)

reloc = relocated

renum = renumbered

rep = repealed

rs = repealed and substituted

s = section(s)/subsection(s)

Sch = Schedule(s)

Sdiv = Subdivision(s)

SLI = Select Legislative Instrument

SR = Statutory Rules

Sub-Ch = Sub-Chapter(s)

SubPt = Subpart(s)

 $\underline{\text{underlining}} = \text{whole or part not}$ 

commenced or to be commenced

Compilation date: 1/7/17

Authorised Version F2017C00573 registered 19/07/2017

## Endnote 3—Legislation history

# **Endnote 3—Legislation history**

Name	FRLI registration or gazettal	Commencement	Application, saving and transitional provisions
37, 1999	18 Mar 1999	18 Mar 1999	
97, 1999	10 June 1999	10 June 1999	_
306, 2000	16 Nov 2000	16 Nov 2000	_
330, 2000	8 Dec 2000	5 Feb 2001	_
271, 2001	5 Oct 2001	5 Oct 2001	_
243, 2002	24 Oct 2002	24 Oct 2002	_
90, 2003	22 May 2003	22 May 2003	_
213, 2004	15 July 2004	15 July 2004	_
115, 2007	11 May 2007 (F2007L01083)	12 May 2007	_
234, 2008	3 Dec 2008 (F2008L04264)	4 Dec 2008	_
101, 2010	25 May 2010 (F2010L01072)	26 May 2010	_
174, 2010	2 July 2010 (F2010L01560)	3 July 2010	_
51, 2011	27 Apr 2011 (F2011L00644)	1 July 2011	_
44, 2012	10 Apr 2012 (F2012L00812)	1 July 2012	_
74, 2013	17 May 2013 (F2013L00796)	Sch 1 (item 3): 1 July 2013 (s 2)	_
78, 2014	16 June 2014 (F2014L00722)	1 July 2014 (s 2)	_
73, 2015	1 Jun 2015 (F2015L00776)	1 July 2015 (s 2)	_

Name	Registration	Commencement	Application, saving and transitional provisions
Australian Radiation Protection and Nuclear Safety Amendment (2016 Measures No. 1) Regulation 2016	10 May 2016 (F2016L00758)	1 July 2016 (s 2)	_
Australian Radiation Protection and Nuclear Safety Amendment (2017 Measures No. 1) Regulations 2017	28 June 2017 (F2017L00781)	1 July 2017 (s 2(1) item 1)	_

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# **Endnote 4—Amendment history**

Provision affected	How affected
Part 1	
r 2	rep LA s 48D
r 3	am No 78, 2014
	rs No 73, 2015
	am F2016L00758; F2017L00781
r 3A	ad No 73, 2015
Part 1A	
Part 1A	ad F2017L00781
r 3B	ad F2017L00781
Part 2	
Division 1	
r. 4	am No 306, 2000; No 234, 2008; No 78, 2014; No 73, 2015; F2017L00781
Division 2	
r 5	rep F2016L00758
r. 6	am No 306, 2000; No 90, 2003; No 73, 2015; F2016L00758
г 6АА	ad F2016L00758
Division 2A	
Division 2A	ad No 306, 2000
r. 6A	ad No 306, 2000
Division 3	
r. 7	rs No 90, 2003
	am No 73, 2015; F2016L00758
r. 8	am No 306, 2000
	rs No 90, 2003
	am No 73, 2015; F2016L00758
rr. 9–10	rep No 90, 2003
r. 11	rs No 90, 2003
	am No 73, 2015
Part 3	
Division 2	
r 30	am F2016L00758
r 31	am F2016L00758
r 35	am F2016L00758
r. 36	am. 1999 No. 97; 2000 No. 330
	rep. 2008 No. 234

