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. These 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 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 less than 1 megawatt	27 285 to 28 021
2.	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 less than 1 megawatt	170 531 to 175 135
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

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

Table Item	Thing authorised to be done by licence	Fees ($)
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
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	122 783 to 126 098
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	27 285 to 28 021

Part 1 of Schedule 3B

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 electron volt (MeV)	12 278 to 12 609
2.	Particle accelerator capable of producing neutrons	12 278 to 12 609
3.	Irradiator containing more than 10^{15} becquerel (Bq) of a controlled material	12 278 to 12 609
4.	Irradiator containing more than 10^{13} Bq of a controlled material but not including shielding as an integral part of its construction	12 278 to 12 609
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	12 278 to 12 609
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	12 278 to 12 609

Table Item	Kind of prescribed radiation facility	Fees ($)
7.	Facility for the production, processing, use, storage, management or disposal of: (a) unsealed sources for which the result worked out using the steps mentioned in subregulation 6(2) is greater than 10^6; or (b) sealed sources for which the result worked out using the steps mentioned in subregulation 6(2) is greater than 10^9	24 557 to 25 220

Part 2 of Schedule 3B

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	40 927 to 42 032
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	27 285 to 28 021
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	40 927 to 42 032
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	27 285 to 28 021

Part 2 of Schedule 3C

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 the same location to be dealt with under the application	Fees ($)
1.	For less than 4 controlled apparatus or controlled materials from: (a) Group 1 (b) Group 2 (c) Group 3	 682 to 700 2 728 to 2 801 8 185 8 405
2.	For more than 3, but less than 11, controlled apparatus or controlled materials from: (a) Group 1 (b) Group 2 (c) Group 3	 1 772 to 1 819 5 457 to 5 604 16 370 to 16 811

Table Item	Number of controlled apparatus or controlled materials in the same location to be dealt with under the application	Fees ($)
3.	For 11 or more controlled apparatus or controlled materials from: (a) Group 1 (b) Group 2 (c) Group 3	 3 411 to 3 503 10 257 to 10 533 30 012 to 30 822

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 in the existing Dictionary. The amendment also streamline the list of definitions to avoid repeating terms that are already defined in the Act and to move citations of publications to the appropriate parts of the body of the ARPANS regulations.

The amendment also inserts a new regulation 3A that would provide 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

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.

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.

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.

Regulations 49, 50 and 51

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 would clarify 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 will bring 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 give 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 would also replace 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 will fully spell out the requirements of regulation 51 in the body of the regulations and make it unnecessary to separately define 'relevant change'.

Regulations 53

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. The amendment introduces a new subregulation 53(1A) to provide 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.

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 change 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.

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". This is consequential to an amendment below, which repeals the table at Part 4 of Schedule 2.

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. (See below)

(h) an electron capture detector or similar device used in gas chromatography containing:
(i) a nickel-63 sealed source with activity not more than 750 MBq; or
(ii) a tritium source with activity not more than 20 GBq;
(i) lighting products that include krypton-85.

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 would exempt dealings involving certain sealed radioactive sources used for teaching purposes and a new table item 10 would exempt a dealing involving certain geological samples. (See below)

9	*The dealing involves a sealed radioactive source used for teaching the characteristics and properties of radiation or radiation sources, and the sealed source contains one or more of the following:* *(a) Cobalt-60 with an activity not greater than 200 kBq;*

	(b) Strontium-90 with an activity not greater than 80 kBq; *(c) Caesium-137 with an activity not greater than 200 kBq;* *(d) Radium-226 with an activity not greater than 20 kBq;* *(e) Americium-241 with an activity not greater than 40 kBq.*
10	*The dealing involves a geological sample that:* *(a) contains radioactive material that emits radiation at a level not exceeding 5 micrograys an hour, measured at a distance of 10 cm from its surface; and* *(b) is being used as a sample in teaching or for display as a geological specimen.*

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 amendments repeal the tables in Parts 2 and 3 of Schedule 2 and replace 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 do not have to be listed here again.

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.