Australian Radiation Protection and Nuclear Safety Regulations 1999

Statutory Rules 1999 No. 37 as amended

made under the

Australian Radiation Protection and Nuclear Safety Act 1998

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Contents

Part 1 Preliminary

1 Name of regulations [*see* Note 1]

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

2 Commencement

These regulations commence on gazettal.

3 Definitions — the dictionary

(1) The dictionary at the end of these regulations defines certain words and expressions, and includes signpost definitions to words and expressions used in these regulations.

Example

The signpost definition:

'***dose*** see Annex A of the *Recommendations for limiting exposure to ionizing radiation.*'
indicates that the expression is defined in Annex A of the *Recommendations for limiting exposure to ionizing radiation* and applies to these regulations.

(2) The dictionary also includes certain words and expressions used in these regulations that are defined in the Act.

(3) The dictionary is part of these regulations.

(4) A definition in these regulations applies to each use of the word or expression in these regulations unless the contrary intention appears.

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 level greater than the accessible emission limit of a Class 3B (Restricted) laser product as defined by the accessible emission limit given in AS/NZS 2211.1:1997; or

(ix) an optical fibre communication system exceeding Hazard Level 3A as defined by AS/NZS 2211.2:1997; 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 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 is not a controlled apparatus.

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; and

(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

5 Controlled facility

(1) ***Controlled facility*** is defined in section 13 of the Act as a nuclear installation or a prescribed radiation facility.

(2) ***Prescribed radiation facility*** is also defined in section 13 as a facility or installation prescribed by the regulations.

(3) This Division describes prescribed radiation facilities, which will therefore be controlled facilities.

6 Prescribed radiation facility

(1) A prescribed radiation facility is any of the following:

(a) a particle accelerator that:

(i) has, or is capable of having, a beam energy greater than 1 MeV; or

(ii) can produce neutrons;

(b) an irradiator that contains more than 10^{15} Bq of a controlled material;

(c) an irradiator that contains more than 10^{13} Bq of a controlled material and:

(i) does not include shielding as an integral part of its construction; or

(ii) if it does include shielding as an integral part of its construction — the shielding does not prevent a person from being exposed to the source; or

(iii) if it does include shielding as an integral part of its construction — has a source that is not inside shielding during the operation of the irradiator;

(d) a facility (other than a nuclear installation) used for the production, processing, use, storage, management or disposal of:

(i) unsealed sources for which the result worked out using the steps mentioned in subregulation (2) is greater than 10^6; or

(ii) sealed sources for which the result worked out using the steps mentioned in subregulation (2) is greater than 10^9.

(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 column 4 of Part 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.

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 nuclear waste storage facilities

(1) For paragraph (c) of the definition of ***nuclear installation*** in section 13 of the Act, the activity level, for a nuclear waste storage facility that contains, or is designed to contain, controlled materials, is:

(a) if the facility contains, or is designed to contain, unsealed sources, and the result worked out for a waste package of

the unsealed sources, using the steps mentioned in subregulation (2) (the ***activity concentration value steps***), is greater than 10^4 — the level at which the result worked out for the unsealed sources in the facility, using the steps mentioned in subregulation (3) (the ***activity value steps***), is 10^6; or

(b) if the facility contains, or is designed to contain, sealed sources — the level at which the result worked out for the sealed sources in the facility, using the steps mentioned in subregulation (3) (the ***activity value steps***), is 10^{10}.

Note Under section 13 of the Act, a nuclear 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 column 3 of Part 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 column 4 of Part 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 nuclear waste disposal facilities

(1) This regulation applies to a nuclear waste disposal facility if:

(a) it contains, or is designed to contain, controlled materials; and

(b) the result worked out for a waste package of the controlled materials, using the steps mentioned in subregulation (3)

(the ***activity concentration value steps***), is greater than 10^2.

(2) For paragraph (c) of the definition of ***nuclear installation*** in section 13 of the Act, the activity level, for a nuclear 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 10^8.

Note Under section 13 of the Act, a nuclear 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 column 3 of Part 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 column 4 of Part 2 of Schedule 2 for the nuclide; and

(b) if there is more than 1 nuclide in the controlled materials — add the result for each nuclide worked out under paragraph (a).

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

(1) For paragraph (d) of the definition of ***nuclear installation*** in section 13 of the Act, the activity level, for a facility for production of radioisotopes, is:

(a) if the facility contains, or is designed to contain, unsealed sources — the level at which the result worked out for the

unsealed sources using the steps mentioned in subregulation (2) is 10^6; or

(b) if the facility contains, or is designed to contain, sealed sources — the level at which the result worked out for the sealed sources using the steps mentioned in subregulation (2) is 10^{10}.

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

(2) For paragraphs (1) (a) and (b), the steps are:

(a) divide the activity of each nuclide in the sources by the activity value mentioned in column 4 of Part 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 or the Council about the Committee's performance of its functions.

31 Meetings

(1) The CEO or the Council 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 or the Council 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 or the Council.

(3) If a Committee prepares a report on any matter, it must give copies of the report to the CEO and to the Chair of the Council.

36 Existing codes — revision

(1) If a Committee prepares a draft publication for the amendment of a code of practice mentioned in subregulation (2), the draft publication must be:

(a) notified as soon as practicable in a daily newspaper circulating nationally; and

(b) tabled in Parliament as part of the CEO's next quarterly report.

(2) For subregulation (1), the codes of practice are as follows:

(a) the *Code of Practice on the Management of Radioactive Wastes from the Mining and Milling of Radioactive Ores*;

(b) the *Code of Practice on Radiation Protection in the Mining and Milling of Radioactive Ores*;

(c) the *Code of Practice for the Safe Transport of Radioactive Substances*.

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) or (e) 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) or (e) 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 Part 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 Part 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 55 or 58; or

(c) the annual collective effective dose to the population committed by 1 year of the dealing is likely to be greater than 1 man.Sv.

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 Part 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; or

(c) the annual collective effective dose to the population committed by 1 year of the dealing is likely to be not more than 1 man.Sv.

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 Part 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 Part 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 Part 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 column 2 of an item in Schedule 3A in relation to a controlled facility that is a nuclear installation.

(2) The application fee for the licence is the fee mentioned in column 3 of 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 column 2 of an item in Part 1 of Schedule 3B.

(2) The application fee for the licence is:

(a) subject to paragraph (b), the fee mentioned in column 3 of the relevant item in Part 1 of Schedule 3B; or

(b) if the thing authorised to be done by the licence is mentioned in column 2 of an item in Part 2 of Schedule 3B — the fee mentioned in column 3 of that 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 application fee for the licence is the sum of the application fees for each thing authorised to be done by the licence.

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 column 2 of an item in Group 1, 2 or 3 of Part 1 of Schedule 3C.