### **Endnotes**

## Endnote 4—Amendment history

Provision affected	How affected
Part 4	
Division 1	
r 37	am No 306, 2000; F2016L00758
r. 37A	am No 306, 2000
r. 38	am No 306, 2000; No 234, 2008; No 73, 2015
Division 2	
r 39	am No 73, 2015
Division 2A	
Division 2A	ad. 1999 No. 97
	rs. 2000 No. 306
r. 40A	ad. 1999 No. 97
	rs. 2000 No. 306
r. 40B	ad No 97, 1999
	rs No 306, 2000
	am No 73, 2015
r. 40C	ad No 97, 1999
	rs No 306, 2000
	am No 73, 2015
r 40CA	ad F2016L00758
r. 40D	ad No 97, 1999
	rs No 306, 2000
	am No 213, 2004; No 73, 2015
r. 40E	ad. 1999 No. 97
	rep. 2000 No. 97
r. 40F	ad. 1999 No. 97
	rep. 2000 No. 306
r. 40G	ad. 1999 No. 97
	rep. 2000 No. 306
r. 40H	ad. 1999 No. 97
	rep. 2000 No. 306
Division 4	
r. 47	rep. 2008 No. 234
r. 48	am No 271, 2001; No 234, 2008; No 73, 2015; F2016L00758
	rs F2017L00781
r 49	rs No 73, 2015
r 50	rs No 73, 2015
r 51	rs No 73, 2015
r 52	am No 73, 2015
r 53	am No 73, 2015; F2017L00781
r. 54	rs. 2000 No. 306

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Provision affected	How affected
r. 55	rs. 2000 No. 306
Division 5	
Division 5	ad. 2000 No. 306
r. 55A	ad. 2000 No. 306
r. 55B	ad. 2000 No. 306
	am No 78, 2014
r. 55C	ad. 2000 No. 306
	am No 78, 2014; F2017L00781
r. 55D	ad. 2000 No. 306
	rep No 78, 2014
Part 5	
Part 5 heading	rs No 73, 2015
Division 5.1	
Division 5.1 heading	ad. 2000 No. 330
r. 56	rs. 2000 No. 330
Division 5.2	
Division 5.2 heading	ad. 2000 No. 330
r. 57	rs. 2000 No. 330
r. 58	am No 306, 2000; No 234, 2008; No 73, 2015; F2017L00781
r 59	am No 234, 2008; F2017L00781
r 60	am No 73, 2015
r 61	am No 73, 2015
r 62	am No 73, 2015; F2017L00781
Division 5.3	
Division 5.3	ad No 330, 2000
Division 5.3 heading	rs No 73, 2015
r. 62A	ad No 330, 2000
	am No 271, 2001; No 234, 2008; No 73, 2015; F2017L00781
Part 7	
Part 7	ad. 2000 No. 306
r. 65	ad. 2000 No. 306
	am F2016L00758
r. 65A	ad. 2001 No. 271
r. 66	ad No 306, 2000
	am No 234, 2008; F2016L00758
Part 8	ad F2016L00758
	rep F2017L00781
67	ad F2016L00758
r 67	

### **Endnotes**

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## Endnote 4—Amendment history

Provision affected	How affected
Schedule 1	am No 243, 2002; No 234, 2008; No 78, 2014; No 73, 2015; F2016L00758; F2017L00781
Schedule 2	
Schedule 2 heading	rs No 90, 2003
Schedule 2	am No 97, 1999; No 306, 2000; No 271, 2001; No 234, 2008; No 78, 2014; No 73, 2015; F2016L00758; F2017L00781
Schedule 3	
Schedule 3	am No 73, 2015
Schedule 3A	
Schedule 3A	ad No 97, 1999
	rs No 306, 2000
	am No 90, 2003; No 213, 2004; No 115, 2007; No 101, 2010; No 51, 2011; No 44, 2012; No. 74, 2013; No 78, 2014; No 73, 2015; F2016L00758; F2017L00781
Schedule 3B	
Schedule 3B	ad No 97, 1999
	rs No 306, 2000
	am No 90, 2003; No 213, 2004; No 101, 2010; No 51, 2011; No 44, 2012; No. 74, 2013; No 78, 2014; No 73, 2015; F2016L00758; F2017L00781
Schedule 3BA	
Schedule 3BA	ad F2016L00758
	am F2017L00781
Schedule 3C	
Schedules 3C	ad No 97, 1999
	rs No 306, 2000
	am No 213, 2004; No 234, 2008; No 101, 2010; No 174, 2010; No 51, 2011; No 44, 2012; No. 74, 2013; No 78, 2014; No 73, 2015; F2016L00758; F2017L00781
Schedules 3D–3F	ad. 1999 No. 97
	rep. 2000 No. 306
Schedule 5	
Schedule 5	ad. 2000 No. 306
	rs F2016L00758
Schedule 6	
Schedule 6	ad No 271, 2001
	am No 234, 2008; No 78, 2014
Dictionary	am No 97, 1999; No 306, 2000; No 330, 2000; No 271, 2001; No 90, 2003; No 234, 2008
	rep F2016L00758