#### **EXPLANATORY STATEMENT**

## Select Legislative Instrument No. 73, 2015

Australian Radiation Protection and Nuclear Safety Act 1998

Australian Radiation Protection and Nuclear Safety Regulations 1999

Australian Radiation Protection and Nuclear Safety Amendment (2015 Measures No. 1)
Regulation 2015

Subsection 85(1) of *Australian Radiation Protection and Nuclear Safety Act 1998* (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.

Under the Act, a 'controlled person' is prohibited from undertaking certain conduct in relation to a 'controlled facility' unless that person is authorised to do so by a facility licence. A 'controlled person' is a Commonwealth entity or a Commonwealth contractor. The types of conduct that are prohibited include the construction or operation of a controlled facility and the decommissioning of a controlled facility. A controlled facility is defined as either a nuclear installation or a prescribed radiation facility.

The Act also provides that a controlled person is prohibited from undertaking dealings with controlled material or controlled apparatus (collectively referred to as 'sources') unless that person is authorised to do so by a source licence. To 'deal with' a source includes to possess or control the source; use or operate the source or dispose of the source. An example of a controlled material is Technetium-99, which is commonly used in nuclear medicine and an example of a controlled apparatus is an X-ray machine.

Subsection 32(1) of the Act provides that the Chief Executive Officer (CEO) of ARPANSA may issue a facility licence to a controlled person authorising that controlled person to undertake an otherwise prohibited action. Under subsection 33(1), the CEO may issue a source licence to a controlled person authorising that controlled person to deal with a controlled apparatus or a controlled material.

Under section 34 of the Act, an application for a facility or source licence must be in a form approved by the CEO and accompanied by such application fee as is prescribed in the *Australian Radiation Protection and Nuclear Safety Regulations 1999* (the ARPANS Regulations). The fees are listed in Schedule 3A (for nuclear installations), Schedule 3B (for prescribed radiation facilities), and Schedule 3C (for material and apparatus) to the ARPANS Regulations.

The Regulation amends the ARPANS Regulations to increase the licence application fees collected by the CEO by 2.7 per cent on 1 July 2015. The increase is to adjust for increased labour costs and is in line with the Australian Bureau of Statistics' Wage Price Index (excluding bonuses) as at 30 September 2014. The licence application fees were last adjusted on 1 July 2014.

The Regulation also makes other minor amendments to update references, correct certain errors and omissions and improve the drafting of the provisions.

The Regulation is being brought forward concurrently with the *Australian Radiation Protection* and *Nuclear Safety (Licence Charges) Amendment (2015 Measures No. 1) Regulation 2015.* 

Details of the Regulation are set out in the Attachment.

The Act does not specify any condition that needs to be met before the power to make the Regulation may be exercised.

The Regulation is a legislative instrument for the purposes of the Legislative Instruments Act 2003.

The Regulation commences on 1 July 2015.

#### Consultation

The Office of Best Practice Regulation (OBPR) has exempted ARPANSA from the need to prepare a regulatory impact statement for the Regulation (OBPR ID: 18079) as the amendments are either minor or machinery in nature or the impact on businesses and not for profit sector is low to nil. This is because, with the exception of the publicly-listed SILEX Ltd, which is in a prescribed Commonwealth place, ARPANSA regulates only Commonwealth government departments and entities and therefore any impact on competition is unlikely. No consultation was undertaken for the indexation increase by 2.7% and for the other minor changes to correct and update the Regulations as, under section 18 of the *Legislative Instruments Act 2003*, consultation is unnecessary or inappropriate where amendments are minor or machinery in nature.

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

#### **ATTACHMENT**

## <u>Details of the Australian Radiation Protection and Nuclear Safety Amendment (2015</u> Measures No. 1) Regulation 2015

## **Section 1 – Name of regulation**

This section provides that the name of the regulation is the *Australian Radiation Protection and Nuclear Safety Amendment (2015 Measures No. 1) Regulation 2015.* 

#### **Section 2 – Commencement**

This section provides for the regulation to commence on 1 July 2015.

## **Section 3 – Authority**

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

#### Section 4 – Schedules(s)

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—Amendment of fees

Australian Radiation Protection and Nuclear Safety Regulations 1999

## Item [1] Amendments of listed provisions—Schedule 3A

Schedule 3A lists the fees that must accompany an application for a facility licence for particular activities in relation to certain nuclear installations. The amendments increase the application fees in the table in Schedule 3A by 2.7 per cent as follows:

Table Item	Thing authorised to be done by licence	Fees (\$)
1.	Preparing a site for a controlled facility, being a nuclear reactor that	27 285 to
	is designed for research or production of nuclear materials for	28 021
	industrial or medical use (including critical and subcritical	
	assemblies) and to have maximum thermal power of less than 1	
	megawatt	
2.	Constructing a controlled facility, being a nuclear reactor that is	170 531 to
	designed for research or production of nuclear materials for	175 135
	industrial or medical use (including critical and subcritical	
	assemblies) and to have maximum thermal power of less than 1	
	megawatt	