(2) The application fee 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 fee mentioned in column 3 of the provision in Part 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 fees mentioned in column 3 of the provisions in Part 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 fees mentioned in column 3 of the provisions in Part 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.

47 Compliance with *National Standard for Limiting Occupational Exposure to Ionizing Radiation*

(1) This regulation does not apply to conduct and dealings with controlled apparatus of a kind mentioned in regulation 4.

Note Regulation 4 describes kinds of apparatus that are controlled apparatus.

(2) The holder of a source licence or a facility licence must ensure that conduct and dealings with controlled materials, controlled apparatus and controlled facilities comply with the *National Standard for Limiting Occupational Exposure to Ionizing Radiation.*

48 Compliance with Recommendations and Codes of Practice

(1) This regulation does not apply to conduct and dealings with controlled apparatus of a kind mentioned in regulation 4.

Note Regulation 4 describes kinds of apparatus that are controlled apparatus.

(2) The holder of a source licence or a facility licence must ensure that all conduct and dealings with controlled materials, controlled apparatus and controlled facilities are in accordance with:

(a) the *Recommendations for limiting exposure to ionizing radiation*; and

(b) the *Code of Practice for the Safe Transport of Radioactive Material*

(3) The holder of a source licence or a facility licence must also ensure that dealings with the disposal of controlled material and controlled apparatus are in accordance with the following Codes of Practice:

(a) the *Code of Practice for the Disposal of Radioactive Waste by the User*;

(b) the *Code of Practice for the Near-Surface Disposal of Radioactive Waste in Australia*;

(c) the *Code of Practice for the Safe Transport of Radioactive Material*.

49 Compliance with plans for managing safety

The holder of a licence must ensure that all dealings with controlled materials and controlled apparatus, and all activities related to controlled facilities, comply with the plans and arrangements for managing safety of the source or facility, mentioned in the licence application.

50 Holder of a licence must review and update plans and arrangements

(1) The holder of a licence must, at least once every 12 months, review and update any plans and arrangements for managing the controlled facility, controlled material or controlled apparatus to ensure the health and safety of people and protection of the environment.

(2) The holder of a licence must, after conducting a review mentioned in subregulation (1), give the CEO information about the review.

51 CEO approval for relevant changes

The holder of a licence must seek the CEO's prior approval to make a relevant change that will have significant implications for safety.

52 Holder of a licence must tell CEO about other changes

(1) The holder of a licence may make a relevant change that is unlikely to have significant implications for safety without the CEO's approval.

(2) However, the holder of a licence must, at least once every 3 months, tell the CEO about any changes mentioned in subregulation (1).

(3) However, subregulation (2) does not apply to the extent that the licence makes other arrangements for a matter mentioned in the subregulations.

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

(1) The holder of a licence must only dispose of controlled apparatus or controlled materials with the approval of the CEO.

(2) If the holder of a licence transfers controlled apparatus or controlled materials to the possession of another person or

body, the holder of the licence must, within 7 days of the transfer, tell the CEO:

(a) that the transfer has happened; and

(b) the name of the other person or body; and

(c) the number of the licence held by the other person or body; 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 or body, a controlled facility without the CEO's approval.

(4) However, subregulations (1), (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 pro-rate the amount of the annual charge for the licence for the year.

(2) If the CEO decides to pro-rate the amount of the annual charge, the amount must be pro-rated in accordance with regulation 55D.

(3) This regulation applies to:

(a) an annual charge, unpaid in part, or in full, at the commencement of this regulation, for a financial year that commenced before the commencement of this regulation; and

(b) an annual charge for each financial year that commences after the commencement of this regulation.

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) the whole, or part, of the annual charge for the licence for the year 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 must be calculated in accordance with regulation 55D.

55D Method for pro-rating annual charge or calculating amount of refund

(1) This regulation sets out:

(a) for regulation 55B, the method for pro-rating the amount of annual charge for a facility licence or a source licence for a financial year; and

(b) for regulation 55C, the method for calculating the amount of annual charge for a facility licence or a source licence for a financial year that may be refunded to the holder of the licence.

(2) The method is:

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

where:

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

M is the number of months of the year 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 part of a month only is taken to be held for the whole of that month.

Part 5 Practices 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 practices mentioned in this regulation are prescribed for:

(a) a facility at which controlled material is present; and

(b) dealings with controlled apparatus and controlled material.

(2) The holder of a facility licence for operating the controlled facility must ensure that the doses to which a person is exposed, inside or outside the facility, while the 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.

(3) The holder of a source licence for dealing with controlled apparatus or controlled material must ensure that the doses to which a person is exposed while the source in the apparatus or material is under the holder's control do not exceed the effective dose limits mentioned in regulation 59, and the equivalent dose limits mentioned in regulation 62.

(4) For each controlled material, controlled apparatus (excluding apparatus prescribed by these regulations that produce harmful non-ionizing radiation when energised) and controlled facility, the holder of a licence must ensure that radiation protection and safety are optimised so that the following are as low as reasonably achievable after taking into account economic and social 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 *Recommendations for limiting exposure to ionising radiation* 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 calendar 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 For the obligation imposed on female employees who are pregnant, see the *National Standard for Limiting Occupational Exposure to Ionizing Radiation*, which is a prescribed standard for regulation 62.

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.

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 Schedule 1.

62 Annual equivalent dose limit

(1) The annual equivalent dose limit to the lens of the eye is:

(a) for occupational exposure — 150 mSv; and

(b) for public exposure — 15 mSv.

(2) For occupational exposure, the annual equivalent dose limit to the hands and feet is 500 mSv.

(3) The annual equivalent dose limit to the skin is:

(a) for occupational exposure — 500 mSv; and

(b) for public exposure — 50 mSv.

(4) The annual equivalent dose limit to the skin applies to the average dose received by any 1 cm^2 of skin.

Division 5.3 Codes of practice

62A Codes of practice to be followed

(1) For paragraph 85 (2) (a) of the Act, the practices and procedures described in the codes of practice 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 of practice are as follows:

(a) the *Code of Practice on the Management of Radioactive Wastes from the Mining and Milling of Radioactive Ores*;

(b) the *Code of Practice on Radiation Protection in the Mining and Milling of Radioactive Ores*;

(c) the *Code of Practice for the Safe Transport of Radioactive Material*.

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 paragraph 84 (3) (b) 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 90 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), accessible on the Internet at:

http://scaleplus.law.gov.au/html/instruments/0/14/0/IN000020.htm

(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 The exposure limits mentioned in the *Interim guidelines on limits of exposure to 50/60 Hz electric and magnetic fields*, National Health and Medical Research Council, Radiation Health Series No. 30, 1989, as in force when these regulations commence.

