

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. 19**

**Compilation date:** 1 July 2018

**Includes amendments up to:** F2018L00850

**Registered:** 23 July 2018

**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 2018 (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If a provision of the compiled law has been repealed in accordance with a provision of the law, details are included in the endnotes.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 2018.

***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 2018.

***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 2018.

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

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.

***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:

(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 Management in Mining and Mineral Processing (2005) (Radiation Protection Series No. 9)*, as existing on 1 July 2018.

Note: The Mining and Mineral Processing Code and Safety Guide could in 2018 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 2018.

Note: The Planned Exposure Code could in 2018 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 2018.

Note: The Security Code of Practice could in 2018 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 2018.

Note: The Transport Code could in 2018 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.

Note: Parent nuclides are also marked a 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.

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*;

(c) to grant approvals under the Transport Code in the CEO’s capacity as competent authority for the Commonwealth for the purposes of the Transport Code.

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.

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 1015 Bq of a controlled material;

(c) an irradiator that contains more than 1013 Bq but not more than 1015 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 106; or

(ii) sealed sources for which the result worked out using the steps mentioned in subregulation (2) is greater than 109.

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.

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 104—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 106; 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 1010.

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 102.

(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 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 108.

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 106; 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 1010.

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.

(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

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.

(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

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.

(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

(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:

(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

(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:

(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:

(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.

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.

50A Maintaining accurate inventory of controlled apparatus and materials

The holder of a licence must keep and maintain an accurate inventory of the controlled apparatus and controlled materials that that the licence holder deals with.

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

(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:



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

(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:



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.

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 personis 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 cm2 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.

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 <http://www.comlaw.gov.au> (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.

| Exposure limits for non‑ionizing radiation | |
| --- | --- |
| Item | Exposure limits |
| 1 | The reference levels mentioned in the *ICNIRP Guidelines For Limiting Exposure To Time‑Varying Electric And Magnetic Fields (1 Hz—100 kHz)*, published by the International Commission on Non‑Ionizing Radiation Protection, as existing on 1 July 2018. | |
| 3 | The maximum exposure levels mentioned in the *Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields—3 kHz to 300 GHz (2002) (Radiation Protection Series No. 3)*. | |
| 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 | The exposure limits mentioned in the *ICNIRP* *Guidelines On Limits Of Exposure To Static Magnetic Fields*, published by the International Commission on Non‑Ionizing Radiation Protection, as existing on 1 July 2018. | |

Note 1: The documents mentioned in items 1, 3, 6 and 7 of the table could in 2018 be viewed on, or accessed from, ARPANSA’s website (http://www.arpansa.gov.au).

Note 2: For guidance on the exposure limits mentioned in item 5 of the table, see the *ICNIRP Guidelines On Limits Of Exposure To Incoherent Visible And Infrared Radiation*, published by the International Commission on Non‑Ionizing Radiation Protection. The Guidelines could in 2018 be accessed from ARPANSA’s website (http://www.arpansa.gov.au).

Schedule 2—Exempt dealings

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

Part 1—Exempt dealings

1 Exempt dealings

The following table sets out dealings that are exempt dealings.

| Exempt dealings | |
| --- | --- |
| 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/m3 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: *Smoke Alarms using scattered light, transmitted light or ionization*, as existing on 1 July 2018.  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:  (i) is used solely for safety purposes; and  (ii) includes less than 74 GBq of tritium;  (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:  (i) a nickel‑63 sealed source with activity not more than 750 MBq; or  (ii) a tritium source with activity not more than 20 GBq;  (i) lighting products that include krypton‑85;  (j) radar equipment used for communications;  (k) radiofrequency equipment used for communications;  (l) an artificial optical source emitting ultraviolet A radiation (315—400 nm);  (m) a completely enclosed apparatus containing an ultraviolet radiation light source (e.g. a spectrophotometer);  (n) a biological safety cabinet (laminar flow or biohazard) with a failsafe interlocking system;  (o) an embedded (enclosed) laser product with an accessible emission that is lower than the accessible emission limits of a Class 3B laser product, as set out in AS/NZS IEC 60825.1:2014, during normal operations. |
| 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 a 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.