Table Item	Thing authorised to be done by licence	Fees (\$)
3.	Possessing or controlling a controlled facility, being a nuclear reactor for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies) and with maximum thermal power of less than 1 megawatt	136 426 to 140 109
4.	Operating a controlled facility, being a nuclear reactor for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies) and with maximum thermal power of less than 1 megawatt	68 212 to 70 053
5.	De-commissioning, disposing of or abandoning a controlled facility, being a nuclear reactor that was used for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies) and had maximum thermal power of less than 1 megawatt	68 212 to 70 053
6.	Preparing a site for a controlled facility, being a nuclear reactor that is designed for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies) and to have maximum thermal power of 1 megawatt or more	136 426 to 140 109
7.	Constructing a controlled facility, being a nuclear reactor that is designed for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies) and to have maximum thermal power of 1 megawatt or more	545 701 to 560 434
8.	Possessing or controlling a controlled facility, being a nuclear reactor for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies) and with maximum thermal power of 1 megawatt or more	136 426 to 140 109
9.	Operating a controlled facility, being a nuclear reactor for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies) and with maximum thermal power of 1 megawatt or more	584 681 to 600 467
10.	De-commissioning, disposing of or abandoning a controlled facility, being a nuclear reactor that was used for research or production of nuclear materials for industrial or medical use (including critical and subcritical assemblies) and had maximum thermal power of 1 megawatt or more	136 426 to 140 109
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 above	13 642 to 14 010
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 above	61 390 to 63 047
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 above	13 642 to 14 010
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 above	61 390 to 63 047

Table Item	Thing authorised to be done by licence	Fees (\$)
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 above	27 285 to 28 021
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	324 823 to 333 593
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	389 787 to 400 311
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	13 642 to 14 010
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	204 638 to 210 163
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	27 285 to 28 021
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	68 212 to 70 053
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	136 426 to 140 109
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	13 642 to 14 010

Table Item	Thing authorised to be done by licence	Fees (\$)
24.	Operating a controlled facility, being a facility producing	122 783 to
	radioisotopes and containing controlled materials with an activity	126 098
	that is greater than the applicable activity level prescribed by	
	regulation 11	
25.	De-commissioning, disposing of, or abandoning a controlled	27 285 to
	facility, being a facility that formerly produced radioisotopes and	28 021
	contained controlled materials with an activity that was greater than	
	the applicable activity level prescribed by regulation 11	

## <u>Item [2] Amendments of listed provisions—Part 1 of Schedule 3B</u>

Part 1 of Schedule 3B lists the fees that must accompany an application for a facility licence for particular kinds of prescribed radiation facilities. The amendments increase the application fees in the table in Part 1 of Schedule 3B by 2.7 per cent as follows:

Table Item	Kind of prescribed radiation facility	Fees (\$)
1.	Particle accelerator with a beam energy of more than 1 mega	12 278 to
	electron volt (MeV)	12 609
2.	Particle accelerator capable of producing neutrons	12 278 to
		12 609
3.	Irradiator containing more than 10 <sup>15</sup> becquerel (Bq) of a controlled	12 278 to
	material	12 609
4.	Irradiator containing more than 10 <sup>13</sup> Bq of a controlled material but	12 278 to
	not including shielding as an integral part of its construction	12 609
5.	Irradiator containing more than 10 <sup>13</sup> Bq of a controlled material and	12 278 to
	including shielding as an integral part of its construction, but the	12 609
	shielding does not prevent a person from being exposed to the source	
6.	Irradiator containing more than 10 <sup>13</sup> Bq of a controlled material and	12 278 to
	including shielding as an integral part of its construction, and with a	12 609
	source that is not inside the shielding during the operation of the	
	irradiator	
7.	Facility for the production, processing, use, storage, management or	24 557 to
	disposal of:	25 220
	(a) unsealed sources for which the result worked out using the steps	
	mentioned in subregulation $6(2)$ is greater than $10^6$ ; or	
	(b) sealed sources for which the result worked out using the steps	
	mentioned in subregulation $6(2)$ is greater than $10^9$	

## <u>Item [3] Amendments of listed provisions—Part 2 of Schedule 3B</u>

Part 2 of Schedule 3B lists the fees that must accompany an application for a facility licence for particular activities in relation to certain prescribed radiation facilities. The amendments increase the application fees in the table in Part 2 of Schedule 3B by 2.7 per cent as follows:

Table 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	

Table Item	Thing authorised to be done by licence	Fee (\$)
2.	Disposing of or abandoning a controlled facility, being a prescribed	27 285 to
	radiation facility that was formerly used as a nuclear or atomic weapon test site	28 021
3.	De-commissioning a controlled facility, being a prescribed radiation	40 927 to
	facility that was formerly used for the mining, processing, use,	42 032
	storage, management or disposal of radioactive ores	
4.	Disposing of or abandoning a controlled facility, being a prescribed	27 285 to
	radiation facility that was formerly used for the mining, processing,	28 021
	use, storage, management or disposal of radioactive ores	

## <u>Item [4] Amendments of listed provisions—Part 2 of Schedule 3C</u>

Part 2 of Schedule 3C lists the application fees that must accompany an application for a source licence to deal with particular kinds of controlled apparatus or controlled material. For purposes of source licence application fees, controlled material and controlled apparatus have been divided into three groups, namely Group 1, Group 2 and Group 3, in ascending order of risk to people and the environment. The amendments increase the application fees in the table in Part 2 of Schedule 3C by 2.7 per cent as follows:

Table Item	Number of controlled apparatus or controlled materials in	Fees (\$)
	the same location to be dealt with under the application	` ,
1.	For less than 4 controlled apparatus or controlled materials	
	from:	682 to 700
	(a) Group 1	2 728 to 2 801
	(b) Group 2	8 185 8 405
	(c) Group 3	
2.	For more than 3, but less than 11, controlled apparatus or	
	controlled materials from:	
	(a) Group 1	1 772 to 1 819
	(b) Group 2	5 457 to 5 604
	(c) Group 3	16 370 to 16 811
3.	For 11 or more controlled apparatus or controlled materials	
	from:	3 411 to 3 503
	(a) Group 1	10 257 to 10 533
	(b) Group 2	30 012 to 30 822
	(c) Group 3	

#### Part 2—Other amendments

Australian Radiation Protection and Nuclear Safety Regulations 1999

#### Item [5] Regulation 3

The existing regulation 3 refers to the Dictionary at the end of the ARPANS Regulations. This amendment repeals the existing regulation 3 and inserts a new regulation 3 titled 'Definitions' with a list of terms from the existing Dictionary. The amendment also streamlines the list of definitions to avoid repeating terms that are already defined in the Act and moves citations of publications to the appropriate parts of the body of the ARPANS regulations.