2 For frequencies other than 50/60 Hz, and below 3 kHz, the field limits mentioned in the International Commission on Non-Ionizing Radiation Protection Guidelines for limiting exposure to time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz), Health Physics (1998), 74, 494-522, as in force when these regulations commence.

3 The maximum exposure levels mentioned in *Radiation Protection Standard — Maximum Exposure Levels to Radiofrequency Fields— 3 kHz to 300 GHz*, adopted by the CEO of ARPANSA on 7 May 2002, as in force when *Australian Radiation Protection and Nuclear Safety Amendment Regulations 2002 (No. 1)* commence.

4 The maximum permissible exposure limits mentioned in the Australia / New Zealand Standard *AS/NZS 2211.1: 1997 Laser Safety, Part 1: Equipment classification requirements and user's guide*, published by Standards Australia, Homebush, NSW, 1997, as in force when these regulations commence.

5 The exposure limits mentioned in the International Commission on Non-Ionizing Radiation Protection: *Guidelines on limits of exposure to broadband incoherent optical radiation (0.38 to 3 μm)*, Health Physics (1997), 73, 539-553, as in force when these regulations commence.

6 The exposure limits mentioned in the *Occupational standard for exposure to ultraviolet radiation (1989)*, National Health and Medical Research Council, Radiation Health Series No. 29, 1989, as in force when these regulations commence.

7 For static magnetic fields — the limits mentioned in the International Commission on Non-Ionizing Radiation Protection: *Guidelines on limits of exposure to static magnetic fields*, Health Physics (1994), 66, 100-106, as in force when these regulations commence.

Schedule 2 Exempt dealings

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

Part 1 Dealings

Item	Description of dealing
1	The dealing involves a controlled material that has: (a) an activity concentration less than the concentration for the material mentioned in column 3 of Part 2; or (b) an activity of less than the activity in column 4 of Part 2.
2	The dealing is mixing 2 or more controlled materials. The activity for each material being mixed is divided by: (a) the activity for the material in column 4 of Part 2; or (b) the activity concentration for the material in column 3 of Part 2, and then divided by the total mass of the mixture. The results for all of the materials are added. The total is 1 or less.
3	The dealing involves naturally occurring radon-222 with an activity concentration of less than 1000 Bq/m^3 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.

Item	Description of 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 *Code of Practice for the Safe Transport of Radioactive Material* for transporting radioactive substances.
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 AS3786, as in force when these regulations commence. The dealing is not repair or maintenance of the detector.

Item	Description of dealing
7	The dealing involves any of the following items and no other controlled material: (a) a clock, watch or other device with a luminous dial that includes a quantity of a controlled material that is not more than the quantity in Part 4; (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.
8	The dealing involves a controlled apparatus or controlled material that is part of, used in connection with, produced by, incorporated in, stored in, or disposed of in, a controlled facility for which a facility licence is in force.

Part 2 Exemption levels: exempt activity concentrations and exempt activities of radionuclides (rounded)

For a nuclide marked [a] in this Part, parent nuclides and their progeny included in secular equilibrium are listed in Part 3.

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
1	H-3	1×10^6	1×10^9
2	Be-7	1×10^3	1×10^7
3	C-11	1×10^1	1×10^6

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
4	C-14	1×10^4	1×10^7
5	O-15	1×10^2	1×10^9
6	N-13	1×10^2	1×10^9
7	F-18	1×10^1	1×10^6
8	Na-22	1×10^1	1×10^6
9	Na-24	1×10^1	1×10^5
10	Mg-28	1×10^1	1×10^5
11	Si-31	1×10^3	1×10^6
12	P-32	1×10^3	1×10^5
13	P-33	1×10^5	1×10^8
14	S-35	1×10^5	1×10^8
15	Cl-36	1×10^4	1×10^6
16	Cl-38	1×10^1	1×10^5
17	Ar-37	1×10^6	1×10^8
18	Ar-41	1×10^2	1×10^9
19	K-40	1×10^2	1×10^6
20	K-42	1×10^2	1×10^6
21	K-43	1×10^1	1×10^6
22	Ca-45	1×10^4	1×10^7

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
23	Ca-47	1×10^{1}	1×10^{6}
24	Sc-46	1×10^{1}	1×10^{6}
25	Sc-47	1×10^{2}	1×10^{6}
26	Sc-48	1×10^{1}	1×10^{5}
27	V-48	1×10^{1}	1×10^{5}
28	Cr-51	1×10^{3}	1×10^{7}
29	Mn-51	1×10^{1}	1×10^{5}
30	Mn-52	1×10^{1}	1×10^{5}
31	Mn-52m	1×10^{1}	1×10^{5}
32	Mn-53	1×10^{4}	1×10^{9}
33	Mn-54	1×10^{1}	1×10^{6}
34	Mn-56	1×10^{1}	1×10^{5}
35	Fe-52	1×10^{1}	1×10^{6}
36	Fe-55	1×10^{4}	1×10^{6}
37	Fe-59	1×10^{1}	1×10^{6}
38	Co-55	1×10^{1}	1×10^{6}
39	Co-56	1×10^{1}	1×10^{5}
40	Co-57	1×10^{2}	1×10^{6}
41	Co-58	1×10^{1}	1×10^{6}

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
42	Co-58m	1×10^4	1×10^7
43	Co-60	1×10^1	1×10^5
44	Co-60m	1×10^3	1×10^6
45	Co-61	1×10^2	1×10^6
46	Co-62m	1×10^1	1×10^5
47	Ni-59	1×10^4	1×10^8
48	Ni-63	1×10^5	1×10^8
49	Ni-65	1×10^1	1×10^6
50	Cu-64	1×10^2	1×10^6
51	Cu-67	1×10^2	1×10^6
52	Zn-65	1×10^1	1×10^6
53	Zn-69	1×10^4	1×10^6
54	Zn-69m	1×10^2	1×10^6
55	Ga-67	1×10^2	1×10^6
56	Ga-72	1×10^1	1×10^5
57	Ge-68	1×10^1	1×10^5
58	Ge-71	1×10^4	1×10^8
59	As-73	1×10^3	1×10^7
60	As-74	1×10^1	1×10^6

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
61	As-76	1×10^2	1×10^5
62	As-77	1×10^3	1×10^6
63	Se-73	1×10^1	1×10^6
64	Se-75	1×10^2	1×10^6
65	Br-75	1×10^1	1×10^6
66	Br-76	1×10^1	1×10^5
67	Br-82	1×10^1	1×10^6
68	Kr-74	1×10^2	1×10^9
69	Kr-76	1×10^2	1×10^9
70	Kr-77	1×10^2	1×10^9
71	Kr-79	1×10^3	1×10^5
72	Kr-81	1×10^4	1×10^7
73	Kr-83m	1×10^5	1×10^{12}
74	Kr-85	1×10^5	1×10^4
75	Kr-85m	1×10^3	1×10^{10}
76	Kr-87	1×10^2	1×10^9
77	Kr-88	1×10^2	1×10^9
78	Rb-81	1×10^1	1×10^6
79	Rb-86	1×10^2	1×10^5