| Activity concentration values and activity values for nuclides | | | |
| --- | --- | --- | --- |
| Item | Nuclide | Activity concentration value (Bq/g) | Activity value (Bq) |
| 1 | H‑3 | 1 x 106 | 1 x 109 |
| 2 | Be‑7 | 1 x 103 | 1 x 107 |
| 3 | Be‑10 | 1 x 104 | 1 x 106 |
| 4 | C‑11 | 1 x 101 | 1 x 106 |
| 5 | C‑14 | 1 x 104 | 1 x 107 |
| 6 | N‑13 | 1 x 102 | 1 x 109 |
| 7 | Ne‑19 | 1 x 102 | 1 x 109 |
| 8 | O‑15 | 1 x 102 | 1 x 109 |
| 9 | F‑18 | 1 x 101 | 1 x 106 |
| 10 | Na‑22 | 1 x 101 | 1 x 106 |
| 11 | Na‑24 | 1 x 101 | 1 x 105 |
| 12 | Mg‑28 | 1 x 101 | 1 x 105 |
| 13 | Al‑26 | 1 x 101 | 1 x 105 |
| 14 | Si‑31 | 1 x 103 | 1 x 106 |
| 15 | Si‑32 | 1 x 103 | 1 x 106 |
| 16 | P‑32 | 1 x 103 | 1 x 105 |
| 17 | P‑33 | 1 x 105 | 1 x 108 |
| 18 | S‑35 | 1 x 105 | 1 x 108 |
| 19 | Cl‑36 | 1 x 104 | 1 x 106 |
| 20 | Cl‑38 | 1 x 101 | 1 x 105 |
| 21 | Cl‑39 | 1 x 101 | 1 x 105 |
| 22 | Ar‑37 | 1 x 106 | 1 x 108 |
| 23 | Ar‑39 | 1 x 107 | 1 x 104 |
| 24 | Ar‑41 | 1 x 102 | 1 x 109 |
| 25 | K‑40 | 1 x 102 | 1 x 106 |
| 26 | K‑42 | 1 x 102 | 1 x 106 |
| 27 | K‑43 | 1 x 101 | 1 x 106 |
| 28 | K‑44 | 1 x 101 | 1 x 105 |
| 29 | K‑45 | 1 x 101 | 1 x 105 |
| 30 | Ca‑41 | 1 x 105 | 1 x 107 |
| 31 | Ca‑45 | 1 x 104 | 1 x 107 |
| 32 | Ca‑47 | 1 x 101 | 1 x 106 |
| 33 | Sc‑43 | 1 x 101 | 1 x 106 |
| 34 | Sc‑44 | 1 x 101 | 1 x 105 |
| 35 | Sc‑45 | 1 x 102 | 1 x 107 |
| 36 | Sc‑46 | 1 x 101 | 1 x 106 |
| 37 | Sc‑47 | 1 x 102 | 1 x 106 |
| 38 | Sc‑48 | 1 x 101 | 1 x 105 |
| 39 | Sc‑49 | 1 x 103 | 1 x 105 |
| 40 | Ti‑44 | 1 x 101 | 1 x 105 |
| 41 | Ti‑45 | 1 x 101 | 1 x 106 |
| 42 | V‑47 | 1 x 101 | 1 x 105 |
| 43 | V‑48 | 1 x 101 | 1 x 105 |
| 44 | V‑49 | 1 x 104 | 1 x 107 |
| 45 | Cr‑48 | 1 x 102 | 1 x 106 |
| 46 | Cr‑49 | 1 x 101 | 1 x 106 |
| 47 | Cr‑51 | 1 x 103 | 1 x 107 |
| 48 | Mn‑51 | 1 x 101 | 1 x 105 |
| 49 | Mn‑52 | 1 x 101 | 1 x 105 |
| 50 | Mn‑52m | 1 x 101 | 1 x 105 |
| 51 | Mn‑53 | 1 x 104 | 1 x 109 |
| 52 | Mn‑54 | 1 x 101 | 1 x 106 |
| 53 | Mn‑56 | 1 x 101 | 1 x 105 |
| 54 | Fe‑52 | 1 x 101 | 1 x 106 |
| 55 | Fe‑55 | 1 x 104 | 1 x 106 |
| 56 | Fe‑59 | 1 x 101 | 1 x 106 |
| 57 | Fe‑60 | 1 x 102 | 1 x 105 |
| 58 | Co‑55 | 1 x 101 | 1 x 106 |
| 59 | Co‑56 | 1 x 101 | 1 x 105 |
| 60 | Co‑57 | 1 x 102 | 1 x 106 |
| 61 | Co‑58 | 1 x 101 | 1 x 106 |
| 62 | Co‑58m | 1 x 104 | 1 x 107 |
| 63 | Co‑60 | 1 x 101 | 1 x 105 |
| 64 | Co‑60m | 1 x 103 | 1 x 106 |
| 65 | Co‑61 | 1 x 102 | 1 x 106 |
| 66 | Co‑62m | 1 x 101 | 1 x 105 |
| 67 | Ni‑56 | 1 x 101 | 1 x 106 |
| 68 | Ni‑57 | 1 x 101 | 1 x 106 |
| 69 | Ni‑59 | 1 x 104 | 1 x 108 |
| 70 | Ni‑63 | 1 x 105 | 1 x 108 |
| 71 | Ni‑65 | 1 x 101 | 1 x 106 |
| 72 | Ni‑66 | 1 x 104 | 1 x 107 |
| 73 | Cu‑60 | 1 x 101 | 1 x 105 |
| 74 | Cu‑61 | 1 x 101 | 1 x 106 |
| 75 | Cu‑64 | 1 x 102 | 1 x 106 |
| 76 | Cu‑67 | 1 x 102 | 1 x 106 |
| 77 | Zn‑62 | 1 x 102 | 1 x 106 |
| 78 | Zn‑63 | 1 x 101 | 1 x 105 |
| 79 | Zn‑65 | 1 x 101 | 1 x 106 |
| 80 | Zn‑69 | 1 x 104 | 1 x 106 |
| 81 | Zn‑69m | 1 x 102 | 1 x 106 |
| 82 | Zn‑71m | 1 x 101 | 1 x 106 |
| 83 | Zn‑72 | 1 x 102 | 1 x 106 |
| 84 | Ga‑65 | 1 x 101 | 1 x 105 |
| 85 | Ga‑66 | 1 x 101 | 1 x 105 |
| 86 | Ga‑67 | 1 x 102 | 1 x 106 |
| 87 | Ga‑68 | 1 x 101 | 1 x 105 |
| 88 | Ga‑70 | 1 x 102 | 1 x 106 |
| 89 | Ga‑72 | 1 x 101 | 1 x 105 |
| 90 | Ga‑73 | 1 x 102 | 1 x 106 |
| 91 | Ge‑66 | 1 x 101 | 1 x 106 |
| 92 | Ge‑67 | 1 x 101 | 1 x 105 |
| 93 | Ge‑68a | 1 x 101 | 1 x 105 |
| 94 | Ge‑69 | 1 x 101 | 1 x 106 |
| 95 | Ge‑71 | 1 x 104 | 1 x 108 |
| 96 | Ge‑75 | 1 x 103 | 1 x 106 |
| 97 | Ge‑77 | 1 x 101 | 1 x 105 |
| 98 | Ge‑78 | 1 x 102 | 1 x 106 |
| 99 | As‑69 | 1 x 101 | 1 x 105 |
| 100 | As‑70 | 1 x 101 | 1 x 105 |
| 101 | As‑71 | 1 x 101 | 1 x 106 |
| 102 | As‑72 | 1 x 101 | 1 x 105 |
| 103 | As‑73 | 1 x 103 | 1 x 107 |
| 104 | As‑74 | 1 x 101 | 1 x 106 |
| 105 | As‑76 | 1 x 102 | 1 x 105 |
| 106 | As‑77 | 1 x 103 | 1 x 106 |
| 107 | As‑78 | 1 x 101 | 1 x 105 |
| 108 | Se‑70 | 1 x 101 | 1 x 106 |
| 109 | Se‑73 | 1 x 101 | 1 x 106 |
| 110 | Se‑73m | 1 x 102 | 1 x 106 |
| 111 | Se‑75 | 1 x 102 | 1 x 106 |
| 112 | Se‑79 | 1 x 104 | 1 x 107 |
| 113 | Se‑81 | 1 x 103 | 1 x 106 |
| 114 | Se‑81m | 1 x 103 | 1 x 107 |
| 115 | Se‑83 | 1 x 101 | 1 x 105 |
| 116 | Br‑74 | 1 x 101 | 1 x 105 |
| 117 | Br‑74m | 1 x 101 | 1 x 105 |
| 118 | Br‑75 | 1 x 101 | 1 x 106 |
| 119 | Br‑76 | 1 x 101 | 1 x 105 |
| 120 | Br‑77 | 1 x 102 | 1 x 106 |
| 121 | Br‑80 | 1 x 102 | 1 x 105 |
| 122 | Br‑80m | 1 x 103 | 1 x 107 |
| 123 | Br‑82 | 1 x 101 | 1 x 106 |
| 124 | Br‑83 | 1 x 103 | 1 x 106 |
| 125 | Br‑84 | 1 x 101 | 1 x 105 |
| 126 | Kr‑74 | 1 x 102 | 1 x 109 |
| 127 | Kr‑76 | 1 x 102 | 1 x 109 |
| 128 | Kr‑77 | 1 x 102 | 1 x 109 |
| 129 | Kr‑79 | 1 x 103 | 1 x 105 |
| 130 | Kr‑81 | 1 x 104 | 1 x 107 |
| 131 | Kr‑81m | 1 x 103 | 1 x 1010 |
| 132 | Kr‑83m | 1 x 105 | 1 x 1012 |