The amendment also inserts a new regulation 3A that provides that for purposes of the Regulations, in determining the activity of a parent nuclide mentioned in the table in Part 3 of Schedule 2, the activity of the progeny nuclide is to taken to be nil when in secular equilibrium with that parent nuclide

## Item [6] Paragraph 4(2)(b)

Regulation 4 prescribes those non-ionising radiation apparatus that are controlled apparatus. Subregulation 4(2) lists the prescribed apparatus and paragraph 4(2)(b) provides that the a prescribed apparatus is controlled apparatus only if 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. The amendment makes an editorial change to the way in which the table in Schedule 1 is referred to and is consequential to the amendment at Item [65].

## Item [7] Subregulation 4(3)

Section 13 of the Act defines 'controlled apparatus' as including an apparatus prescribed by regulations that produces harmful non-ionising radiation when energised. Subregulation 4(2) prescribes those controlled apparatus, which therefore will need a source licence from the CEO of ARPANSA. Subregulation 4(3) provides the CEO the power to exempt a prescribed apparatus from the need to be licensed. Subregulation 4(3) does this by providing that the CEO 'may declare in writing on a case by case basis that an apparatus is not a controlled apparatus'. The amendment clarifies this sub-regulation by providing that the controlled apparatus being referred to in subregulation 4(3) is a controlled apparatus covered by subregulation 4(2).

## Item [8] Paragraph 4(3A)(a)

Section 13 of the Act defines 'controlled apparatus' as including an apparatus prescribed by regulations that produces harmful non-ionising radiation when energised. Regulation 4 prescribes those apparatus. Subregulation 4(3) gives the CEO the power to exempt a prescribed controlled apparatus from the need to be authorised by a source licence by declaring that it is not controlled apparatus. Under subregulation 4(3A) the CEO must not make that declaration unless he 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." The amendment replaces the word "and" with the word "or". This is because in some cases the CEO's reason to declare that an apparatus is not controlled (and therefore is exempt from licensing requirements) may only be under paragraph (b). For example, where Work Health and Safety legislation requires the wearing of personal protective equipment, that requirement alone may be sufficient and there would be no further need to require the apparatus to be licensed under the Act.

#### Item [9] Paragraph 6(1)(c)

Section 13 of the Act defines a 'controlled facility' as a nuclear installation or a 'prescribed radiation facility'. Regulation 6 prescribes those prescribed radiation facilities. Paragraph 6(1)(b) prescribes "an irradiator that contains more than 10<sup>15</sup> Becquerel (Bq) of a controlled material. Paragraph 6(1)(c) prescribes an irradiator that contains "more than 10<sup>13</sup> Bq of a controlled material" provided certain other conditions in relation to the physical shielding of the controlled material are met. The amendment clarifies that paragraph 6(1)(c) only applies to an irradiator that contains controlled material with an activity level that is more than 10<sup>13</sup> Bq but not

more than  $10^{15}$  Bq. (Note: Becquerel is the SI unit of radioactivity corresponding to one disintegration per second.)

## Items [10] to [15] Paragraphs 6(2)(a), 7(2)(b), 7(3)(a), 8(3)(b), 8(4)(a), and 11(2)(a)

Regulations 6, 7, 8 and 11 prescribe certain activity concentration values and activity values in order to determine if a facility is a prescribed radiation facility or a nuclear installation. Each of these paragraphs includes the method for calculating the relevant value and to do so refers to values in column 3 or column 4 of the table in Part 2 to Schedule 2. The amendments make editorial changes to the way in which the relevant value is referred to in each paragraph and are consequential to the amendment at Item [81].

#### Item [16] Subregulations 38(1) and (3)

Subregulation 38(1) provides that a dealing with a controlled material or apparatus that is listed in the table in Part 1 of Schedule 2 is exempt. Subregulation 38(3) lists those situations when a CEO may declare that a dealing that is listed in that table is not exempt. The amendment makes an editorial change to the way in which that table is referred to and is consequential to the amendment at Item [70].

## Items [17] and [18] Paragraphs 38(3)(b) and 38(3)(c)

Subregulation 38(1) provides that a dealing with a controlled material or apparatus that is listed in the table in Part 1 of Schedule 2 is exempt. Paragraphs 38(3)(a), (b) and (c) list those situations when a CEO may declare that a dealing that is listed in the table in Part 1 of Schedule 2 is not exempt. Paragraph 38(3)(c) provides one such situation and that is when 'the annual collective effective dose to the population committed by 1 year of the dealing is likely to be greater than 1 man.Sv.' The amendments delete paragraph 38(3)(c) as the concept of annual collective effective dose to the population is not relevant anymore and the limiting factor for exemptions from regulatory control is the radiation dose to the individual. (Note: Sv means Sievert and is the SI unit of equivalent dose which takes account of the biological effectiveness of the ionising radiation that is absorbed in the tissue)

## Item [19] Subregulation 38(5)

Subregulation 38(1) provides that a dealing with a controlled material or apparatus that is listed in the table in Part 1 of Schedule 2 is exempt. Subregulation 38(5) lists those situations when a CEO may declare that a dealing that is not listed in Part 1 of Schedule 2 is exempt. The amendment makes an editorial change to the way in which that table is referred to and is consequential to the amendment at Item [70].