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
80	Sr-85	1×10^2	1×10^6
81	Sr-85m	1×10^2	1×10^7
82	Sr-87m	1×10^2	1×10^6
83	Sr-89	1×10^3	1×10^6
84	Sr-90[a]	1×10^2	1×10^4
85	Sr-91	1×10^1	1×10^5
86	Sr-92	1×10^1	1×10^6
86A	Y-88	1 x 101	1 x 106
87	Y-90	1×10^3	1×10^5
88	Y-91	1×10^3	1×10^6
89	Y-91m	1×10^2	1×10^6
90	Y-92	1×10^2	1×10^5
91	Y-93	1×10^2	1×10^5
92	Zr-93[a]	1×10^3	1×10^7
93	Zr-95	1×10^1	1×10^6
94	Zr-97[a]	1×10^1	1×10^5
95	Nb-93m	1×10^4	1×10^7
96	Nb-94	1×10^1	1×10^6
97	Nb-95	1×10^1	1×10^6

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
98	Nb-97	1×10^1	1×10^6
99	Nb-98	1×10^1	1×10^5
100	Mo-90	1×10^1	1×10^6
101	Mo-93	1×10^3	1×10^8
102	Mo-99[a]	1×10^2	1×10^6
103	Mo-101	1×10^1	1×10^6
104	Tc-95m	1×10^1	1×10^6
105	Tc-96	1×10^1	1×10^6
106	Tc-96m	1×10^3	1×10^7
107	Tc-97	1×10^3	1×10^8
108	Tc-97m	1×10^3	1×10^7
109	Tc-99	1×10^4	1×10^7
110	Tc-99m	1×10^2	1×10^7
111	Ru-97	1×10^2	1×10^7
112	Ru-103	1×10^2	1×10^6
113	Ru-105	1×10^1	1×10^6
114	Ru-106[a]	1×10^2	1×10^5
115	Rh-103m	1×10^4	1×10^8
116	Rh-105	1×10^2	1×10^7

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
117	Pd-103	1×10^3	1×10^8
118	Pd-109	1×10^3	1×10^6
119	Ag-105	1×10^2	1×10^6
120	Ag-110m	1×10^1	1×10^6
121	Ag-111	1×10^3	1×10^6
122	Cd-109	1×10^4	1×10^6
123	Cd-115	1×10^2	1×10^6
124	Cd-115m	1×10^3	1×10^6
125	In-111	1×10^2	1×10^6
126	In-113m	1×10^2	1×10^6
127	In-114m	1×10^2	1×10^6
128	In-115m	1×10^2	1×10^6
129	Sn-113	1×10^3	1×10^7
130	Sn-117m	1×10^2	1×10^6
131	Sn-121	1×10^5	1×10^7
132	Sn-125	1×10^2	1×10^5
133	Sb-122	1×10^2	1×10^4
134	Sb-124	1×10^1	1×10^6
135	Sb-125	1×10^2	1×10^6

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
136	Te-123m	1×10^2	1×10^7
137	Te-125m	1×10^3	1×10^7
138	Te-127	1×10^3	1×10^6
139	Te-127m	1×10^3	1×10^7
140	Te-129	1×10^2	1×10^6
141	Te-129m	1×10^3	1×10^6
142	Te-131	1×10^2	1×10^5
143	Te-131m	1×10^1	1×10^6
144	Te-132	1×10^2	1×10^7
145	Te-133	1×10^1	1×10^5
146	Te-133m	1×10^1	1×10^5
147	Te-134	1×10^1	1×10^6
148	I-123	1×10^2	1×10^7
149	I-124	1×10^1	1×10^6
150	I-125	1×10^3	1×10^6
151	I-126	1×10^2	1×10^6
152	I-129	1×10^2	1×10^5
153	I-130	1×10^1	1×10^6
154	I-131	1×10^2	1×10^6

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
155	I-132	1×10^{1}	1×10^{5}
156	I-133	1×10^{1}	1×10^{6}
157	I-134	1×10^{1}	1×10^{5}
158	I-135	1×10^{1}	1×10^{6}
159	Xe-131m	1×10^{4}	1×10^{4}
160	Xe-133	1×10^{3}	1×10^{4}
161	Xe-135	1×10^{3}	1×10^{10}
162	Cs-129	1×10^{2}	1×10^{5}
163	Cs-131	1×10^{3}	1×10^{6}
164	Cs-132	1×10^{1}	1×10^{5}
165	Cs-134m	1×10^{3}	1×10^{5}
166	Cs-134	1×10^{1}	1×10^{4}
167	Cs-135	1×10^{4}	1×10^{7}
168	Cs-136	1×10^{1}	1×10^{5}
169	Cs-137[a]	1×10^{1}	1×10^{4}
170	Cs-138	1×10^{1}	1×10^{4}
171	Ba-131	1×10^{2}	1×10^{6}
172	Ba-133	1×10^{2}	1×10^{6}
173	Ba-140[a]	1×10^{1}	1×10^{5}

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
174	La-140	1×10^{1}	1×10^{5}
175	Ce-139	1×10^{2}	1×10^{6}
176	Ce-141	1×10^{2}	1×10^{7}
177	Ce-143	1×10^{2}	1×10^{6}
178	Ce-144[a]	1×10^{2}	1×10^{5}
179	Pr-142	1×10^{2}	1×10^{5}
180	Pr-143	1×10^{4}	1×10^{6}
181	Nd-147	1×10^{2}	1×10^{6}
182	Nd-149	1×10^{2}	1×10^{6}
183	Pm-147	1×10^{4}	1×10^{7}
184	Pm-149	1×10^{3}	1×10^{6}
185	Sm-147	1×10^{1}	1×10^{4}
186	Sm-151	1×10^{4}	1×10^{8}
187	Sm-153	1×10^{2}	1×10^{6}
188	Eu-152	1×10^{1}	1×10^{6}
189	Eu-152m	1×10^{2}	1×10^{6}
190	Eu-154	1×10^{1}	1×10^{6}
191	Eu-155	1×10^{2}	1×10^{7}
192	Gd-153	1×10^{2}	1×10^{7}