| 133 | Kr‑85 | 1 x 105 | 1 x 104 |
| 134 | Kr‑85m | 1 x 103 | 1 x 1010 |
| 135 | Kr‑87 | 1 x 102 | 1 x 109 |
| 136 | Kr‑88 | 1 x 102 | 1 x 109 |
| 137 | Rb‑79 | 1 x 101 | 1 x 105 |
| 138 | Rb‑81 | 1 x 101 | 1 x 106 |
| 139 | Rb‑81m | 1 x 103 | 1 x 107 |
| 140 | Rb‑82m | 1 x 101 | 1 x 106 |
| 141 | Rb‑83a | 1 x 102 | 1 x 106 |
| 142 | Rb‑84 | 1 x 101 | 1 x 106 |
| 143 | Rb‑86 | 1 x 102 | 1 x 105 |
| 144 | Rb‑87 | 1 x 103 | 1 x 107 |
| 145 | Rb‑88 | 1 x 102 | 1 x 105 |
| 146 | Rb‑89 | 1 x 102 | 1 x 105 |
| 147 | Sr‑80 | 1 x 103 | 1 x 107 |
| 148 | Sr‑81 | 1 x 101 | 1 x 105 |
| 149 | Sr‑82a | 1 x 101 | 1 x 105 |
| 150 | Sr‑83 | 1 x 101 | 1 x 106 |
| 151 | Sr‑85 | 1 x 102 | 1 x 106 |
| 152 | Sr‑85m | 1 x 102 | 1 x 107 |
| 153 | Sr‑87m | 1 x 102 | 1 x 106 |
| 154 | Sr‑89 | 1 x 103 | 1 x 106 |
| 155 | Sr‑90a | 1 x 102 | 1 x 104 |
| 156 | Sr‑91 | 1 x 101 | 1 x 105 |
| 157 | Sr‑92 | 1 x 101 | 1 x 106 |
| 158 | Y‑86 | 1 x 101 | 1 x 105 |
| 159 | Y‑86m | 1 x 102 | 1 x 107 |
| 160 | Y‑87a | 1 x 101 | 1 x 106 |
| 161 | Y‑88 | 1 x 101 | 1 x 106 |
| 162 | Y‑90 | 1 x 103 | 1 x 105 |
| 163 | Y‑90m | 1 x 101 | 1 x 106 |
| 164 | Y‑91 | 1 x 103 | 1 x 106 |
| 165 | Y‑91m | 1 x 102 | 1 x 106 |
| 166 | Y‑92 | 1 x 102 | 1 x 105 |
| 167 | Y‑93 | 1 x 102 | 1 x 105 |
| 168 | Y‑94 | 1 x 101 | 1 x 105 |
| 169 | Y‑95 | 1 x 101 | 1 x 105 |
| 170 | Zr‑86 | 1 x 102 | 1 x 107 |
| 171 | Zr‑88 | 1 x 102 | 1 x 106 |
| 172 | Zr‑89 | 1 x 101 | 1 x 106 |
| 173 | Zr‑93a | 1 x 103 | 1 x 107 |
| 174 | Zr‑95 | 1 x 101 | 1 x 106 |
| 175 | Zr‑97a | 1 x 101 | 1 x 105 |
| 176 | Nb‑88 | 1 x 101 | 1 x 105 |
| 177 | Nb‑89 | 1 x 101 | 1 x 105 |
| 178 | Nb‑89m | 1 x 101 | 1 x 105 |
| 179 | Nb‑90 | 1 x 101 | 1 x 105 |
| 180 | Nb‑93m | 1 x 104 | 1 x 107 |
| 181 | Nb‑94 | 1 x 101 | 1 x 106 |
| 182 | Nb‑95 | 1 x 101 | 1 x 106 |
| 183 | Nb‑95m | 1 x 102 | 1 x 107 |
| 184 | Nb‑96 | 1 x 101 | 1 x 105 |
| 185 | Nb‑97 | 1 x 101 | 1 x 106 |
| 186 | Nb‑98 | 1 x 101 | 1 x 105 |
| 187 | Mo‑90 | 1 x 101 | 1 x 106 |
| 188 | Mo‑93 | 1 x 103 | 1 x 108 |
| 189 | Mo‑93m | 1 x 101 | 1 x 106 |
| 190 | Mo‑99 | 1 x 102 | 1 x 106 |
| 191 | Mo‑101 | 1 x 101 | 1 x 106 |
| 192 | Tc‑93 | 1 x 101 | 1 x 106 |
| 193 | Tc‑93m | 1 x 101 | 1 x 106 |
| 194 | Tc‑94 | 1 x 101 | 1 x 106 |
| 195 | Tc‑94m | 1 x 101 | 1 x 105 |
| 196 | Tc‑95 | 1 x 101 | 1 x 106 |
| 197 | Tc‑95m | 1 x 101 | 1 x 106 |
| 198 | Tc‑96 | 1 x 101 | 1 x 106 |
| 199 | Tc‑96m | 1 x 103 | 1 x 107 |
| 200 | Tc‑97 | 1 x 103 | 1 x 108 |
| 201 | Tc‑97m | 1 x 103 | 1 x 107 |
| 202 | Tc‑98 | 1 x 101 | 1 x 106 |
| 203 | Tc‑99 | 1 x 104 | 1 x 107 |
| 204 | Tc‑99m | 1 x 102 | 1 x 107 |
| 205 | Tc‑101 | 1 x 102 | 1 x 106 |
| 206 | Tc‑104 | 1 x 101 | 1 x 105 |
| 207 | Ru‑94 | 1 x 102 | 1 x 106 |
| 208 | Ru‑97 | 1 x 102 | 1 x 107 |
| 209 | Ru‑103 | 1 x 102 | 1 x 106 |
| 210 | Ru‑105 | 1 x 101 | 1 x 106 |
| 211 | Ru‑106a | 1 x 102 | 1 x 105 |
| 212 | Rh‑99 | 1 x 101 | 1 x 106 |
| 213 | Rh‑99m | 1 x 101 | 1 x 106 |
| 214 | Rh‑100 | 1 x 101 | 1 x 106 |
| 215 | Rh‑101 | 1 x 102 | 1 x 107 |
| 216 | Rh‑101m | 1 x 102 | 1 x 107 |
| 217 | Rh‑102 | 1 x 101 | 1 x 106 |
| 218 | Rh‑102m | 1 x 102 | 1 x 106 |
| 219 | Rh‑103m | 1 x 104 | 1 x 108 |
| 220 | Rh‑105 | 1 x 102 | 1 x 107 |
| 221 | Rh‑106m | 1 x 101 | 1 x 105 |
| 222 | Rh‑107 | 1 x 102 | 1 x 106 |
| 223 | Pd‑100 | 1 x 102 | 1 x 107 |
| 224 | Pd‑101 | 1 x 102 | 1 x 106 |
| 225 | Pd‑103 | 1 x 103 | 1 x 108 |
| 226 | Pd‑107 | 1 x 105 | 1 x 108 |
| 227 | Pd‑109 | 1 x 103 | 1 x 106 |
| 228 | Ag‑102 | 1 x 101 | 1 x 105 |
| 229 | Ag‑103 | 1 x 101 | 1 x 106 |
| 230 | Ag‑104 | 1 x 101 | 1 x 106 |
| 231 | Ag‑104m | 1 x 101 | 1 x 106 |
| 232 | Ag‑105 | 1 x 102 | 1 x 106 |
| 233 | Ag‑106 | 1 x 101 | 1 x 106 |
| 234 | Ag‑106m | 1 x 101 | 1 x 106 |
| 235 | Ag‑108ma | 1 x 101 | 1 x 106 |
| 236 | Ag‑110m | 1 x 101 | 1 x 106 |
| 237 | Ag‑111 | 1 x 103 | 1 x 106 |
| 238 | Ag‑112 | 1 x 101 | 1 x 105 |
| 239 | Ag‑115 | 1 x 101 | 1 x 105 |
| 240 | Cd‑104 | 1 x 102 | 1 x 107 |
| 241 | Cd‑107 | 1 x 103 | 1 x 107 |
| 242 | Cd‑109 | 1 x 104 | 1 x 106 |
| 243 | Cd‑113 | 1 x 103 | 1 x 106 |
| 244 | Cd‑113m | 1 x 103 | 1 x 106 |
| 245 | Cd‑115 | 1 x 102 | 1 x 106 |
| 246 | Cd‑115m | 1 x 103 | 1 x 106 |
| 247 | Cd‑117 | 1 x 101 | 1 x 106 |
| 248 | Cd‑117m | 1 x 101 | 1 x 106 |
| 249 | In‑109 | 1 x 101 | 1 x 106 |
| 250 | In‑110 | 1 x 101 | 1 x 106 |
| 251 | In‑110m | 1 x 101 | 1 x 105 |
| 252 | In‑111 | 1 x 102 | 1 x 106 |
| 253 | In‑112 | 1 x 102 | 1 x 106 |
| 254 | In‑113m | 1 x 102 | 1 x 106 |
| 255 | In‑114 | 1 x 103 | 1 x 105 |
| 256 | In‑114m | 1 x 102 | 1 x 106 |
| 257 | In‑115 | 1 x 103 | 1 x 105 |
| 258 | In‑115m | 1 x 102 | 1 x 106 |
| 259 | In‑116m | 1 x 101 | 1 x 105 |
| 260 | In‑117 | 1 x 101 | 1 x 106 |
| 261 | In‑117m | 1 x 102 | 1 x 106 |
| 262 | In‑119m | 1 x 102 | 1 x 105 |
| 263 | Sn‑110 | 1 x 102 | 1 x 107 |
| 264 | Sn‑111 | 1 x 102 | 1 x 106 |