#### Items [20] and [21] Paragraphs 38(5)(b) and 38(5)(c)

Subregulation 38(1) provides that a dealing with a controlled material or apparatus that is listed in the table in Part 1 of Schedule 2 is exempt. Paragraphs 38(5)(a), (b) and (c) list those situations when a CEO may declare that a dealing that is not listed in Part 1 of Schedule 2 is exempt. Paragraph 38(5)(c) provides one such situation and that is when '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.'. The amendments delete paragraph 38(5)(c) as the concept of annual collective

effective dose to the population is not relevant anymore and the limiting factor for exemptions from regulatory control is the radiation dose to the individual.

## <u>Item [22] Paragraph 38(6)(a)</u>

Subregulation 38(1) provides that a dealing with a controlled material or apparatus that is listed in the table in Part 1 of Schedule 2 is exempt. Subregulation 38(6) lists those situations when a CEO may declare that a dealing that is not listed in Part 1 of Schedule 2 is exempt. The amendment makes an editorial change to the way in which that table is referred to and is consequential to the amendment at Item [70].

#### Items [23] and [24] Paragraphs 39(2)(a) and 39(3)(a)

Regulation 39 provides for the form and content of an application for a licence. Under paragraphs 39(2)(a) and 39(3)(a) the CEO may ask an applicant for a facility licence or source licence to provide certain information referred to in the tables in Parts 1 and 2 of Schedule 3 respectively. The amendments make editorial changes to the way in which those tables are referred to and are consequential to the amendments at Items [82] and [85].

#### Items [25] and [26] Subregulations 40B(1) and 40B(2)

Subregulations 40B(1) and (2) provide that the application fee for a facility licence for each controlled facility that is a nuclear installation is as set out in columns 2 and 3 of the table in Schedule 3A. The amendments make editorial changes to the way in which references are made to the relevant items in the table in Schedule 3A and are consequential to the amendment at Item [87].

## Items [27] to [31] Subregulations 40(C)(1) and (2), paragraphs 40C(2)(a) and (b) and subregulation 40(C)(3)

Regulation 40C sets out the fees that apply for an application for a facility licence that authorises a person to undertake certain activities in relation to prescribed radiation facilities. These activities, which are spelled out in subsection 30(1) of the Act are to prepare a site for, construct, possess or control, operate, or de-commission, dispose of or abandon a prescribed radiation facility. The applicable fees are those in the tables in Parts 1 and Parts 2 of Schedule 3B. The amendments make editorial changes to the way in which subregulations 40(C)(1) and (2) and paragraphs 40C(2)(a) and (b) refer to the tables in Parts 1 and 2 of Schedule 3B and are consequential to the amendments at Items [89] and [92].

The amendments to subregulation 40(C)(3) are also editorial changes to spell out more clearly that where an application is made for more than one of the activities in subsection 30(1) of the Act in relation to a prescribed radiation facility, the fee that is payable is as if each one of those activities had been the subject of a separate application.

# Items [32] to [36] Subregulations 40D(1) and 40D(2), subparagraphs 40D(2)(a)(i) and (ii) and paragraph 40D(2)(b)

Regulation 40D sets out the applicable fees for an application for a source licence. The applicable fees are provided for in subregulations 40D(1) and 40D(2), subparagraphs 40D(2)(a)(i) and (ii) and paragraph 40D(2)(b) through references to the tables in Parts 1 and 2 of

Schedule 3C. The amendments make editorial changes to the way in which the relevant tables in Parts 1 and 2 of Schedule 3C are referred to and are consequential to the amendments at Items [94] and [98].

#### Item [37] Subregulation 48(2)

Subregulation 48(2) makes it a condition of licence that the holder of a source licence or facility licence must comply with the recommendations, standards and codes of practice listed in that subregulation. The amendment clarifies that the applicable recommendations and codes of practice are those existing on 1 July 2015.

#### Item [38] Paragraphs 48(2)(a), (b) and (c)

The amendment makes editorial changes to remove the word "and" from the end of paragraphs 48(2)(a), (b) and (c).

## <u>Item [39] Paragraph 48(2)(d)</u>

Subregulation 48(2) makes it a condition of licence that the holder of a source licence or facility licence must comply with the recommendations, standards and codes of practice mentioned in that subregulation. Paragraph 48(2)(d) mentions the *Code of Practice for the Safe Transport of Radioactive Material (2008) (Radiation Protection Series No. 2).* The amendment replaces this outdated code of practice with the more recent *Code for the Safe Transport of Radioactive Material (2014) (Radiation Protection Series C-2)* and also notes that this code as well as the other code of practice, recommendations and standard listed in subregulation 48(2) could in 2015 be viewed on the ARPANSA Internet website.

#### Item [40] Subregulation 48(3)

Subregulation 48(3) makes it a condition of licence that a licence holder must comply with the list of codes of practice in that subregulation when disposing of controlled material and controlled apparatus. The amendment deletes the phrase 'following codes of practice' and replace that with the word 'following' and is consequential to the amendment at Item [43]. The amendment also clarifies that the applicable codes are those existing on 1 July 2015.