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
193	Gd-159	1×10^3	1×10^6
194	Tb-149	1×10^1	1×10^6
195	Tb-160	1×10^1	1×10^6
196	Dy-165	1×10^3	1×10^6
197	Dy-166	1×10^3	1×10^6
198	Ho-166	1×10^3	1×10^5
199	Er-161	1×10^1	1×10^6
200	Er-169	1×10^4	1×10^7
201	Er-171	1×10^2	1×10^6
202	Tm-170	1×10^3	1×10^6
203	Tm-171	1×10^4	1×10^8
204	Yb-169	1×10^2	1×10^7
205	Yb-175	1×10^3	1×10^7
206	Lu-177	1×10^3	1×10^7
207	Hf-181	1×10^1	1×10^6
208	Ta-182	1×10^1	1×10^4
209	W-181	1×10^3	1×10^7
210	W-185	1×10^4	1×10^7
211	W-187	1×10^2	1×10^6

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
212	W-188	1×10^2	1×10^5
213	Re-186	1×10^3	1×10^6
214	Re-188	1×10^2	1×10^5
215	Os-185	1×10^1	1×10^6
216	Os-191	1×10^2	1×10^7
217	Os-191m	1×10^3	1×10^7
218	Os-193	1×10^2	1×10^6
219	Ir-190	1×10^1	1×10^6
220	Ir-192	1×10^1	1×10^4
221	Ir-194	1×10^2	1×10^5
222	Pt-191	1×10^2	1×10^6
223	Pt-193m	1×10^3	1×10^7
224	Pt-197	1×10^3	1×10^6
225	Pt-197m	1×10^2	1×10^6
226	Au-198	1×10^2	1×10^6
227	Au-199	1×10^2	1×10^6
228	Hg-195m	1×10^2	1×10^6
229	Hg-197	1×10^2	1×10^7
230	Hg-197m	1×10^2	1×10^6

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
231	Hg-203	1×10^2	1×10^5
232	Tl-200	1×10^1	1×10^6
233	Tl-201	1×10^2	1×10^6
234	Tl-202	1×10^2	1×10^6
235	Tl-204	1×10^4	1×10^4
235A	Pb-201	1×10^1	1×10^6
236	Pb-203	1×10^2	1×10^6
237	Pb-210[a]	1×10^1	1×10^4
238	Pb-212[a]	1×10^1	1×10^5
239	Bi-206	1×10^1	1×10^5
240	Bi-207	1×10^1	1×10^6
241	Bi-210	1×10^3	1×10^6
242	Bi-212[a]	1×10^1	1×10^5
243	Bi-213	1×10^2	1×10^6
244	Po-203	1×10^1	1×10^6
245	Po-205	1×10^1	1×10^6
246	Po-207	1×10^1	1×10^6
246A	Po-208	1 x 101	1 x 104
246B	Po-209	1 x 101	1 x 104

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
247	Po-210	1×10^{1}	1×10^{4}
248	At-211	1×10^{3}	1×10^{7}
249	Rn-220[a]	1×10^{4}	1×10^{7}
250	Rn-222[a]	1×10^{1}	1×10^{8}
251	Ra-223[a]	1×10^{2}	1×10^{5}
252	Ra-224[a]	1×10^{1}	1×10^{5}
253	Ra-225	1×10^{2}	1×10^{5}
254	Ra-226[a]	1×10^{1}	1×10^{4}
255	Ra-227	1×10^{2}	1×10^{6}
256	Ra-228[a]	1×10^{1}	1×10^{5}
257	Ac-225	1×10^{1}	1×10^{4}
258	Ac-227	1×10^{1}	1×10^{3}
259	Ac-228	1×10^{1}	1×10^{6}
260	Th-226[a]	1×10^{3}	1×10^{7}
261	Th-227	1×10^{1}	1×10^{4}
262	Th-228[a]	1×10^{0}	1×10^{4}
263	Th-229[a]	1×10^{0}	1×10^{3}
264	Th-230	1×10^{0}	1×10^{4}
265	Th-231	1×10^{3}	1×10^{7}

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
266	Th-nat (including Th-232)[a]	1×10^{0}	1×10^{3}
267	Th-234[a]	1×10^{3}	1×10^{5}
268	Pa-230	1×10^{1}	1×10^{6}
269	Pa-231	1×10^{0}	1×10^{3}
270	Pa-233	1×10^{2}	1×10^{7}
271	U-230[a]	1×10^{1}	1×10^{5}
272	U-231	1×10^{2}	1×10^{7}
273	U-232[a]	1×10^{0}	1×10^{3}
274	U-233	1×10^{1}	1×10^{4}
275	U-234	1×10^{1}	1×10^{4}
276	U-235[a]	1×10^{1}	1×10^{4}
277	U-236	1×10^{1}	1×10^{4}
278	U-237	1×10^{2}	1×10^{6}
279	U-238[a]	1×10^{1}	1×10^{4}
280	U-nat[a]	1×10^{0}	1×10^{3}
281	U-239	1×10^{2}	1×10^{6}
282	U-240	1×10^{3}	1×10^{7}
283	U-240[a]	1×10^{1}	1×10^{6}

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
284	Np-237[a]	1×10^0	1×10^3
285	Np-239	1×10^2	1×10^7
286	Np-240	1×10^1	1×10^6
287	Pu-234	1×10^2	1×10^7
288	Pu-235	1×10^2	1×10^7
289	Pu-236	1×10^1	1×10^4
290	Pu-237	1×10^3	1×10^7
291	Pu-238	1×10^0	1×10^4
292	Pu-239	1×10^0	1×10^4
293	Pu-240	1×10^0	1×10^3
294	Pu-241	1×10^2	1×10^5
295	Pu-242	1×10^0	1×10^4
296	Pu-243	1×10^3	1×10^7
297	Pu-244	1×10^0	1×10^4
298	Am-241	1×10^0	1×10^4
299	Am-242	1×10^3	1×10^6
300	Am-242m[a]	1×10^0	1×10^4
301	Am-243[a]	1×10^0	1×10^3
302	Cm-242	1×10^2	1×10^5

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
303	Cm-243	1×10^{0}	1×10^{4}
304	Cm-244	1×10^{1}	1×10^{4}
305	Cm-245	1×10^{0}	1×10^{3}
306	Cm-246	1×10^{0}	1×10^{3}
307	Cm-247	1×10^{0}	1×10^{4}
308	Cm-248	1×10^{0}	1×10^{3}
309	Bk-249	1×10^{3}	1×10^{6}
310	Cf-246	1×10^{3}	1×10^{6}
311	Cf-248	1×10^{1}	1×10^{4}
312	Cf-249	1×10^{0}	1×10^{3}
313	Cf-250	1×10^{1}	1×10^{4}
314	Cf-251	1×10^{0}	1×10^{3}
315	Cf-252	1×10^{1}	1×10^{4}
316	Cf-253	1×10^{2}	1×10^{5}
317	Cf-254	1×10^{0}	1×10^{3}
318	Es-253	1×10^{2}	1×10^{5}
319	Es-254	1×10^{1}	1×10^{4}
320	Es-254m	1×10^{2}	1×10^{6}
321	Fm-254	1×10^{4}	1×10^{7}