| 265 | Sn‑113 | 1 x 103 | 1 x 107 |
| 266 | Sn‑117m | 1 x 102 | 1 x 106 |
| 267 | Sn‑119m | 1 x 103 | 1 x 107 |
| 268 | Sn‑121 | 1 x 105 | 1 x 107 |
| 269 | Sn‑121ma | 1 x 103 | 1 x 107 |
| 270 | Sn‑123 | 1 x 103 | 1 x 106 |
| 271 | Sn‑123m | 1 x 102 | 1 x 106 |
| 272 | Sn‑125 | 1 x 102 | 1 x 105 |
| 273 | Sn‑126a | 1 x 101 | 1 x 105 |
| 274 | Sn‑127 | 1 x 101 | 1 x 106 |
| 275 | Sn‑128 | 1 x 101 | 1 x 106 |
| 276 | Sb‑115 | 1 x 101 | 1 x 106 |
| 277 | Sb‑116 | 1 x 101 | 1 x 106 |
| 278 | Sb‑116m | 1 x 101 | 1 x 105 |
| 279 | Sb‑117 | 1 x 102 | 1 x 107 |
| 280 | Sb‑118m | 1 x 101 | 1 x 106 |
| 281 | Sb‑119 | 1 x 103 | 1 x 107 |
| 282 | Sb‑120 | 1 x 102 | 1 x 106 |
| 283 | Sb‑120m | 1 x 101 | 1 x 106 |
| 284 | Sb‑122 | 1 x 102 | 1 x 104 |
| 285 | Sb‑124 | 1 x 101 | 1 x 106 |
| 286 | Sb‑124m | 1 x 102 | 1 x 106 |
| 287 | Sb‑125 | 1 x 102 | 1 x 106 |
| 288 | Sb‑126 | 1 x 101 | 1 x 105 |
| 289 | Sb‑126m | 1 x 101 | 1 x 105 |
| 290 | Sb‑127 | 1 x 101 | 1 x 106 |
| 291 | Sb‑128 | 1 x 101 | 1 x 105 |
| 292 | Sb‑128m | 1 x 101 | 1 x 105 |
| 293 | Sb‑129 | 1 x 101 | 1 x 106 |
| 294 | Sb‑130 | 1 x 101 | 1 x 105 |
| 295 | Sb‑131 | 1 x 101 | 1 x 106 |
| 296 | Te‑116 | 1 x 102 | 1 x 107 |
| 297 | Te‑121 | 1 x 101 | 1 x 106 |
| 298 | Te‑121m | 1 x 102 | 1 x 106 |
| 299 | Te‑123 | 1 x 103 | 1 x 106 |
| 300 | Te‑123m | 1 x 102 | 1 x 107 |
| 301 | Te‑125m | 1 x 103 | 1 x 107 |
| 302 | Te‑127 | 1 x 103 | 1 x 106 |
| 303 | Te‑127m | 1 x 103 | 1 x 107 |
| 304 | Te‑129 | 1 x 102 | 1 x 106 |
| 305 | Te‑129m | 1 x 103 | 1 x 106 |
| 306 | Te‑131 | 1 x 102 | 1 x 105 |
| 307 | Te‑131m | 1 x 101 | 1 x 106 |
| 308 | Te‑132 | 1 x 102 | 1 x 107 |
| 309 | Te‑133 | 1 x 101 | 1 x 105 |
| 310 | Te‑133m | 1 x 101 | 1 x 105 |
| 311 | Te‑134 | 1 x 101 | 1 x 106 |
| 312 | I‑120 | 1 x 101 | 1 x 105 |
| 313 | I‑120m | 1 x 101 | 1 x 105 |
| 314 | I‑121 | 1 x 102 | 1 x 106 |
| 315 | I‑123 | 1 x 102 | 1 x 107 |
| 316 | I‑124 | 1 x 101 | 1 x 106 |
| 317 | I‑125 | 1 x 103 | 1 x 106 |
| 318 | I‑126 | 1 x 102 | 1 x 106 |
| 319 | I‑128 | 1 x 102 | 1 x 105 |
| 320 | I‑129 | 1 x 102 | 1 x 105 |
| 321 | I‑130 | 1 x 101 | 1 x 106 |
| 322 | I‑131 | 1 x 102 | 1 x 106 |
| 323 | I‑132 | 1 x 101 | 1 x 105 |
| 324 | I‑132m | 1 x 102 | 1 x 106 |
| 325 | I‑133 | 1 x 101 | 1 x 106 |
| 326 | I‑134 | 1 x 101 | 1 x 105 |
| 327 | I‑135 | 1 x 101 | 1 x 106 |
| 328 | Xe‑120 | 1 x 102 | 1 x 109 |
| 329 | Xe‑121 | 1 x 102 | 1 x 109 |
| 330 | Xe‑122a | 1 x 102 | 1 x 109 |
| 331 | Xe‑123 | 1 x 102 | 1 x 109 |
| 332 | Xe‑125 | 1 x 103 | 1 x 109 |
| 333 | Xe‑127 | 1 x 103 | 1 x 105 |
| 334 | Xe‑129m | 1 x 103 | 1 x 104 |
| 335 | Xe‑131m | 1 x 104 | 1 x 104 |
| 336 | Xe‑133m | 1 x 103 | 1 x 104 |
| 337 | Xe‑133 | 1 x 103 | 1 x 104 |
| 338 | Xe‑135 | 1 x 103 | 1 x 1010 |
| 339 | Xe‑135m | 1 x 102 | 1 x 109 |
| 340 | Xe‑138 | 1 x 102 | 1 x 109 |
| 341 | Cs‑125 | 1 x 101 | 1 x 104 |
| 342 | Cs‑127 | 1 x 102 | 1 x 105 |
| 343 | Cs‑129 | 1 x 102 | 1 x 105 |
| 344 | Cs‑130 | 1 x 102 | 1 x 106 |
| 345 | Cs‑131 | 1 x 103 | 1 x 106 |
| 346 | Cs‑132 | 1 x 101 | 1 x 105 |
| 347 | Cs‑134m | 1 x 103 | 1 x 105 |
| 348 | Cs‑134 | 1 x 101 | 1 x 104 |
| 349 | Cs‑135 | 1 x 104 | 1 x 107 |
| 350 | Cs‑135m | 1 x 101 | 1 x 106 |
| 351 | Cs‑136 | 1 x 101 | 1 x 105 |
| 352 | Cs‑137a | 1 x 101 | 1 x 104 |
| 353 | Cs‑138 | 1 x 101 | 1 x 104 |
| 354 | Ba‑126 | 1 x 102 | 1 x 107 |
| 355 | Ba‑128 | 1 x 102 | 1 x 107 |
| 356 | Ba‑131 | 1 x 102 | 1 x 106 |
| 357 | Ba‑131m | 1 x 102 | 1 x 107 |
| 358 | Ba‑133 | 1 x 102 | 1 x 106 |
| 359 | Ba‑133m | 1 x 102 | 1 x 106 |
| 360 | Ba‑135m | 1 x 102 | 1 x 106 |
| 361 | Ba‑137m | 1 x 101 | 1 x 106 |
| 362 | Ba‑139 | 1 x 102 | 1 x 105 |
| 363 | Ba‑140a | 1 x 101 | 1 x 105 |
| 364 | Ba‑141 | 1 x 102 | 1 x 105 |
| 365 | Ba‑142 | 1 x 102 | 1 x 106 |
| 366 | La‑131 | 1 x 101 | 1 x 106 |
| 367 | La‑132 | 1 x 101 | 1 x 106 |
| 368 | La‑135 | 1 x 103 | 1 x 107 |
| 369 | La‑137 | 1 x 103 | 1 x 107 |
| 370 | La‑138 | 1 x 101 | 1 x 106 |
| 371 | La‑140 | 1 x 101 | 1 x 105 |
| 372 | La‑141 | 1 x 102 | 1 x 105 |
| 373 | La‑142 | 1 x 101 | 1 x 105 |
| 374 | La‑143 | 1 x 102 | 1 x 105 |
| 375 | Ce‑134 | 1 x 103 | 1 x 107 |
| 376 | Ce‑135 | 1 x 101 | 1 x 106 |
| 377 | Ce‑137 | 1 x 103 | 1 x 107 |
| 378 | Ce‑137m | 1 x 103 | 1 x 106 |
| 379 | Ce‑139 | 1 x 102 | 1 x 106 |
| 380 | Ce‑141 | 1 x 102 | 1 x 107 |
| 381 | Ce‑143 | 1 x 102 | 1 x 106 |
| 382 | Ce‑144a | 1 x 102 | 1 x 105 |
| 383 | Pr‑136 | 1 x 101 | 1 x 105 |
| 384 | Pr‑137 | 1 x 102 | 1 x 106 |
| 385 | Pr‑138m | 1 x 101 | 1 x 106 |
| 386 | Pr‑139 | 1 x 102 | 1 x 107 |
| 387 | Pr‑142 | 1 x 102 | 1 x 105 |
| 388 | Pr‑142m | 1 x 107 | 1 x 109 |
| 389 | Pr‑143 | 1 x 104 | 1 x 106 |
| 390 | Pr‑144 | 1 x 102 | 1 x 105 |
| 391 | Pr‑145 | 1 x 103 | 1 x 105 |
| 392 | Pr‑147 | 1 x 101 | 1 x 105 |
| 393 | Nd‑136 | 1 x 102 | 1 x 106 |
| 394 | Nd‑138 | 1 x 103 | 1 x 107 |