#### Items [41] and [42] Paragraphs 48(3)(a) and (b)

Subregulation 48(3) makes it a condition of licence that a licence holder must comply with the list of codes of practice in that subregulation when disposing of controlled material and controlled apparatus. Paragraphs 48(3)(a) and (b) list the *Code of Practice for the Disposal of Radioactive Waste by the User* and the *Code of Practice for the Near-Surface Disposal of Radioactive Waste in Australia*. The amendment inserts the year of publication and the publisher's name for each of these two codes of practice.

## Items [43] Paragraph 48(3)(c)

Subregulation 48(3) makes it a condition of licence that a licence holder must comply with the list of codes of practice in that subregulation when disposing of controlled material and controlled apparatus. Paragraph 48(3)(c) mentions the *Code of Practice for the Safe Transport of Radioactive Material (2008) (Radiation Protection Series No. 2).* The amendment replaces this

outdated code of practice with the more recent *Code for the Safe Transport of Radioactive Material (2014) (Radiation Protection Series C-2.* 

## Item [44] At the end of subregulation 48(3)

The amendment inserts a note at the end of subregulation 48(3) that the codes listed in the subregulation could in 2015 be viewed on the ARPANSA Internet website.

## <u>Item [45] Regulations 49, 50 and 51</u>

The existing regulation 49 makes it a condition of licence that a licence holder complies with its plans and arrangements for managing safety of controlled facilities, controlled material and controlled apparatus. The amendment replaces regulation 49 with a new licence condition that clarifies that the obligation of the licence holder is to take all reasonably practicable steps to have in place plans and arrangements of the kind that was submitted with the application for the licence and ensure that such plans and arrangements are implemented to the extent reasonably practicable. This brings regulation 49 in line with other licence conditions in the ARPANS Regulations, which require the licence holder to take all reasonably practicable actions.

The existing regulation 50 is a condition of licence that requires the holder of a licence to, 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. The licence holder must also, after conducting the review give the CEO information about the review. The amendment increases the interval between reviews from 12 months to three years and gives the CEO the discretion to vary the interval between reviews. This is because for some large nuclear installations or radiation facilities the plans and arrangements are so voluminous in number and size that it would be unreasonable to expect the licence holders in those cases to review their plans and arrangements every 12 months or, in some cases, even once in 3 years. The amendment also replaces the requirement to provide information about the review to the CEO with a requirement that the licence holder keeps and maintains proper records of any changes to the plans and arrangements. This is to reduce regulatory burden and cut red tape.

The existing regulation 51 provides that the holder of a licence must get the CEO's prior approval to make a relevant change that will have significant implications for safety. The words, 'relevant change' are defined in the Dictionary as a change to the details in the application for the licence or a modification of the source or facility mentioned in the licence. The amendment fully spells out the requirements of regulation 51 in the body of the regulations and make it unnecessary to separately define 'relevant change'.

#### <u>Items [46] to [48] Subregulations 52(1), 52(2) and 52(3)</u>

The existing subregulation 52(1) provides that a person may make a 'relevant change' that is unlikely to have significant implications for safety without the CEO's approval. The amendment brings subregulation 52(1) in line with the amendment to regulation 51 at item [45] by omitting reference to the words 'relevant change' and referring instead to those things that require approval under regulation 51.

The existing subregulation 52(2) provides that where a licence holder makes a change under regulation 52, the licence holder must tell the CEO about the change "at least once every 3

months". The amendment clarifies this requirement by stating that a licence holder who must tell the CEO about a change under subregulation 52(1) must do so "within" three months.

The amendment to subregulation 52(3) corrects an error by replacing the words 'the subregulations' with 'that subregulation'.

Items [49] to [53] Subregulations 53(1), after subregulation 53(1), and subregulations 53(2), 53(3) and 53(4)

Regulation 53 provides for the disposal of and movement of controlled apparatus. controlled material and controlled facilities and specifies the conditions under which this may be done as well as the reporting requirements after it is done.

Subregulation 53(1) provides that the holder of a licence must only dispose of controlled apparatus or controlled materials with the approval of the CEO. The amendment at item [49] corrects an error by replacing "must only" with "may only".

The amendment at item [50] introduces a new subregulation 53(1A) that provides that a licence holder must only transfer controlled apparatus or material with the approval of the CEO unless the transferee is the holder of a source licence or facility licence issued by the CEO. The amendment also clarifies that a transfer of controlled apparatus or material to another ARPANSA licensee would not require the prior approval of the CEO only if the transferee's licence authorises the transferee to receive the controlled apparatus or controlled materials.

The amendment at item [51] replaces the existing subregulation 53(2) to bring the subregulation in line with the provisions in the new subregulation 53(1A).

The amendment at item [52] corrects an error by deleting the word 'body" from subregulation 53(3).

The amendment at item [53] is consequential to the new subregulation 53(1A).

#### Item [54] Part 5 (heading)

The amendment changes the heading to 'Practices and procedures to be followed' to more accurately describe the contents of Part 5.

#### Item [55] Subregulations 58(1) and (2)

The existing subregulation 58(1) provides for the application of regulation 58 and the existing subregulation 58(2) specifies the requirements on a holder of a facility licence in relation to dose limits. The amendment repeals the existing subregulations 58(1) and (2) and consolidates and clarifies the requirements in a new subregulation 58(1) to state succinctly that the holder of a facility licence must ensure that doses to which a person is exposed to inside or in connection with the facility do not exceed certain effective dose limits mentioned in regulations 59 and 60.

## Item [56] Subregulation 58(4)

The existing subregulation 58(4) provides that the holder of a licence must ensure that radiation protection and safety are optimised so that the magnitude of individual doses, the number of

people who are exposed and the likelihood of incurring exposures to radiation are as low as reasonably achievable after taking into account economic and social factors. The amendment also provides for the optimisation of radiation protection but splits the subregulation into subregulations 58(4) and (4A) to make the requirement easier to read and understand.