Item	Nuclide	Activity concentration (Bq/g)	Activity (Bq)
322	Fm-255	1×10^3	1×10^6
323	alpha-emitting radionuclide not mentioned in another item	1×10^0	1×10^3
324	radionuclide that is not alpha-emitting and not mentioned in another item	1×10^1	1×10^4

Part 3 Nuclides and progeny

For a nuclide marked [a] in Part 2, parent nuclides and their progeny included in secular equilibrium are listed in the following table:

Item	Parent nuclide	Progeny
1	Sr-90	Y-90
2	Zr-93	Nb-93m
3	Zr-97	Nb-97
4	Mo-99	Tc-99m
5	Ru-106	Rh-106
6	Cs-137	Ba-137m
7	Ba-140	La-140

Item	Parent nuclide	Progeny
8	Ce-144	Pr-144
9	Pb-210	Bi-210 Po-210
10	Pb-212	Bi-212 Tl-208 (0.36) Po-212 (0.64)
11	Bi-212	Tl-208 (0.36) Po-212 (0.64)
12	Rn-220	Po-216
13	Rn-222	Po-218 Pb-214 Bi-214 Po-214
14	Ra-223	Rn-219 Po-215 Pb-211 Bi-211 Tl-207
15	Ra-224	Rn-220 Po-216 Pb-212 Bi-212 Tl-208 (0.36) Po-212 (0.64)

Item	Parent nuclide	Progeny
16	Ra-226	Rn-222 Po-218 Pb-214 Bi-214 Po-214 Pb-210 Bi-210 Po-210
17	Ra-228	Ac-228
18	Th-226	Ra-222 Rn-218 Po-214
19	Th-228	Ra-224 Rn-220 Po-216 Pb-212 Bi-212 Tl-208 (0.36) Po-212 (0.64)
20	Th-229	Ra-225 Ac-225 Fr-221 At-217 Bi-213 Po-213 Pb-209

Item	Parent nuclide	Progeny
21	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)
22	Th-234	Pa-234m
23	U-230	Th-226 Ra-222 Rn-218 Po-214
24	U-232	Th-228 Ra-224 Rn-220 Po-216 Pb-212 Bi-212 Tl-208 (0.36) Po-212 (0.64)
25	U-235	Th-231
26	U-238	Th-234 Pa-234m

Item	Parent nuclide	Progeny
27	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
28	U-240	Np-240m
29	Np-237	Pa-233
30	Am-242m	Am-242
31	Am-243	Np-239

Part 4 Quantities of radioactive substances in timekeeping and other devices

Item	Radioactive substance	Quantity
For a wrist watch		
1	H-3	280 MBq
2	Pm-147	5.5 MBq
3	Ra-226	5.5 kBq

Item	Radioactive substance	Quantity
For a pocket watch		
4	H-3	280 MBq
5	Pm-147	5.5 MBq
For a clock		
6	H-3	370 MBq
7	Pm-147	7.4 MBq
8	Ra-226	7.4 kBq
For another timepiece usually worn by a person, containing quantities of radioactive substances to produce luminosity necessary for special purposes		
9	H-3	920 MBq
10	Pm-147	18 MBq
11	Ra-226	5.5 kBq
For other devices		
12	H-3	920 MBq
13	Pm-147	18 MBq
14	Ra-226	5.5 kBq

Schedule 3 Information that may be requested by the CEO

(regulation 39)

Part 1 Facility licence

Item	Information
	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.

Item	Information
	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.

Item	Information
	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

Item	General Information
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.

Item	General Information
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.

Item	General Information
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)

Item	Thing authorised to be done by licence	Fee ($)
1	Preparing a site for a controlled facility, being a nuclear reactor that is designed: (a) for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies); and (b) to have maximum thermal power of less than 1 megawatt	21 000
2	Constructing a controlled facility, being a nuclear reactor that is designed: (a) for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies); and (b) to have maximum thermal power of less than 1 megawatt	131 250
3	Possessing or controlling a controlled facility, being a nuclear reactor: (a) for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies); and (b) with maximum thermal power of less than 1 megawatt	105 000
4	Operating a controlled facility, being a nuclear reactor: (a) for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies); and (b) with maximum thermal power of less than 1 megawatt	52 500

Item	Thing authorised to be done by licence	Fee ($)
5	De-commissioning, disposing of or abandoning a controlled facility, being a nuclear reactor that: (a) was used for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies); and (b) had maximum thermal power of less than 1 megawatt	52 500
6	Preparing a site for a controlled facility, being a nuclear reactor that is designed: (a) for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies); and (b) to have maximum thermal power of 1 megawatt or more	105 000
7	Constructing a controlled facility, being a nuclear reactor that is designed: (a) for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies); and (b) to have maximum thermal power of 1 megawatt or more	420 000
8	Possessing or controlling a controlled facility, being a nuclear reactor: (a) for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies); and (b) with maximum thermal power of 1 megawatt or more	21 000
9	Operating a controlled facility, being a nuclear reactor: (a) for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies); and (b) with maximum thermal power of 1 megawatt or more	450 000

Item	Thing authorised to be done by licence	Fee ($)
10	De-commissioning, disposing of or abandoning a controlled facility, being a nuclear reactor that: (a) was used for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies); and (b) had maximum thermal power of 1 megawatt or more	105 000
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	10 500
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	47 250
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	10 500
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	47 250
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	21 000
16	Preparing a site for a controlled facility, being: (a) a nuclear 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 nuclear 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	250 000

Item	Thing authorised to be done by licence	Fee ($)
17	Constructing a controlled facility, being: (a) a nuclear 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 nuclear 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	300 000
18	Possessing or controlling a controlled facility, being: (a) a nuclear 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 nuclear waste disposal facility that contains controlled materials with an activity that is greater than the applicable activity level prescribed by regulation 8	10 500
19	Operating a controlled facility, being: (a) a nuclear 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 nuclear waste disposal facility that contains controlled materials with an activity that is greater than the applicable activity level prescribed by regulation 8	157 500
20	De-commissioning, disposing of or abandoning a controlled facility, being: (a) a nuclear 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 nuclear waste disposal facility that formerly contained controlled materials with an activity that was greater than the applicable activity level prescribed by regulation 8	21 000

Item	Thing authorised to be done by licence	Fee ($)
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	52 500
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	105 000
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	10 500
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	94 500
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	21 000

Schedule 3B Facility licence application fees — prescribed radiation facilities

(regulation 40C)

Part 1 Fees — general

Item	Kind of prescribed radiation facility	Fee ($)
1	Particle accelerator with a beam energy of more than 1 MeV	9 450
2	Particle accelerator capable of producing neutrons	9 450
3	Irradiator containing more than 10^{15} Bq of a controlled material	9 450
4	Irradiator containing more than 10^{13} Bq of a controlled material but not including shielding as an integral part of its construction	9 450
5	Irradiator containing more than 10^{13} 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	9 450
6	Irradiator containing more than 10^{13} 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	9 450
7	Facility for the production, processing, use, storage, management or disposal of unsealed sources, for which the result worked out using the steps mentioned in subregulation 6 (2) is greater than 10^6	18 900
8	Facility for the production, processing, use, storage, management or disposal of sealed sources, for which the result worked out using the steps mentioned in subregulation 6 (2) is greater than 10^9	18 900

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 application fee for

the licence is the sum of the application fees for each thing authorised to be done by the licence — see subregulation 40C (3).

