

EXPLANATORY STATEMENT

Subject - *Australian Radiation Protection and Nuclear Safety Act 1998*
Australian Radiation Protection and Nuclear Safety Amendment Regulations 2019

The *Australian Radiation Protection and Nuclear Safety Act 1998* (the Act) protects the health and safety of people, and protects the environment, from the harmful effects of radiation. Under the Act, the CEO of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is responsible for regulating the possession, use, control of, and disposal of radioactive sources and activities related to nuclear installation and radiation facilities by Commonwealth entities and their contractors.

Subsection 85(1) of the Act provides that the Governor-General may make regulations prescribing matters required or permitted by the Act to be prescribed; or necessary or convenient to be prescribed for carrying out or giving effect to the Act.

The *Australian Radiation Protection and Nuclear Safety Amendment Regulations 2019* (the Regulations) amend the *Australian Radiation Protection and Nuclear Safety Regulations 2018* (the ARPANS Regulations) as follows:

- Apply a 2% indexation to the licence application fees prescribed in the ARPANS Regulations representing the annual salary increase for ARPANSA staff under the ARPANSA Enterprise Agreement.
- Simplify the source application fee process by removing the reference to the location of the sources.
- Add and update the publication details of the Codes incorporated by reference in the ARPANS Regulations.
- Require a decommissioning plan and a continually updated Safety Analysis Report at each licensing phase for a controlled facility. Currently the ARPANS Regulations only require a decommissioning plan to be submitted when an applicant applies for a decommissioning licence. A preliminary safety analysis report is required at the construction phase and a final report when applying for an operating licence. This is not considered to be international best practice.
- Introduce a new requirement at the construction licensing stage to conduct a test exercise responding to a field emergency scenario.
- Introduce a requirement to require a facility licence holder to have a safety analysis report in place at all times to manage safety and to revise and update the safety analysis report at least once every three years. Currently the ARPANS Regulations require a safety analysis report to be developed as part of the licensing process for a facility, but there is no requirement for the licence holder to subsequently maintain the currency of the report or update it as necessary.

- Amend the effective dose limits for ionizing radiation to cover occupational exposure to persons aged 16 and 17.

Details of the Regulations are set out in Attachment A.

The Act does not specify any conditions that need to be satisfied before the power to make the Regulations may be exercised.

The Regulations are a legislative instrument for the purposes of the Legislation Act 2003.

ARPANSA regulatory and scientific staff provided expert input to the proposed amendments. No consultation was undertaken among licence holders (all of whom are Commonwealth entities) or other stakeholders as the amendments are considered minor and machinery in nature. The Office of Best Practice Regulation (OBPR) has exempted ARPANSA from the need to prepare a Regulatory Impact Statement for the Regulation (OBPR ID: 22587).

The Regulations will commence on the day after they are registered on the Federal Register of Legislation.

Authority: Subsection 85(1) of the *Australian Radiation Protection and Nuclear Safety Act 1998*

ATTACHMENT

Details of the *Australian Radiation Protection and Nuclear Safety Amendment Regulations 2019*

Section 1 – Name

This section provides that the name of the Regulations is the Australian Radiation Protection and Nuclear Safety Amendment Regulations 2019.

Section 2 – Commencement

This section provides for the regulations to commence on the day after being registered on the Federal Register of Legislation.

Section 3 – Authority

This section provides that the regulations are made under the *Australian Radiation Protection and Nuclear Safety Act 1998*.

Section 4 – Schedules

This section provides that each instrument that is specified in a Schedule to this instrument is amended or repealed as set out in the applicable items in the Schedule concerned, and any other item in a Schedule to this instrument has effect according to its terms.

Schedule 1 – Amendments

Part 1 – Application fees for licences

Division 1 – Amounts of fees for facility licences

Australian Radiation Protection and Nuclear Safety Regulations 2018

Item [1] Amendments of listed provisions – section 49

Section 49 lists the fees that must accompany an application for a facility licence relating to nuclear installations.