## Item [57] At the end of regulation 60

Regulation 60 provides a methodology to calculate the effective does that a person has received in a relevant period. The words "relevant period" are now defined in the dictionary. The amendment inserts a new subregulation (3) that will define the words "relevant period" at the end of regulation 60 instead.

#### Item [58] Regulation 61

Regulation 61 provides that 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. The amendment makes an editorial change to the way in which the table in Schedule 1 is referred to and is consequential to the amendment at Item [65].

## Item [59] Subregulation 62(1)

The existing subregulation 62(1) provides the annual equivalent dose limit for the lens of the eye as 150 mSv for occupational exposure and 15 mSv for public exposure. The amendment repeals subregulation 62(1) and replaces it with new subregulations 62(1), (1A) and (1B) that reduce the annual equivalent dose limit for occupational exposure for the lens of the eye to 20 mSv averaged over 5 consecutive calendar years and provide that the equivalent dose to the lens of the eye for occupational exposure should be no more 50 mSv in a single year. The annual equivalent dose limit to the lens of the eye for members of the public remains unchanged at 15 mSv a year.

#### Item [60] Division 5.3 (heading) and Item [61] Section 62A (heading)

The existing heading for Division 5.3 is 'Codes of practice' and the existing heading for section 62A is 'Codes of practice to be followed'. The amendments repeal the headings and replace each with the heading 'Practices and procedures' as it more accurately describes Division 5.3 and section 62A.

#### Item [62] Subregulations'62A(1) and (2)

The amendment replaces the phrase 'codes of practice' in subregulations 62A(1) and (2) with the word 'codes'. This is consequential to the amendment at Item [64].

## Item [63] Subregulation 62A(2)

The amendment clarifies that the applicable codes of practice listed under subregulation 62A(2) are those existing on 1 July 2015.

#### Item [64] Paragraph 62A(2)(c)

Regulation 62A lists certain codes that must be followed by controlled persons. Paragraph 62A(2)(c) prescribes the *Code of Practice for the Safe Transport of Radioactive Material (2008) (Radiation Protection Series No. 2).* The amendment replaces this outdated code of practice with the more recent *Code for the Safe Transport of Radioactive Material (2014) (Radiation Protection Series C-2)* and also notes that the codes listed in subregulation 62A(2) could in 2015 be viewed on the ARPANSA Internet website.

## Item [65] Schedule 1 (before the table)

Schedule 1 has a table that lists exposure limits for non-ionising radiation. The amendment inserts a clause that describes what the table in Schedule 1 sets out to do.

#### Item [66] Schedule 1 (table item 1)

Schedule 1 has a table that lists exposure limits for non-ionising radiation. The amendment inserts new table and column headings for the table and also makes editorial changes to the exposure limits mentioned in table item 1.

## Item [67] At the end of Schedule 1

Schedule 1 has a table that lists exposure limits for non-ionising radiation. The amendment points out that that the documents referred to in table items 1, 3 and 6 of the table could, in 2015, be viewed on the ARPANSA Internet website.

#### Item [68] Schedule 2 (note to Schedule heading)

Schedule 2 comprises three tables that set out exempt dealings, that list activity values and activity concentration values of nuclides, and that list the progeny nuclides of parent nuclides in secular equilibrium. The note to the Schedule heading refers to the relevant regulation numbers. The amendment inserts "3A", which is a new regulation inserted under the amendment at item [5].

## Item [69] Part 1 of Schedule 2 (heading)

Part 1 of Schedule 2 has a table that lists dealings with radiation apparatus and material that are exempt from the need to be licensed. The amendment repeals the current heading of Part 1 with the new heading, "Part 1—Exempt dealings", which describes Part 1 more accurately.

## Item [70] Part 1 of Schedule 2 (after the heading)

Part 1 of Schedule 2 has a table that lists dealings with radiation apparatus and material that are exempt from the need to be licensed. The amendment inserst a clause that describes what the table in Part 1 of Schedule 2 sets out to do.

#### Item [71] Part 1 of Schedule 2 (table. headings)

Part 1 of Schedule 2 has a table that lists dealings with radiation apparatus and material that are exempt from the need to be licensed. The amendment inserts a table heading for that table.

Items [72] Part 1 of Schedule 2 (table item 1, column headed "Description of dealing", paragraph (a)) and Item [73] Part 1 of Schedule 2 (table item 1, column headed "Description of dealing", paragraph (b))

Part 1 of Schedule 2 has a table that lists dealings with radiation apparatus and material that are exempt from the need to be licensed. Paragraphs (a) and (b) of table item 1 of Part 1 of Schedule 2 exempts certain radioactive material from the need to be licensed provided the activity concentration value or the activity value for that material is less than the value set out for that material in the table in Part 2 of Schedule 2. The amendments make editorial changes to the way in which the relevant values are referred to and are consequential to the amendments at item [81].

Items [74] Part 1 of Schedule 2 (table item 2, column headed "Description of dealing", paragraph (a)) and Item [75] Part 1 of Schedule 2 (table item 2, column headed "Description of dealing", paragraph (b))

Part 1 of Schedule 2 has a table that lists dealings with radiation apparatus and material that are exempt from the need to be licensed. Table item 2 of Part 1 of Schedule 2 provides for the exemption of mixed radioactive material containing 2 or more different radioactive material from the need to be licensed. The table item specifies a method of calculating the sum of the activity values and activity concentration values of each type of radioactive material. The method makes reference to the activity and activity concentration values for the radioactive material listed in the table in Part 2 of Schedule 2. The amendments make editorial changes to the way in which the relevant values are referred to and are consequential to the amendments at item [81].