| 395 | Nd‑139 | 1 x 102 | 1 x 106 |
| 396 | Nd‑139m | 1 x 101 | 1 x 106 |
| 397 | Nd‑141 | 1 x 102 | 1 x 107 |
| 398 | Nd‑147 | 1 x 102 | 1 x 106 |
| 399 | Nd‑149 | 1 x 102 | 1 x 106 |
| 400 | Nd‑151 | 1 x 101 | 1 x 105 |
| 401 | Pm‑141 | 1 x 101 | 1 x 105 |
| 402 | Pm‑143 | 1 x 102 | 1 x 106 |
| 403 | Pm‑144 | 1 x 101 | 1 x 106 |
| 404 | Pm‑145 | 1 x 103 | 1 x 107 |
| 405 | Pm‑146 | 1 x 101 | 1 x 106 |
| 406 | Pm‑147 | 1 x 104 | 1 x 107 |
| 407 | Pm‑148 | 1 x 101 | 1 x 105 |
| 408 | Pm‑148m | 1 x 101 | 1 x 106 |
| 409 | Pm‑149 | 1 x 103 | 1 x 106 |
| 410 | Pm‑150 | 1 x 101 | 1 x 105 |
| 411 | Pm‑151 | 1 x 102 | 1 x 106 |
| 412 | Sm‑141 | 1 x 101 | 1 x 105 |
| 413 | Sm‑141m | 1 x 101 | 1 x 106 |
| 414 | Sm‑142 | 1 x 102 | 1 x 107 |
| 415 | Sm‑145 | 1 x 102 | 1 x 107 |
| 416 | Sm‑146 | 1 x 101 | 1 x 105 |
| 417 | Sm‑147 | 1 x 101 | 1 x 104 |
| 418 | Sm‑151 | 1 x 104 | 1 x 108 |
| 419 | Sm‑153 | 1 x 102 | 1 x 106 |
| 420 | Sm‑155 | 1 x 102 | 1 x 106 |
| 421 | Sm‑156 | 1 x 102 | 1 x 106 |
| 422 | Eu‑145 | 1 x 101 | 1 x 106 |
| 423 | Eu‑146 | 1 x 101 | 1 x 106 |
| 424 | Eu‑147 | 1 x 102 | 1 x 106 |
| 425 | Eu‑148 | 1 x 101 | 1 x 106 |
| 426 | Eu‑149 | 1 x 102 | 1 x 107 |
| 427 | Eu‑150 | 1 x 101 | 1 x 106 |
| 428 | Eu‑150m | 1 x 103 | 1 x 106 |
| 429 | Eu‑152 | 1 x 101 | 1 x 106 |
| 430 | Eu‑152m | 1 x 102 | 1 x 106 |
| 431 | Eu‑154 | 1 x 101 | 1 x 106 |
| 432 | Eu‑155 | 1 x 102 | 1 x 107 |
| 433 | Eu‑156 | 1 x 101 | 1 x 106 |
| 434 | Eu‑157 | 1 x 102 | 1 x 106 |
| 435 | Eu‑158 | 1 x 101 | 1 x 105 |
| 436 | Gd‑145 | 1 x 101 | 1 x 105 |
| 437 | Gd‑146a | 1 x 101 | 1 x 106 |
| 438 | Gd‑147 | 1 x 101 | 1 x 106 |
| 439 | Gd‑148 | 1 x 101 | 1 x 104 |
| 440 | Gd‑149 | 1 x 102 | 1 x 106 |
| 441 | Gd‑151 | 1 x 102 | 1 x 107 |
| 442 | Gd‑152 | 1 x 101 | 1 x 104 |
| 443 | Gd‑153 | 1 x 102 | 1 x 107 |
| 444 | Gd‑159 | 1 x 103 | 1 x 106 |
| 445 | Tb‑147 | 1 x 101 | 1 x 106 |
| 446 | Tb‑149 | 1 x 101 | 1 x 106 |
| 447 | Tb‑150 | 1 x 101 | 1 x 106 |
| 448 | Tb‑151 | 1 x 101 | 1 x 106 |
| 449 | Tb‑153 | 1 x 102 | 1 x 107 |
| 450 | Tb‑154 | 1 x 101 | 1 x 106 |
| 451 | Tb‑155 | 1 x 102 | 1 x 107 |
| 452 | Tb‑156 | 1 x 101 | 1 x 106 |
| 453 | Tb‑156 (24.4 h) | 1 x 103 | 1 x 107 |
| 454 | Tb‑156m’ (5 h) | 1 x 104 | 1 x 107 |
| 455 | Tb‑157 | 1 x 104 | 1 x 107 |
| 456 | Tb‑158 | 1 x 101 | 1 x 106 |
| 457 | Tb‑160 | 1 x 101 | 1 x 106 |
| 458 | Tb‑161 | 1 x 103 | 1 x 106 |
| 459 | Dy‑155 | 1 x 101 | 1 x 106 |
| 460 | Dy‑157 | 1 x 102 | 1 x 106 |
| 461 | Dy‑159 | 1 x 103 | 1 x 107 |
| 462 | Dy‑165 | 1 x 103 | 1 x 106 |
| 463 | Dy‑166 | 1 x 103 | 1 x 106 |
| 464 | Ho‑155 | 1 x 102 | 1 x 106 |
| 465 | Ho‑157 | 1 x 102 | 1 x 106 |
| 466 | Ho‑159 | 1 x 102 | 1 x 106 |
| 467 | Ho‑161 | 1 x 102 | 1 x 107 |
| 468 | Ho‑162 | 1 x 102 | 1 x 107 |
| 469 | Ho‑162m | 1 x 101 | 1 x 106 |
| 470 | Ho‑164 | 1 x 103 | 1 x 106 |
| 471 | Ho‑164m | 1 x 103 | 1 x 107 |
| 472 | Ho‑166 | 1 x 103 | 1 x 105 |
| 473 | Ho‑166m | 1 x 101 | 1 x 106 |
| 474 | Ho‑167 | 1 x 102 | 1 x 106 |
| 475 | Er‑161 | 1 x 101 | 1 x 106 |
| 476 | Er‑165 | 1 x 103 | 1 x 107 |
| 477 | Er‑169 | 1 x 104 | 1 x 107 |
| 478 | Er‑171 | 1 x 102 | 1 x 106 |
| 479 | Er‑172 | 1 x 102 | 1 x 106 |
| 480 | Tm‑162 | 1 x 101 | 1 x 106 |
| 481 | Tm‑166 | 1 x 101 | 1 x 106 |
| 482 | Tm‑167 | 1 x 102 | 1 x 106 |
| 483 | Tm‑170 | 1 x 103 | 1 x 106 |
| 484 | Tm‑171 | 1 x 104 | 1 x 108 |
| 485 | Tm‑172 | 1 x 102 | 1 x 106 |
| 486 | Tm‑173 | 1 x 102 | 1 x 106 |
| 487 | Tm‑175 | 1 x 101 | 1 x 106 |
| 488 | Yb‑162 | 1 x 102 | 1 x 107 |
| 489 | Yb‑166 | 1 x 102 | 1 x 107 |
| 490 | Yb‑167 | 1 x 102 | 1 x 106 |
| 491 | Yb‑169 | 1 x 102 | 1 x 107 |
| 492 | Yb‑175 | 1 x 103 | 1 x 107 |
| 493 | Yb‑177 | 1 x 102 | 1 x 106 |
| 494 | Yb‑178 | 1 x 103 | 1 x 106 |
| 495 | Lu‑169 | 1 x 101 | 1 x 106 |
| 496 | Lu‑170 | 1 x 101 | 1 x 106 |
| 497 | Lu‑171 | 1 x 101 | 1 x 106 |
| 498 | Lu‑172 | 1 x 101 | 1 x 106 |
| 499 | Lu‑173 | 1 x 102 | 1 x 107 |
| 500 | Lu‑174 | 1 x 102 | 1 x 107 |
| 501 | Lu‑174m | 1 x 102 | 1 x 107 |
| 502 | Lu‑176 | 1 x 102 | 1 x 106 |
| 503 | Lu‑176m | 1 x 103 | 1 x 106 |
| 504 | Lu‑177 | 1 x 103 | 1 x 107 |
| 505 | Lu‑177m | 1 x 101 | 1 x 106 |
| 506 | Lu‑178 | 1 x 102 | 1 x 105 |
| 507 | Lu‑178m | 1 x 101 | 1 x 105 |
| 508 | Lu‑179 | 1 x 103 | 1 x 106 |
| 509 | Hf‑170 | 1 x 102 | 1 x 106 |
| 510 | Hf‑172a | 1 x 101 | 1 x 106 |
| 511 | Hf‑173 | 1 x 102 | 1 x 106 |
| 512 | Hf‑175 | 1 x 102 | 1 x 106 |
| 513 | Hf‑177m | 1 x 101 | 1 x 105 |
| 514 | Hf‑178m | 1 x 101 | 1 x 106 |
| 515 | Hf‑179m | 1 x 101 | 1 x 106 |
| 516 | Hf‑180m | 1 x 101 | 1 x 106 |
| 517 | Hf‑181 | 1 x 101 | 1 x 106 |
| 518 | Hf‑182 | 1 x 102 | 1 x 106 |
| 519 | Hf‑182m | 1 x 101 | 1 x 106 |
| 520 | Hf‑183 | 1 x 101 | 1 x 106 |
| 521 | Hf‑184 | 1 x 102 | 1 x 106 |
| 522 | Ta‑172 | 1 x 101 | 1 x 106 |
| 523 | Ta‑173 | 1 x 101 | 1 x 106 |
| 524 | Ta‑174 | 1 x 101 | 1 x 106 |