Part 2 Fees — other

Item	Thing authorised to be done by licence	Fee ($)
1	De-commissioning a controlled facility, being a prescribed radiation facility that was formerly used as a nuclear or atomic weapon test site	31 500
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	21 000
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	31 500
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	21 000

Schedule 3C Source licence application fees

(regulation 40D)

Part 1 Kinds of controlled apparatus or controlled material

Item	Controlled apparatus or controlled material
Group 1	
1	Sealed source for calibration purposes of activity of 40 MBq or less
2	Sealed source in a fully enclosed analytical device
3	Sealed source with activity of 400 MBq or less in a fixed gauge
4	Sealed source in a blood irradiator
5	Sealed source in a bone densitometer
6	Sealed source that: (a) is in storage and awaiting disposal; and (b) has a nuclide with a maximum activity of not more than 10^9 times the amount mentioned in column 4 of Part 2 of Schedule 2 for that kind of nuclide
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 amount mentioned in column 4 of Part 2 of Schedule 2 for that kind of nuclide
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 amount mentioned in column 4 of Part 2 of Schedule 2 for that kind of nuclide, 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

Item	Controlled apparatus or controlled material
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 accessible emission level more than the accessible emission limit of a Class 3B (Restricted) laser product, set out in Australia/New Zealand Standard AS/NZA 2211.1:1997
24	Optical fibre communication system exceeding Hazard Level 3A, as set out in Australia/New Zealand Standard AS/NZS 2211.2:1997
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 amount mentioned in column 4 of Part 2 of Schedule 2 for that kind of nuclide
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 amount mentioned in column 4 of Part 2 of Schedule 2 for that kind of nuclide, 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

Item	Controlled apparatus or controlled material
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
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
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 amount mentioned in column 4 of Part 2 of Schedule 2 for that kind of nuclide
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 amount mentioned in column 4 of Part 2 of Schedule 2 for that kind of nuclide, 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

Note The dictionary in these Regulations defines ***sealed source*** and ***unsealed source***.

Part 2 Fees

Item	Number of controlled apparatus or controlled materials in the same location to be dealt with under application	Fee ($)
1	For less than 4 controlled apparatus or controlled materials from:	
	(a) Group 1	525
	(b) Group 2	2 100
	(c) Group 3	6 300
2	For more than 3, but less than 11, controlled apparatus or controlled materials from:	
	(a) Group 1	1 365
	(b) Group 2	4 200
	(c) Group 3	12 600
3	For 11 or more controlled apparatus or controlled materials from:	
	(a) Group 1	2 625
	(b) Group 2	7 896
	(c) Group 3	23 100

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

(regulation 65)

Item	Title of agreement	Date agreement signed on behalf of Australia
1	Agreement between the Government of Australia and the Government of New Zealand concerning the Transfer of Uranium	14 September 1999
2	Agreement for Cooperation between Australia and the United States of America concerning Technology for the Separation of Isotopes of Uranium by Laser Excitation, Agreed Minute, and Exchange of Notes	28 October 1999

Schedule 6 Non-applicable State and Territory laws

(regulation 65A)

1. *Radiation Control Act 1990* (NSW).
2. **Health Act 1958** (Vic), Part 5, Division 2AA.
3. *Radiation Safety Act 1999* (Qld).
4. *Radiation Safety Act 1975* (WA).
5. *Radiation Protection and Control Act 1982* (SA).
6. *Radiation Control Act 1977* (Tas).
7. *Radiation Act 1983* (ACT).
8. *Radiation (Safety Control) Act* (NT).

Dictionary

(regulation 3)

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

> *Note* See Annex B to the *Recommendations for limiting exposure to ionizing radiation* (1995) (Guidance note [NOHSC:3022 (1995)]).

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.

CEO see section 13 of the Act.

Code of Practice for the Disposal of Radioactive Waste by the User means the document of that title published in 1985 by the NHMRC as in force when these regulations commence.

Code of Practice for the Near-Surface Disposal of Radioactive Waste in Australia means the document of that title published in 1992 by the NHMRC as in force when these regulations commence.

Code of Practice for the Safe Transport of Radioactive Material means the document of that title published in September 2001 by the CEO of the Australian Radiation Protection and Nuclear Safety Agency.

Code of Practice for the Safe Transport of Radioactive Substances means the document of that title published in 1990 as in force when these regulations commence.

Code of Practice on Radiation Protection in the Mining and Milling of Radioactive Ores means the document of that title published in 1987, as approved under subsection 9 (1) of the *Environment Protection (Nuclear Codes) Act 1978*, and as in force on 18 March 1999.

Code of Practice on the Management of Radioactive Wastes from the Mining and Milling of Radioactive Ores means the document of that title published in 1982, as approved under subsection 9 (1) of the *Environment Protection (Nuclear Codes) Act 1978*, and as in force on 18 March 1999.

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

Note See Annex B to the *Recommendations for limiting exposure to ionizing radiation* (1995) (Guidance note [NOHSC:3022 (1995)]).

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

controlled apparatus see section 13 of the Act.

controlled facility see section 13 of the Act.

controlled material see section 13 of the Act.

controlled person see section 13 of the Act.

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

deal with see section 13 of the Act.

dose includes absorbed dose, equivalent dose or effective dose.

Note See Annex B to the *Recommendations for limiting exposure to ionizing radiation* (1995) (Guidance note [NOHSC:3022 (1995)]).

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

Note See Annex B to the *Recommendations for limiting exposure to ionizing radiation* (1995) (Guidance note [NOHSC:3022 (1995)]).

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

Note See Annex B to the *Recommendations for limiting exposure to ionizing radiation* (1995) (Guidance note [NOHSC:3022 (1995)]).

excluded exposure, for the definition of ***occupational exposure***, means the component of exposure which arises from natural background radiation, provided that any relevant action level or levels for the workplace are not exceeded and that the CEO does not prohibit its exclusion.