This amendment increases the fees under section 49 by 2 per cent as follows.

| Table Item | Thing authorised to be done by licence | Fees (\$) |
|------------|--|-----------|
|------------|--|-----------|

| Table Item | Thing authorised to be done by licence | Fees (\$) |
|------------|--|--------------------|
| 1. | Preparing a site for a nuclear reactor designed: (a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and (b) to have maximum thermal power less than 1 megawatt | 30,144 to 30,747 |
| 2. | Constructing a nuclear reactor designed: (a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and (b) to have maximum thermal power less than 1 megawatt | 188,414 to 192,182 |
| 3. | Possessing or controlling a nuclear reactor: (a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and (b) with maximum thermal power less than 1 megawatt | 150,732 to 153,747 |
| 4. | Operating a nuclear reactor: (a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and (b) with maximum thermal power less than 1 megawatt | 75,364 to 76,871 |
| 5. | Decommissioning, disposing of or abandoning a nuclear reactor that: (a) was used for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and (b) had maximum thermal power less than 1 megawatt | 75,364 to 76,871 |
| 6. | Preparing a site for a nuclear reactor designed: (a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and (b) to have maximum thermal power at least 1 megawatt | 150,732 to 153,747 |
| 7. | Constructing a nuclear reactor designed: (a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and (b) to have maximum thermal power at least 1 megawatt | 602,933 to 614,992 |

| Table Item | Thing authorised to be done by licence | Fees (\$) |
|------------|--|--------------------|
| 8. | Possessing or controlling a nuclear reactor: (a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and (b) with maximum thermal power at least 1 megawatt | 150,732 to 153,747 |
| 9. | Operating a nuclear reactor: (a) for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and (b) with maximum thermal power at least 1 megawatt | 646,002 to 658,922 |
| 10. | Decommissioning, disposing of or abandoning a nuclear reactor that: (a) was used for research or production of radioactive materials for industrial or medical use (including critical and subcritical assemblies); and (b) had maximum thermal power at least 1 megawatt | 150,732 to 153,747 |
| 11. | Preparing a site for a plant for preparing or storing fuel for use in a nuclear reactor described in any of items 1 to 9 | 15,071 to 15,372 |
| 12. | Constructing a plant for preparing or storing fuel for use in a nuclear reactor described in any of items 1 to 9 | 67,827 to 69,184 |
| 13. | Possessing or controlling a plant for preparing or storing fuel for use in a nuclear reactor described in any of items 1 to 9 | 15,071 to 15,372 |
| 14. | Operating a plant for preparing or storing fuel for use in a nuclear reactor described in any of items 1 to 9 | 67,827 to 69,184 |
| 15. | Decommissioning, disposing of or abandoning a plant that was used for preparing or storing fuel for use in a nuclear reactor described in any of items 1 to 10 | 30,144 to 30,747 |
| 16. | Preparing a site for: (a) a radioactive waste storage facility designed to contain controlled materials with an activity greater than the applicable activity level prescribed by section 10; or (b) a radioactive waste disposal facility designed to contain controlled materials and have an activity greater than the applicable activity level prescribed by section 11 | 358,890 to 366,068 |