| 525 | Ta‑175 | 1 x 101 | 1 x 106 |
| 526 | Ta‑176 | 1 x 101 | 1 x 106 |
| 527 | Ta‑177 | 1 x 102 | 1 x 107 |
| 528 | Ta‑178 | 1 x 101 | 1 x 106 |
| 529 | Ta‑179 | 1 x 103 | 1 x 107 |
| 530 | Ta‑180 | 1 x 101 | 1 x 106 |
| 531 | Ta‑180m | 1 x 103 | 1 x 107 |
| 532 | Ta‑182 | 1 x 101 | 1 x 104 |
| 533 | Ta‑182m | 1 x 102 | 1 x 106 |
| 534 | Ta‑183 | 1 x 102 | 1 x 106 |
| 535 | Ta‑184 | 1 x 101 | 1 x 106 |
| 536 | Ta‑185 | 1 x 102 | 1 x 105 |
| 537 | Ta‑186 | 1 x 101 | 1 x 105 |
| 538 | W‑176 | 1 x 102 | 1 x 106 |
| 539 | W‑177 | 1 x 101 | 1 x 106 |
| 540 | W‑178a | 1 x 101 | 1 x 106 |
| 541 | W‑179 | 1 x 102 | 1 x 107 |
| 542 | W‑181 | 1 x 103 | 1 x 107 |
| 543 | W‑185 | 1 x 104 | 1 x 107 |
| 544 | W‑187 | 1 x 102 | 1 x 106 |
| 545 | W‑188a | 1 x 102 | 1 x 105 |
| 546 | Re‑177 | 1 x 101 | 1 x 106 |
| 547 | Re‑178 | 1 x 101 | 1 x 106 |
| 548 | Re‑181 | 1 x 101 | 1 x 106 |
| 549 | Re‑182 | 1 x 101 | 1 x 106 |
| 550 | Re‑182m | 1 x 101 | 1 x 106 |
| 551 | Re‑184 | 1 x 101 | 1 x 106 |
| 552 | Re‑184m | 1 x 102 | 1 x 106 |
| 553 | Re‑186 | 1 x 103 | 1 x 106 |
| 554 | Re‑186m | 1 x 103 | 1 x 107 |
| 555 | Re‑187 | 1 x 106 | 1 x 109 |
| 556 | Re‑188 | 1 x 102 | 1 x 105 |
| 557 | Re‑188m | 1 x 102 | 1 x 107 |
| 558 | Re‑189a | 1 x 102 | 1 x 106 |
| 559 | Os‑180 | 1 x 102 | 1 x 107 |
| 560 | Os‑181 | 1 x 101 | 1 x 106 |
| 561 | Os‑182 | 1 x 102 | 1 x 106 |
| 562 | Os‑185 | 1 x 101 | 1 x 106 |
| 563 | Os‑189m | 1 x 104 | 1 x 107 |
| 564 | Os‑191 | 1 x 102 | 1 x 107 |
| 565 | Os‑191m | 1 x 103 | 1 x 107 |
| 566 | Os‑193 | 1 x 102 | 1 x 106 |
| 567 | Os‑194a | 1 x 102 | 1 x 105 |
| 568 | Ir‑182 | 1 x 101 | 1 x 105 |
| 569 | Ir‑184 | 1 x 101 | 1 x 106 |
| 570 | Ir‑185 | 1 x 101 | 1 x 106 |
| 571 | Ir‑186 | 1 x 101 | 1 x 106 |
| 572 | Ir‑186m | 1 x 101 | 1 x 106 |
| 573 | Ir‑187 | 1 x 102 | 1 x 106 |
| 574 | Ir‑188 | 1 x 101 | 1 x 106 |
| 575 | Ir‑189a | 1 x 102 | 1 x 107 |
| 576 | Ir‑190 | 1 x 101 | 1 x 106 |
| 577 | Ir‑190m (3.1 h) | 1 x 101 | 1 x 106 |
| 578 | Ir‑190m’ (1.2 h) | 1 x 104 | 1 x 107 |
| 579 | Ir‑192 | 1 x 101 | 1 x 104 |
| 580 | Ir‑192m | 1 x 102 | 1 x 107 |
| 581 | Ir‑193m | 1 x 104 | 1 x 107 |
| 582 | Ir‑194 | 1 x 102 | 1 x 105 |
| 583 | Ir‑194m | 1 x 101 | 1 x 106 |
| 584 | Ir‑195 | 1 x 102 | 1 x 106 |
| 585 | Ir‑195m | 1 x 102 | 1 x 106 |
| 586 | Pt‑186 | 1 x 101 | 1 x 106 |
| 587 | Pt‑188a | 1 x 101 | 1 x 106 |
| 588 | Pt‑189 | 1 x 102 | 1 x 106 |
| 589 | Pt‑191 | 1 x 102 | 1 x 106 |
| 590 | Pt‑193 | 1 x 104 | 1 x 107 |
| 591 | Pt‑193m | 1 x 103 | 1 x 107 |
| 592 | Pt‑195m | 1 x 102 | 1 x 106 |
| 593 | Pt‑197 | 1 x 103 | 1 x 106 |
| 594 | Pt‑197m | 1 x 102 | 1 x 106 |
| 595 | Pt‑199 | 1 x 102 | 1 x 106 |
| 596 | Pt‑200 | 1 x 102 | 1 x 106 |
| 597 | Au‑193 | 1 x 102 | 1 x 107 |
| 598 | Au‑194 | 1 x 101 | 1 x 106 |
| 599 | Au‑195 | 1 x 102 | 1 x 107 |
| 600 | Au‑198 | 1 x 102 | 1 x 106 |
| 601 | Au‑198m | 1 x 101 | 1 x 106 |
| 602 | Au‑199 | 1 x 102 | 1 x 106 |
| 603 | Au‑200 | 1 x 102 | 1 x 105 |
| 604 | Au‑200m | 1 x 101 | 1 x 106 |
| 605 | Au‑201 | 1 x 102 | 1 x 106 |
| 606 | Hg‑193 | 1 x 102 | 1 x 106 |
| 607 | Hg‑193m | 1 x 101 | 1 x 106 |
| 608 | Hg‑194a | 1 x 101 | 1 x 106 |
| 609 | Hg‑195 | 1 x 102 | 1 x 106 |
| 610 | Hg‑195ma | 1 x 102 | 1 x 106 |
| 611 | Hg‑197 | 1 x 102 | 1 x 107 |
| 612 | Hg‑197m | 1 x 102 | 1 x 106 |
| 613 | Hg‑199m | 1 x 102 | 1 x 106 |
| 614 | Hg‑203 | 1 x 102 | 1 x 105 |
| 615 | Tl‑194 | 1 x 101 | 1 x 106 |
| 616 | Tl‑194m | 1 x 101 | 1 x 106 |
| 617 | Tl‑195 | 1 x 101 | 1 x 106 |
| 618 | Tl‑197 | 1 x 102 | 1 x 106 |
| 619 | Tl‑198 | 1 x 101 | 1 x 106 |
| 620 | Tl‑198m | 1 x 101 | 1 x 106 |
| 621 | Tl‑199 | 1 x 102 | 1 x 106 |
| 622 | Tl‑200 | 1 x 101 | 1 x 106 |
| 623 | Tl‑201 | 1 x 102 | 1 x 106 |
| 624 | Tl‑202 | 1 x 102 | 1 x 106 |
| 625 | Tl‑204 | 1 x 104 | 1 x 104 |
| 626 | Pb‑195m | 1 x 101 | 1 x 106 |
| 627 | Pb‑198 | 1 x 102 | 1 x 106 |
| 628 | Pb‑199 | 1 x 101 | 1 x 106 |
| 629 | Pb‑200 | 1 x 102 | 1 x 106 |
| 630 | Pb‑201 | 1 x 101 | 1 x 106 |
| 631 | Pb‑202 | 1 x 103 | 1 x 106 |
| 632 | Pb‑202m | 1 x 101 | 1 x 106 |
| 633 | Pb‑203 | 1 x 102 | 1 x 106 |
| 634 | Pb‑205 | 1 x 104 | 1 x 107 |
| 635 | Pb‑209 | 1 x 105 | 1 x 106 |
| 636 | Pb‑210a | 1 x 101 | 1 x 104 |
| 637 | Pb‑211 | 1 x 102 | 1 x 106 |
| 638 | Pb‑212a | 1 x 101 | 1 x 105 |
| 639 | Pb‑214 | 1 x 102 | 1 x 106 |
| 640 | Bi‑200 | 1 x 101 | 1 x 106 |
| 641 | Bi‑201 | 1 x 101 | 1 x 106 |
| 642 | Bi‑202 | 1 x 101 | 1 x 106 |
| 643 | Bi‑203 | 1 x 101 | 1 x 106 |
| 644 | Bi‑205 | 1 x 101 | 1 x 106 |
| 645 | Bi‑206 | 1 x 101 | 1 x 105 |
| 646 | Bi‑207 | 1 x 101 | 1 x 106 |
| 647 | Bi‑210 | 1 x 103 | 1 x 106 |
| 648 | Bi‑210ma | 1 x 101 | 1 x 105 |
| 649 | Bi‑212a | 1 x 101 | 1 x 105 |
| 650 | Bi‑213 | 1 x 102 | 1 x 106 |
| 651 | Bi‑214 | 1 x 101 | 1 x 105 |
| 652 | Po‑203 | 1 x 101 | 1 x 106 |
| 653 | Po‑205 | 1 x 101 | 1 x 106 |