## Item [76] Part 1 of Schedule 2 (table item 4, column headed "Description of dealing", paragraph (c))

Part 1 of Schedule 2 has a table that lists dealings with radiation apparatus and material that are exempt from the need to be licensed. Table item 4 exempts a dealing with depleted uranium provided the depleted uranium is being used as radiation shielding in a container for other radioactive material, is completely contained in an appropriate metallic sheath, and is in a container that complies with the requirements in the *Code of Practice for the Safe Transport of Radioactive Material (2008) (Radiation Protection Series No. 2).* The amendment replaces this outdated code of practice with the more recent *Code for the Safe Transport of Radioactive Material (2014) (Radiation Protection Series C-2).* 

# Item [77] Part 1 of Schedule 2 (table item 7, column headed "Description of dealing", paragraph (a))

Part 1 of Schedule 2 has a table that lists dealings with radiation apparatus and material that are exempt from the need to be licensed. Paragraph (a) of table item 7 exempts "a clock, watch or other device with a luminous dial that includes a quantity of controlled material that is not more than the quantity in Part 4". The amendment repeals paragraph (a). This is consequential to the amendment at item [81], which repeals the table at Part 4 of Schedule 2.

# Item [78] Part 1 of Schedule 2 (at the end of the cell at table item 7, column headed "Description of dealing")

Part 1 of Schedule 2 has a table that lists dealings with radiation apparatus and material that are exempt from the need to be licensed. Table item 7 lists certain controlled apparatus or controlled material that are exempt. The amendment adds a paragraph (h) to this list to exempt certain electron capture detectors or similar devices used in gas chromatography and a paragraph (i) to this list to exempt lighting products that include krypton-85.

## Item [79] Part 1 of Schedule 2 (at the end of the table)

Part 1 of Schedule 2 has a table that lists dealings with radiation apparatus and material that are exempt from the need to be licensed. The amendment adds two new items to this table. The new table item 9 exempts dealings involving certain sealed radioactive sources used for teaching purposes and the new table item 10 exempts a dealing involving certain geological samples.

#### Item [80] At the end of Part 1 of Schedule 2

Part 1 of Schedule 2 has a table that lists dealings with radiation apparatus and material that are exempt from the need to be licensed. The amendment adds a note to the table that the Code mentioned in item 4 of the table could in 2015 be viewed on ARPANSA's website.

## Item [81] Parts 2,3 and 4 of Schedule 2

Part 2 of Schedule 2 has a table that lists nuclides and activity concentration value and activity values for each nuclide. These values are used to determine if a controlled facility is a prescribed radiation facility or nuclear installation. These values are also used to determine those nuclides that are exempt from the need to be licensed. Part 3 of Schedule 2 lists the progeny of certain nuclides in Part 2, which may be disregarded when calculating activity values and activity concentration values of the parent nuclides. The amendment repeals the tables in Parts 2 and 3 of Schedule 2 and replaces them with updated tables from the *IAEA General Safety Requirements Part 3 – Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards (July 2014)*.

Part 4 of Schedule 2 is a list of timekeeping and other devices that contain the radioactive substances H-3 (Tritium), Pm-147 (Promethium-147) or Ra-226 (Radium 226). These timekeeping and other devices are exempt from the need to be authorised. The amendment repeals Part 4 as the use of Pm-147 in time pieces and other devices has been discontinued for many years and the other radioactive substances are already exempt under Part 2 of Schedule 2 and so do not have to be listed here again.

#### Item [82] Part 1 of Schedule 3 (after the heading)

Part 1 of Schedule 3 has a table that lists the information and documents that the CEO may ask an applicant for a facility licence to provide. The amendment inserts a clause that describes what the table in Part 1 of Schedule 3 sets out to do.

#### Item [83] Part 1 of Schedule 3 (table, headings)

Part 1 of Schedule 3 has a table that lists the information and documents that the CEO may ask an applicant for a facility licence to provide. The amendment replaces the table and column headings of that table.

## Item [84] Part 1 of Schedule 3 (at the end of the cell at table item 4, column headed "Information")

Part 1 of Schedule 3 has a table that lists the information and documents that the CEO may ask an applicant for a facility licence to provide. Table item 4 lists the plans and arrangements that the applicant may be asked to provide to describe how the applicant proposes to manage the controlled facility to ensure the health and safety of people and the protection of the environment. The amendment adds a paragraph "(g) the environment protection plan for the controlled facility" to this list.

## Item [85] Part 2 of Schedule 3 (after the heading)

Part 2 of Schedule 3 has a table that lists the information and documents that the CEO may ask an applicant for a source licence to provide. The amendment inserts a clause that describes what the table in Part 2 of Schedule 3 sets out to do.

## Item [86] Part 2 of Schedule 3 (table, headings)

Part 2 of Schedule 3 has a table that lists the information and documents that the CEO may ask an applicant for a source licence to provide. The amendment replaces the table and column headings of that table.

#### Item [87] Schedule 3A (before the table)

Schedule 3A has a table that sets out the amount of the application fee for a facility licence that authorises a person to prepare a site for, construct, possess or control, operate, decommission, dispose of or abandon a nuclear installation. The amendment inserts a clause that describes what the table in Schedule 3A sets out to do.

## Item [88] Schedule 3A (table, headings)

Schedule 3A has a table that sets out the amount of the application fee for a facility licence that authorises a person to prepare a site for, construct, possess or control, operate, decommission, dispose of or abandon a nuclear installation. The amendment replaces the table and column headings of that table.