| Table Item | Thing authorised to be done by licence | Fees (\$) |
|------------|--|-----------------------|
| 17. | Constructing: (a) a radioactive waste storage facility designed to contain controlled materials and have an activity greater than the applicable activity level prescribed by section 10; or (b) a radioactive waste disposal facility designed to contain controlled materials and have an activity greater than the applicable activity level prescribed by section 11 | 430,667 to 439,280 |
| 18. | Possessing or controlling: (a) a radioactive waste storage facility containing controlled materials that has an activity greater than the applicable activity level prescribed by section 10; or (b) a radioactive waste disposal facility containing controlled materials that has an activity greater than the applicable activity level prescribed by section 11 | 15,071 to 15,372 |
| 19. | Operating: (a) a radioactive waste storage facility containing controlled materials that has an activity greater than the applicable activity level prescribed by section 10; or (b) a radioactive waste disposal facility containing controlled materials that has an activity greater than the applicable activity level prescribed by section 11 | 226,100 to 230,622 |
| 20. | Decommissioning, disposing of or abandoning: (a) a radioactive waste storage facility that contained controlled materials and had an activity greater than the applicable activity level prescribed by section 10; or (b) a radioactive waste disposal facility that contained controlled materials and had an activity that was greater than the applicable activity level prescribed by section 11 | 30,144 to 30,747 |
| 21. | Preparing a site for a facility to produce radioisotopes that is designed to contain controlled materials and have an activity greater than the applicable activity level prescribed by section 12 | 75,364 to 76,871 |
| 22. | Constructing a facility to produce radioisotopes that is designed to contain controlled materials and have an activity greater than the applicable activity level prescribed by section 12 | 150,732 to 153,747 |
| 23. | Possessing or controlling a facility producing radioisotopes and containing controlled materials that has an activity greater than the applicable activity level prescribed by section 12 | 15,071 to 15,372 |

| Table Item | Thing authorised to be done by licence | Fees (\$) |
|------------|---|--------------------|
| 24. | Operating a facility producing radioisotopes and containing controlled materials that has an activity greater than the applicable activity level prescribed by section 12 | 135,659 to 138,372 |
| 25. | Decommissioning, disposing of or abandoning a facility that formerly produced radioisotopes, contained controlled materials and had an activity greater than the applicable activity level prescribed by section 12 | 30,144 to 30,747 |

Item [2] Amendments of listed provisions—subsection 50(2)

Subsection 50(2) lists the fees that must accompany an application for a facility licence for prescribed radiation facilities not formerly used for weapons tests or radioactive ores.

This amendment increases the application fees in subsection 50(2) by 2 per cent as follows:

| Table Item | Kind of prescribed radiation facility | Fees (\$) |
|------------|---|------------------|
| 1. | Particle accelerator that: (a) has, or is capable of having, a beam energy greater than 1 MeV; or (b) can produce neutrons | 13,563 to 13,834 |
| 2. | Irradiator containing more than 10^{15} Bq of a controlled material | 13,563 to 13,834 |
| 3. | Irradiator: (a) containing more than 10^{13} Bq of a controlled material; and (b) either: (i) not including shielding as an integral part of its construction; or (ii) including as an integral part of its construction shielding that does not prevent a person from being exposed to the source or does not shield a source during the operation of the irradiator | 13,563 to 13,834 |
| 4. | Facility for the production, processing, use, storage, management or disposal of: (a) unsealed sources for which the result of the activity value division steps is greater than 10^6 ; or (b) sealed sources for which the result of the activity value division steps is greater than 10^9 | 27,130 to 27,673 |

Item [3] Amendments of listed provisions—subsection 50(3)

Subsection 50(3) lists the fees that must accompany an application for a facility licence for prescribed radiation facilities formerly used for weapons tests or radioactive ores.

This amendment increases the application fees in subsection 50(3) by 2 per cent as follows:

| Table Item | Act authorised by licence | Fee (\$) |
|------------|--|------------------|
| 1. | Decommissioning a prescribed radiation facility formerly used as a nuclear or atomic weapon test site | 45,217 to 46,121 |
| 2. | Disposing of or abandoning a prescribed radiation facility formerly used as a nuclear or atomic weapon test site | 30,144 to 30,747 |
| 3. | Decommissioning a prescribed radiation facility formerly used for mining, processing, using, storing, managing or disposing of radioactive ores | 45,217 to 46,121 |
| 4. | Disposing of or abandoning a prescribed radiation facility formerly used for mining, processing, using, storing, managing or disposing of radioactive ores | 30,144 to 30,747 |

Item [4] Amendments of listed provisions—section 51

Section 51 lists the application fees that must accompany an application for a facility licence for a prescribed legacy site.