| 654 | Po‑206 | 1 x 101 | 1 x 106 |
| 655 | Po‑207 | 1 x 101 | 1 x 106 |
| 656 | Po‑208 | 1 x 101 | 1 x 104 |
| 657 | Po‑209 | 1 x 101 | 1 x 104 |
| 658 | Po‑210 | 1 x 101 | 1 x 104 |
| 659 | At‑207 | 1 x 101 | 1 x 106 |
| 660 | At‑211 | 1 x 103 | 1 x 107 |
| 661 | Fr‑222 | 1 x 103 | 1 x 105 |
| 662 | Fr‑223 | 1 x 102 | 1 x 106 |
| 663 | Rn‑220a | 1 x 104 | 1 x 107 |
| 664 | Rn‑222a | 1 x 101 | 1 x 108 |
| 665 | Ra‑223a | 1 x 102 | 1 x 105 |
| 666 | Ra‑224a | 1 x 101 | 1 x 105 |
| 667 | Ra‑225 | 1 x 102 | 1 x 105 |
| 668 | Ra‑226a | 1 x 101 | 1 x 104 |
| 669 | Ra‑227 | 1 x 102 | 1 x 106 |
| 670 | Ra‑228a | 1 x 101 | 1 x 105 |
| 671 | Ac‑224 | 1 x 102 | 1 x 106 |
| 672 | Ac‑225a | 1 x 101 | 1 x 104 |
| 673 | Ac‑226 | 1 x 102 | 1 x 105 |
| 674 | Ac‑227a | 1 x 10‑1 | 1 x 103 |
| 675 | Ac‑228 | 1 x 101 | 1 x 106 |
| 676 | Th‑226a | 1 x 103 | 1 x 107 |
| 677 | Th‑227 | 1 x 101 | 1 x 104 |
| 678 | Th‑228a | 1 x 100 | 1 x 104 |
| 679 | Th‑229a | 1 x 100 | 1 x 103 |
| 680 | Th‑230 | 1 x 100 | 1 x 104 |
| 681 | Th‑231 | 1 x 103 | 1 x 107 |
| 682 | Th‑232 | 1 x 101 | 1 x 104 |
| 683 | Th‑nata | 1 x 100 | 1 x 103 |
| 684 | Th‑234a | 1 x 103 | 1 x 105 |
| 685 | Pa‑227 | 1 x 101 | 1 x 106 |
| 686 | Pa228 | 1 x 101 | 1 x 106 |
| 687 | Pa‑230 | 1 x 101 | 1 x 106 |
| 688 | Pa‑231 | 1 x 100 | 1 x 103 |
| 689 | Pa‑232 | 1 x 101 | 1 x 106 |
| 690 | Pa‑233 | 1 x 102 | 1 x 107 |
| 691 | Pa‑234 | 1 x 101 | 1 x 106 |
| 692 | U‑230a | 1 x 101 | 1 x 105 |
| 693 | U‑231 | 1 x 102 | 1 x 107 |
| 694 | U‑232a | 1 x 100 | 1 x 103 |
| 695 | U‑233 | 1 x 101 | 1 x 104 |
| 696 | U‑234 | 1 x 101 | 1 x 104 |
| 697 | U‑235a | 1 x 101 | 1 x 104 |
| 698 | U‑236 | 1 x 101 | 1 x 104 |
| 699 | U‑237 | 1 x 102 | 1 x 106 |
| 700 | U‑238a | 1 x 101 | 1 x 104 |
| 701 | U‑nata | 1 x 100 | 1 x 103 |
| 702 | U‑239 | 1 x 102 | 1 x 106 |
| 703 | U‑240 | 1 x 103 | 1 x 107 |
| 704 | U‑240a | 1 x 101 | 1 x 106 |
| 705 | Np‑232 | 1 x 101 | 1 x 106 |
| 706 | Np‑233 | 1 x 102 | 1 x 107 |
| 707 | Np‑234 | 1 x 101 | 1 x 106 |
| 708 | Np‑235 | 1 x 103 | 1 x 107 |
| 709 | Np‑236 | 1 x 102 | 1 x 105 |
| 710 | Np‑236m | 1 x 103 | 1 x 107 |
| 711 | Np‑237a | 1 x 100 | 1 x 103 |
| 712 | Np‑238 | 1 x 102 | 1 x 106 |
| 713 | Np‑239 | 1 x 102 | 1 x 107 |
| 714 | Np‑240 | 1 x 101 | 1 x 106 |
| 715 | Pu‑234 | 1 x 102 | 1 x 107 |
| 716 | Pu‑235 | 1 x 102 | 1 x 107 |
| 717 | Pu‑236 | 1 x 101 | 1 x 104 |
| 718 | Pu‑237 | 1 x 103 | 1 x 107 |
| 719 | Pu‑238 | 1 x 100 | 1 x 104 |
| 720 | Pu‑239 | 1 x 100 | 1 x 104 |
| 721 | Pu‑240 | 1 x 100 | 1 x 103 |
| 722 | Pu‑241 | 1 x 102 | 1 x 105 |
| 723 | Pu‑242 | 1 x 100 | 1 x 104 |
| 724 | Pu‑243 | 1 x 103 | 1 x 107 |
| 725 | Pu‑244 | 1 x 100 | 1 x 104 |
| 726 | Pu‑245 | 1 x 102 | 1 x 106 |
| 727 | Pu‑246 | 1 x 102 | 1 x 106 |
| 728 | Am‑237 | 1 x 102 | 1 x 106 |
| 729 | Am‑238 | 1 x 101 | 1 x 106 |
| 730 | Am‑239 | 1 x 102 | 1 x 106 |
| 731 | Am‑240 | 1 x 101 | 1 x 106 |
| 732 | Am‑241 | 1 x 100 | 1 x 104 |
| 733 | Am‑242 | 1 x 103 | 1 x 106 |
| 734 | Am‑242ma | 1 x 100 | 1 x 104 |
| 735 | Am‑243a | 1 x 100 | 1 x 103 |
| 736 | Am‑244 | 1 x 101 | 1 x 106 |
| 737 | Am‑244m | 1 x 104 | 1 x 107 |
| 738 | Am‑245 | 1 x 103 | 1 x 106 |
| 739 | Am‑246 | 1 x 101 | 1 x 105 |
| 740 | Am‑246m | 1 x 101 | 1 x 106 |
| 741 | Cm‑238 | 1 x 102 | 1 x 107 |
| 742 | Cm‑240 | 1 x 102 | 1 x 105 |
| 743 | Cm‑241 | 1 x 102 | 1 x 106 |
| 744 | Cm‑242 | 1 x 102 | 1 x 105 |
| 745 | Cm‑243 | 1 x 100 | 1 x 104 |
| 746 | Cm‑244 | 1 x 101 | 1 x 104 |
| 747 | Cm‑245 | 1 x 100 | 1 x 103 |
| 748 | Cm‑246 | 1 x 100 | 1 x 103 |
| 749 | Cm‑247 | 1 x 100 | 1 x 104 |
| 750 | Cm‑248 | 1 x 100 | 1 x 103 |
| 751 | Cm‑249 | 1 x 103 | 1 x 106 |
| 752 | Cm‑250 | 1 x 10‑1 | 1 x 103 |
| 753 | Bk‑245 | 1 x 102 | 1 x 106 |
| 754 | Bk‑246 | 1 x 101 | 1 x 106 |
| 755 | Bk‑247 | 1 x 100 | 1 x 104 |
| 756 | Bk‑249 | 1 x 103 | 1 x 106 |
| 757 | Bk‑250 | 1 x 101 | 1 x 106 |
| 758 | Cf‑244 | 1 x 104 | 1 x 107 |
| 759 | Cf‑246 | 1 x 103 | 1 x 106 |
| 760 | Cf‑248 | 1 x 101 | 1 x 104 |
| 761 | Cf‑249 | 1 x 100 | 1 x 103 |
| 762 | Cf‑250 | 1 x 101 | 1 x 104 |
| 763 | Cf‑251 | 1 x 100 | 1 x 103 |
| 764 | Cf‑252 | 1 x 101 | 1 x 104 |
| 765 | Cf‑253 | 1 x 102 | 1 x 105 |
| 766 | Cf‑254 | 1 x 100 | 1 x 103 |
| 767 | Es‑250 | 1 x 102 | 1 x 106 |
| 768 | Es‑251 | 1 x 102 | 1 x 107 |
| 769 | Es‑253 | 1 x 102 | 1 x 105 |
| 770 | Es‑254 | 1 x 101 | 1 x 104 |
| 771 | Es‑254m | 1 x 102 | 1 x 106 |
| 772 | Fm‑252 | 1 x 103 | 1 x 106 |
| 773 | Fm‑253 | 1 x 102 | 1 x 106 |
| 774 | Fm‑254 | 1 x 104 | 1 x 107 |
| 775 | Fm‑255 | 1 x 103 | 1 x 106 |
| 776 | Fm‑257 | 1 x 101 | 1 x 105 |
| 777 | Md‑257 | 1 x 102 | 1 x 107 |
| 778 | Md‑258 | 1 x 102 | 1 x 105 |
| 779 | An alpha‑emitting nuclide not mentioned in another item | 1 x 100 | 1 x 103 |
| 780 | A nuclide that is not alpha‑emitting and not mentioned in another item | 1 x 101 | 1 x 104 |