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.

ionizing radiation see section 13 of the Act.

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

medical exposure means the exposure of a person to radiation received as a patient undergoing medical diagnosis or therapy, or as a volunteer in medical research, or non-occupational exposure received as a consequence of assisting an exposed patient.

modification see section 13 of the Act.

National Standard for Limiting Occupational Exposure to Ionizing Radiation means the document of that title published jointly by the NHMRC and NOHSC in the Radiation Health Series No. 39 in 1995 as in force when these regulations commence.

NHMRC means the National Health and Medical Research Council established by section 6 of the *National Health and Medical Research Council Act 1992*.

NOHSC means the National Occupational Health and Safety Commission established by section 6 of the *National Occupational Health and Safety Commission Act 1985*.

non-ionizing radiation see section 13 of the Act.

Nuclear Safety Committee see section 25 of the Act.

occupational exposure means exposure of a person to radiation which occurs in the course of the person's work and which is not excluded exposure.

Occupational standard for exposure to ultraviolet radiation (1989) means the document of that title published in the Radiation Health Series No. 29 by the Australian Radiation Laboratory on behalf of the NHMRC in 1989 as in force when these regulations commence.

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

Radiation Health Committee see section 22 of the Act.

Recommendations for limiting exposure to ionizing radiation means the document of that title published as (1995) (Guidance Note [NOHSC:3022 (1995)]), as in force when these regulations commence.

relevant change, for regulations 51 and 52, means a change to:

(a) the details in the application for the licence; or

(b) a modification of the source or facility mentioned in the licence.

relevant period, for regulation 60, means:

(a) for a controlled person — 5 years; or

(b) for a member of the public — 1 year.

Remuneration Tribunal means the Remuneration Tribunal established by section 4 of the *Remuneration Tribunal Act 1973*.

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, which 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.

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 nuclear waste storage facility or a nuclear waste disposal facility, means the waste form of the controlled material and its container as prepared for handling, transport, storage or disposal.

Notes to the *Australian Radiation Protection and Nuclear Safety Regulations 1999*

Note 1

The *Australian Radiation Protection and Nuclear Safety Regulations 1999* (in force under the *Australian Radiation Protection and Nuclear Safety Act 1998*) as shown in this compilation comprise Statutory Rules 1999 No. 37 amended as indicated in the Tables below.

Table of Statutory Rules

Year and number	Date of notification in *Gazette*	Date of commencement	Application, saving or transitional provisions
1999 No. 37	18 Mar 1999	18 Mar 1999	
1999 No. 97	10 June 1999	10 June 1999	—
2000 No. 306	16 Nov 2000	16 Nov 2000	—
2000 No. 330	8 Dec 2000	5 Feb 2001	—
2001 No. 271	5 Oct 2001	5 Oct 2001	—
2002 No. 243	24 Oct 2002	24 Oct 2002	—
2003 No. 90	22 May 2003	22 May 2003	—
2004 No. 213	15 July 2004	15 July 2004	—

Table of Amendments

ad. = added or inserted am. = amended rep. = repealed rs. = repealed and substituted

Provision affected	How affected
Part 2	
Division 1	
R. 4	am. 2000 No. 306
Division 2	
R. 6	am. 2000 No. 306; 2003 No. 90
Division 2A	
Div. 2A of Part 2	ad. 2000 No. 306
R. 6A	ad. 2000 No. 306
Division 3	
R. 7	rs. 2003 No. 90
R. 8	am. 2000 No. 306 rs. 2003 No. 90
Rr. 9–10	rep. 2003 No. 90
R. 11	rs. 2003 No. 90
Part 3	
Division 2	
R. 36	am. 1999 No. 97; 2000 No. 330
Part 4	
Division 1	
R. 37	am. 2000 No. 306
R. 37A	am. 2000 No. 306
R. 38	am. 2000 No. 306
Note to r. 38 (3)	ad. 2000 No. 306
Notes to r. 38 (5), (6)	ad. 2000 No. 306
Division 2A	
Div. 2A of Part 4	ad. 1999 No. 97 rs. 2000 No. 306
R. 40A	ad. 1999 No. 97 rs. 2000 No. 306
R. 40B	ad. 1999 No. 97 rs. 2000 No. 306
R. 40C	ad. 1999 No. 97 rs. 2000 No. 306
R. 40D	ad. 1999 No. 97 rs. 2000 No. 306 am. 2004 No. 213

Table of Amendments

ad. = added or inserted am. = amended rep. = repealed rs. = repealed and substituted

Provision affected	How affected
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. 48	am. 2001 No. 271
R. 54	rs. 2000 No. 306
R. 55	rs. 2000 No. 306
Division 5	
Div. 5 of Part 4	ad. 2000 No. 306
R. 55A	ad. 2000 No. 306
R. 55B	ad. 2000 No. 306
R. 55C	ad. 2000 No. 306
R. 55D	ad. 2000 No. 306
Part 5	
Division 5.1	
Heading to Div. 5.1 of Part 5	ad. 2000 No. 330
R. 56	rs. 2000 No. 330
Division 5.2	
Heading to Div. 5.2 of Part 5	ad. 2000 No. 330
R. 57	rs. 2000 No. 330
R. 58	am. 2000 No. 306
Division 5.3	
Div. 5.3 of Part 5	ad. 2000 No. 330
R. 62A	ad. 2000 No. 330 am. 2001 No. 271
Part 7	
Part 7	ad. 2000 No. 306
R. 65	ad. 2000 No. 306
R. 65A	ad. 2001 No. 271
R. 66	ad. 2000 No. 306
Schedule 1	
Schedule 1	am. 2002 No. 243

Table of Amendments

ad. = added or inserted am. = amended rep. = repealed rs. = repealed and substituted

Provision affected	How affected
Schedule 2	
Heading to Schedule 2.....	rs. 2003 No. 90
Schedule 2.....	am. 1999 No. 97; 2000 No. 306; 2001 No. 271
Schedule 3A	
Schedule 3A	ad. 1999 No. 97 rs. 2000 No. 306 am. 2003 No. 90; 2004 No. 213
Schedule 3B	
Schedule 3B	ad. 1999 No. 97 rs. 2000 No. 306 am. 2003 No. 90; 2004 No. 213
Schedule 3C	
Schedules 3C	ad. 1999 No. 97 rs. 2000 No. 306 am. 2004 No. 213
Schedules 3D–3F	ad. 1999 No. 97 rep. 2000 No. 306
Schedule 5	
Schedule 5.....	ad. 2000 No. 306
Schedule 6	
Schedule 6.....	ad. 2001 No. 271
Dictionary	
Dictionary.....	am. 1999 No. 97; 2000 Nos. 306 and 330; 2001 No. 271; 2003 No. 90