#### Item [89] Part 1 of Schedule 3B (after the heading)

Part 1 of Schedule 3B has a table that sets out the out the amount of the application fee for a facility licence that authorises a person to prepare a site for, construct, possess or control, operate, decommission, dispose of or abandon certain prescribed radiation facilities. The amendment inserts a clause that describes what the table in Part 1 of Schedule 3B sets out to do.

#### Item [90] Part 1 of Schedule 3B (table, heading)

Part 1 of Schedule 3B has a table that sets out the out the amount of the application fee for a facility licence that authorises a person to prepare a site for, construct, possess or control, operate, decommission, dispose of or abandon certain prescribed radiation facilities. The amendment replaces the table and column headings of that table.

#### Item [91] Part 1 of Schedule 3B (note)

Part 1 of Schedule 3B has a table that sets out the out the amount of the application fee for a facility licence that authorises a person to prepare a site for, construct, possess or control, operate, decommission, dispose of or abandon certain prescribed radiation facilities. The note below the table sets out the amount of application fee when the application is for two or more of the activities that may be authorised. The amendment clarifies that the amount of the application fee in such a case is the sum of the amounts of the application fees that would have been applicable if applications for separate licences had been made for each of those things

## Item [92] Part 2 of Schedule 3B (after the heading)

Part 2 of Schedule 3B has a table that sets out the amount of application fee for a facility licence that authorises a person to decommission, dispose of, or abandon a controlled facility being a prescribed radiation facility that was formerly used as a nuclear or atomic weapon test site or formerly used for the mining, processing, use, storage, management or disposal of radioactive ores. The amendment inserts a clause that describes what the table in Part 2 of Schedule 3B sets out to do.

#### Item [93] Part 2 of Schedule 3B (table, headings)

Part 2 of Schedule 3B has a table that sets out the amount of application fee for a facility licence that authorises a person to decommission, dispose of, or abandon a controlled facility being a prescribed radiation facility that was formerly used as a nuclear or atomic weapon test site or formerly used for the mining, processing, use, storage, management or disposal of radioactive ores. The amendment replaces the table and column headings of that table.

#### Item [94] Part 1 of Schedule 3C (after the heading)

Part 1 of Schedule 3C has a table that sets out kinds of controlled apparatus and controlled materials for the purpose of determining the amount of an application fee for a source licence. The amendment inserts a clause that describes what the table in Part 1 of Schedule 3C sets out to do.

#### Item [95] Part 1 of Schedule 3C (table, headings)

Part 1 of Schedule 3C has a table that sets out kinds of controlled apparatus and controlled materials for the purpose of determining the amount of an application fee for a source licence. The amendment inserts a table heading for that table.

## <u>Item [96] Part 1 of Schedule 3C (table items 6, 7, 8, 30, 31, 42, and 43)</u>

Part 1 of Schedule 3C has a table that sets out kinds of controlled apparatus and controlled materials for the purpose of determining the amount of an application fee for a source licence.

Table items 6, 7 8, 30, 31, 42, and 43 describe sealed and unsealed sources by referring to activity values in column 4 of the table in Part 2 of Schedule 2. The amendments make an editorial change to the way in which the relevant values are referred to each of those table items and is consequential to the amendments at item [81].

## Item [97] Part 1 of Schedule 3C (note)

Part 1 of Schedule 3C has a table that sets out kinds of controlled apparatus and controlled materials for the purpose of determining the amount of an application fee for a source licence. The note under the table refers to the "dictionary". The amendment replaces this reference with "Regulation 3" and is consequential to the amendment at item [5].

#### Item [98] Part 2 of Schedule 3C (after the heading)

Part 2 of Schedule 3C has a table that sets out amounts of an application fee for a source licence based on the number of controlled apparatus or controlled materials in the same location to be dealt with under the application and the Groups in the table in Part 1 of Schedule 3C that covers the controlled apparatus or controlled materials. The amendment inserts a clause that describes what the table in Part 2 of Schedule 3C sets out to do.

## Item [99] Part 2 of Schedule 3C (table, headings)

Part 2 of Schedule 3C has a table that sets out amounts for the purpose of determining the amount of an application fee for a source licence based on the number of controlled apparatus or controlled materials in the same location to be dealt with under the application and the Group in the table in Part 1 of Schedule 3C that covers the controlled apparatus or controlled materials. The amendment replaces the table and column headings of that table.

## **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 (2015 Measures No. 1) Regulation 2015

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 1999* (the Regulations). The amendments increase the licence application fees prescribed in Schedule 3A, Schedule 3B and Schedule 3C to the Regulations by 2.7 per cent. The increase is to index the fees in line with the Australian Bureau of Statistics' Wage Price Index (excluding bonuses) for the public sector as at 30 September 2014. The increase will take effect on 1 July 2015. The instrument also makes other minor amendments to update references, correct certain errors and omissions and improve the drafting of the provisions.

## **Human rights implications**

This legislative instrument does not engage any of the applicable rights or freedoms for the following reasons:

- The amendments increase the licence application fees paid by Commonwealth entities to the Australian Radiation Protection and Nuclear Safety Agency for licences to deal with radiation equipment or radioactive sources or to engage in activities in relation to radiation facilities and nuclear installations.
- Other amendments are technical or machinery in nature, namely, amendments to bring the provisions in line with current drafting convention, amendments to improve the clarity of provisions and definitions, updating of technical information, for example, tables that provide exemption values for radionuclides and provisions that set dose limits.

#### **Conclusion**

This legislative instrument is compatible with human rights as it does not raise any human rights issues.

Fiona Nash Assistant Minister for Health