This amendment increases the application fees in section 51 by 2 per cent as follows:

| Table Item | Act authorised by licence | Fee (\$) |
|------------|--|--------------------|
| 1. | Possessing or controlling a prescribed legacy site | 14,675 to 14,969 |
| 2. | Remediating a prescribed legacy site | 220,155 to 224,558 |
| 3. | Abandoning a prescribed legacy site | 29,352 to 29,939 |

Division 2 – Application fees for source licences

Item [5] —section 52

Section 52 contains a table that lists the application fees that must accompany an application for a source licence to deal with particular kinds of controlled apparatus or controlled material.

This amendment increases the application fees in section 51 by 2 per cent as follows

| Table Item | Fees for source licences | Fees (\$) |
|------------|--|--|
| 1. | Amount for less than 4 apparatus or materials from: (a) Group 1 (b) Group 2 (c) Group 3 | 751 to 766 3,012 to 3,072 9,040 to 9,221 |
| 2. | Amount for 4 to 10 apparatus or materials from: (a) Group 1 (b) Group 2 (c) Group 3 | 1,955 to 1,994 6,028 to 6,149 18,084 to 18,446 |
| 3. | Amount for 11 or more apparatus or materials from: (a) Group 1 (b) Group 2 (c) Group 3 | 3,767 to 3,842 11,330 to 11,557 33,159 to 33,822 |

Part 2—Other matters

Australian Radiation Protection and Nuclear Safety Regulations 2018

Item [6] Section 4 (definition of *Disposal of Radioactive Waste Code*)

This amendment defines the ***Disposal of Radioactive Waste Code*** as the *Code for the Disposal of Radioactive Waste by the User (Radiation Protection Series C-6)*.

The *Disposal of Radioactive Waste Code* is available for viewing on ARPANSA's website <https://www.arpansa.gov.au>

Item [7] section 4 (definition of Group 1, table item 26)

This amendment clarifies that a controlled apparatus under item 26 includes a controlled apparatus which produces ionizing radiation and also includes a controlled apparatus which produces non-ionizing radiation. The amendment also includes a reference to non-ionizing radiation exposure limits.

Item [8] (definition of *Security Code of Practice*)

This amendment updates the reference to the most recent version of the *Security Code of Practice*.

The *Security Code of Practice* is available for viewing on ARPANSA's website <https://www.arpansa.gov.au>.

Item [9] (definition of *Transport Code*)

The amendment updates the reference to the most recent version of the *Transport Code*.

The *Transport Code* is available for viewing on ARPANSA's website <https://www.arpansa.gov.au>.

Item [10] Subsection 44(1) (table item 2) Exempt dealings with controlled material or controlled apparatus

This amendment to item 2 in the table under subsection 44(1) corrects an error with the formula for determining the exemption level for mixture of 2 or more controlled material to ensure that a mixture of 2 or more controlled material can be exempt if either the activity value of the mixture of the controlled material described in item 2(a) or the activity concentration of the mixture of the controlled material described in item 2(b) is one or less.

Item [11] subsection 46(1)(d) – Application for a facility licence

Subsection 46(1)(d) sets out the requirements for what must be included in a facility licence.

This amendment to subsection 46(1)(d) requires the application for a facility licence to include a decommissioning plan for the facility.

Item [12] subsection 46(1) – Application for a facility licence

This amendment to subsection 46(1) requires the application for a facility licence to include a safety analysis report which covers each activity to be authorised by the licence and for the safety analysis report to be as complete as possible.

Item [13] subsection 46(2) (table item 2, column 2, paragraph (d))

This amendment removes a preliminary safety report from the list of information and documents the CEO may ask the applicant to provide as part of the application for constructing a controlled facility as this is covered as part of the safety analysis report referred to in item 12 above.

Item [14] subsection 46(2) (table item 4, column 2, paragraph (b))

This amendment removes a final safety analysis report from the list of information and documents the CEO may ask the applicant for as part of the application for operating a controlled facility as this is covered as part of the safety analysis report referred to in item 12 above.