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.

Note 1: The activity of a progeny nuclide included in secular equilibrium with a parent nuclide is dealt with in regulation 3A.

Note 2: Parent nuclides are also marked a in the table in clause 2.

| 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 |
| 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)  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)  Tl‑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  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  Tl‑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  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 |

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.

| Facility licence—information and documents that may be requested by CEO | |
| --- | --- |
| Item | Information and documents |
| **General information** | |
| 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. |
| 10 | The construction plan and schedule. |
| 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. |
| **Authorisation 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. |
| **Authorisation 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. |
| **Authorisation for decommissioning a controlled facility** | |
| 20 | The decommissioning plan for the controlled facility. |
| 21 | The schedule for decommissioning the controlled facility. |
| **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:  (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.

| 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:  (a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and  (b) to have maximum thermal power of less than 1 megawatt | 30,144 |
| 2 | 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  (b) to have maximum thermal power of less than 1 megawatt | 188,414 |
| 3 | Possessing or controlling a controlled facility, being a nuclear reactor:  (a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and  (b) with maximum thermal power of less than 1 megawatt | 150,732 |
| 4 | Operating a controlled facility, being a nuclear reactor:  (a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and  (b) with maximum thermal power of less than 1 megawatt | 75,364 |
| 5 | De‑commissioning, disposing of or abandoning a controlled facility, being a nuclear reactor that:  (a) was used for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and  (b) had maximum thermal power of less than 1 megawatt | 75,364 |
| 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  (b) to have maximum thermal power of 1 megawatt or more | 150,732 |
| 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  (b) to have maximum thermal power of 1 megawatt or more | 602,933 |
| 8 | Possessing or controlling a controlled facility, being a nuclear reactor:  (a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and  (b) with maximum thermal power of 1 megawatt or more | 150,732 |
| 9 | Operating a controlled facility, being a nuclear reactor:  (a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and  (b) with maximum thermal power of 1 megawatt or more | 646,002 |
| 10 | De‑commissioning, disposing of or abandoning a controlled facility, being a nuclear reactor that:  (a) was used for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and  (b) had maximum thermal power of 1 megawatt or more | 150,732 |
| 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 | 15,071 |
| 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 | 67,827 |
| 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 | 15,071 |
| 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 | 67,827 |
| 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 | 30,144 |
| 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  (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 | 358,890 |
| 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  (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 | 430,667 |
| 18 | Possessing or controlling 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  (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 | 15,071 |
| 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  (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 | 226,100 |
| 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  (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 | 30,144 |
| 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 | 75,364 |
| 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 | 150,732 |
| 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 | 15,071 |
| 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 | 135,659 |
| 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 | 30,144 |

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 licence application fees—prescribed radiation facilities (general) | | |
| --- | --- | --- |
| Item | Kind of prescribed radiation facility | Amount ($) |
| 1 | Particle accelerator that:  (a) has, or is capable of having, a beam energy greater than 1 MeV; or  (b) can produce neutrons | 13,563 |
| 3 | Irradiator containing more than 1015 Bq of a controlled material | 13,563 |
| 4 | Irradiator containing more than 1013 Bq of a controlled material but not including shielding as an integral part of its construction | 13,563 |
| 5 | Irradiator containing more than 1013 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 | 13,563 |
| 6 | Irradiator containing more than 1013 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 | 13,563 |
| 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 106; or  (b) sealed sources for which the result worked out using the steps mentioned in subregulation 6(2) is greater than 109 | 27,130 |

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 | 45,217 |
| 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 | 30,144 |
| 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 | 45,217 |
| 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 | 30,144 |

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

Note: See regulation 40CA.

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 | 14,675 |
| 2 | Remediate a controlled facility that is a prescribed legacy site | 220,155 |
| 3 | Abandon a controlled facility that is a prescribed legacy site | 29,352 |

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 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 109 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 |
| 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 |
| **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 10 000 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 | 751 | |
|  | (b) Group 2 | 3,012 | |
|  | (c) Group 3 | 9,040 | |
| 2 | For more than 3, but less than 11, controlled apparatus or controlled materials from: |  | |
|  | (a) Group 1 | 1,955 | |
|  | (b) Group 2 | 6,028 | |
|  | (c) Group 3 | 18,084 | |
| 3 | For 11 or more controlled apparatus or controlled materials from: |  | |
|  | (a) Group 1 | 3,767 | |
|  | (b) Group 2 | 11,330 | |
|  | (c) Group 3 | 33,159 | |

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*.

(*photograph*)

(*signature of inspector*)

(*signature of the CEO*)

Valid until (*date when appointment ceases*)

Dated

Schedule 5—International agreements

Note: See regulation 65.

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.

Endnote 2—Abbreviation key

|  |  |
| --- | --- |
| ad = added or inserted | o = order(s) |
| am = amended | Ord = Ordinance |
| amdt = amendment | orig = original |
| c = clause(s) | par = paragraph(s)/subparagraph(s) |
| C[x] = Compilation No. x | /sub‑subparagraph(s) |
| Ch = Chapter(s) | pres = present |
| def = definition(s) | prev = previous |
| Dict = Dictionary | (prev…) = previously |
| disallowed = disallowed by Parliament | Pt = Part(s) |
| Div = Division(s) | r = regulation(s)/rule(s) |
| ed = editorial change | reloc = relocated |
| exp = expires/expired or ceases/ceased to have | renum = renumbered |
| effect | rep = repealed |
| F = Federal Register of Legislation | rs = repealed and substituted |
| gaz = gazette | s = section(s)/subsection(s) |
| LA = *Legislation Act 2003* | Sch = Schedule(s) |
| LIA = *Legislative Instruments Act 2003* | Sdiv = Subdivision(s) |
| (md) = misdescribed amendment can be given | SLI = Select Legislative Instrument |
| effect | SR = Statutory Rules |
| (md not incorp) = misdescribed amendment | Sub‑Ch = Sub‑Chapter(s) |
| cannot be given effect | SubPt = Subpart(s) |
| mod = modified/modification | underlining = whole or part not |
| No. = Number(s) | commenced or to be commenced |

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) | — |
| Australian Radiation Protection and Nuclear Safety Amendment (2018 Measures No. 1) Regulations 2018 | 22 June 2018 (F2018L00850) | 1 July 2018 (s 2(1) item 1) | — |

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; F2018L00850 |
| r 3A | ad No 73, 2015 |
| **Part 1A** |  |
| Part 1A | ad F2017L00781 |
| r 3B | ad F2017L00781 |
|  | am F2018L00850 |
| **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 |
| r 6AA | 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 |
| **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 |
|  | am F2018L00850 |
| r 49 | rs No 73, 2015 |
| r 50 | rs No 73, 2015 |
| r 50A | ad F2018L00850 |
| 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 |
| 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 |
| r 67 | ad F2016L00758 |
|  | rep F2017L00781 |
| **Schedule 1** |  |
| Schedule 1 | am No 243, 2002; No 234, 2008; No 78, 2014; No 73, 2015; F2016L00758; F2017L00781; F2018L00850 |
| **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; F2018L00850 |
| **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; F2018L00850 |
| **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; F2018L00850 |
| **Schedule 3BA** |  |
| Schedule 3BA | ad F2016L00758 |
|  | am F2017L00781; F2018L00850 |
| **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; F2018L00850 |
| 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 |