Item [15] subsection 46(2) (at the end of the cell at table item 4, column 2)

This amendment adds the results of a field exercise to respond to a scenario that involves an emergency that has been agreed with the CEO to the list of information and documents the CEO may ask the applicant for as part of the application for operating a controlled facility.

Item [16] subsection 46(2) (cell at table item 5, column 2)

This amendment removes a decommissioning plan from the list of information and documents the CEO may ask that applicant to provide as part of the application for decommissioning a controlled facility as the decommissioning plan is now required as part of the application for a facility licence under the amendment referred to in item 11 above.

Item [17] Before paragraph 59(1)(a)

This amendment requires the holder of a facility licence to comply with the *Code for Disposal Facilities for Solid Radioactive Waste* and the Disposal of Radioactive Waste Code in relation to activities relating to the controlled facilities to which the licence relates.

Item [18] At the end of subsection 59(1)

This amendment provides that the *Code for Disposal Facilities for Solid Radioactive Waste* is available for viewing on ARPANSA's website <https://www.arpansa.gov.au>.

Item [19] Before paragraphs 59(2)(a) and (3)(a)

This amendment to subsection 59(2)(a) requires the holder of a facility licence that authorises persons to deal with a controlled apparatus or a controlled material to ensure they comply with the Disposal of Radioactive Waste Code with respect to dealing with the controlled apparatus or controlled material.

This amendment to subsection 59(3)(a) requires the holder of a source licence to ensure they comply with the Disposal of Radioactive Waste Code with respect to dealings with the controlled apparatus or controlled material to which the licence relates.

Item [20] At the end of subsection 60(1)

This amendment requires the holder of a facility licence to have in place a safety analysis report.

Item [21] Section 61 (at the end of the heading)

This amendment changes the heading to include a safety analysis report.

Item [22] Subsection 61(1)

This amendment requires the holder of a facility licence to review and update the safety analysis report referred to in section 60 at least once every 3 years.

Item [23] At the end of subsection 61(2)

This amendment requires the holder of a facility licence to keep records of any changes made to the safety analysis report.

Item [24] Section 74

This amendment provides that part 6 applies to a controlled person who is the holder of a licence, or a person covered by a licence, only to the extent the person can comply with the conditions of the licence without discriminating unlawfully under the *Sex Discrimination Act 1984* and the *Age Discrimination Act 2004*.

Item [25] Subsection 77(1) (at the end of the heading)

This amendment adds persons who are at least 18 to the heading.

Item [26] Subsection 77(1)

This amendment clarifies that the limit on effective dose for occupational exposure of 20 mSv annually, averaged over 5 years applies only applies to persons aged 18 and over.

Item [27] Subsection 77(2)

This amendment adds a new heading for the limit for occupational exposure of person who are 16 or 17 years of age.

Item [28] Subsection 77(2)

This amendment provides that the limit on effective dose for occupational exposure of a person who is 16 or 17 is 6mSv per annum.

Item [29] Part 8

This amendment provides that the amendments to section 46 referred to in items 11 to 16 above apply to applications for facility licences made on or after the commencement of this amending instrument and the amendments to section 59 referred to in items 17 to 19 above apply to licences issued before, on or after the commencement of this amending instrument. This amendment only applies to Commonwealth entities.

Statement of Compatibility with Human Rights

Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011

Australian Radiation Protection and Nuclear Safety Amendment Regulations 2019

This legislative instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the legislative instrument

The legislative instrument amends the Australian Radiation Protection and Nuclear Safety Regulations 2018 to adjust the application fees and make other minor amendments.

Human Rights Implications

The amendments are compatible with the right to an adequate standard of living and the right to the enjoyment of the highest attainable standard of physical and mental health as contained in article 11(1) and article 12(1) of the International Covenant on Economic, Social and Cultural Rights.

Conclusion

This Bill is compatible with human rights as it promotes the human right to an adequate standard of living and the highest attainable standard of physical and mental health.

Senator the Hon. Richard Colbeck, Minister for Aged Care and Senior Australians