



Australian Government

Australian Radiation Protection and Nuclear Safety Agency

SOURCE LICENCE APPLICATION

MEDIUM & HIGH HAZARD SOURCES

Use this form to apply for:

1. A source licence to deal with medium and/or high hazard sources, that is, sources in Groups 2 or 3 in the table in clause 1 of Schedule 3C of the Australian Radiation Protection and Nuclear Safety Regulations 1999. (Low hazard sources may also be included) OR
2. An amendment to an existing source licence.

Refer to the [Regulatory Guide: How to Apply for a Source Licence](#) when completing this form.

Indicate the purpose of this application:

- A. NEW LICENCE
- B. AMENDMENT TO SOURCE LICENCE S

REGULATORY SERVICES

REG-LA-FORM-240A v10

May 2016

SECTION A – APPLICANT INFORMATION

| | |
|---|--|
| DEPARTMENT OR COMMONWEALTH BODY: | |
| PORTFOLIO: | |
| PERSON MAKING THE APPLICATION: (Department Secretary, CEO or other authorised delegate¹) NAME: POSITION: BUSINESS ADDRESS: PH: FAX: EMAIL: | |
| NOMINEE (where applicable): NAME: POSITION: BUSINESS ADDRESS: PH: FAX: EMAIL: | |
| RADIATION SAFETY OFFICER (or contact person) NAME: POSITION: BUSINESS ADDRESS: PH: FAX: EMAIL: | |

DECLARATION (To be signed by the person making the application)

I hereby declare that the information provided on this form and in support of this application is, to the best of my knowledge, complete and true in every particular.

Signed:

Date:

¹A copy of the instrument of authorisation must accompany the application if it has been signed by an authorised delegate.

SECTION B – DESCRIPTION OF SOURCE AND PROPOSED DEALING

1. Indicate the kind of controlled material or controlled apparatus in the table below

| GROUP 1* ITEM | KIND OF CONTROLLED MATERIAL OR CONTROLLED APPARATUS | Select |
|------------------|--|--------------------------|
| 1 | Sealed source for calibration purposes of activity of 40MBq or less | <input type="checkbox"/> |
| 2 | Sealed source in a fully enclosed analytical device | <input type="checkbox"/> |
| 3 | Sealed source with activity of 400MBq or less in a fixed gauge | <input type="checkbox"/> |
| 4 | Sealed source in a blood irradiator | <input type="checkbox"/> |
| 5 | Sealed source in a bone densitometer | <input type="checkbox"/> |
| 6 | Sealed source that: (a) is in storage and awaiting disposal; and (b) has a nuclide with a maximum activity of not more than 10 ⁹ times the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2 to the Regulations | <input type="checkbox"/> |
| 7 | Unsealed source, or sources, in a laboratory or premises, having nuclides of 1 kind only with a maximum activity not more than 100 times the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2 to the Regulations | <input type="checkbox"/> |
| 8 | Unsealed source, or sources, in a laboratory or premises, having nuclides such that when the maximum activity of each nuclide in the source, or sources, is divided by the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2 to the Regulations, the total of the results for all nuclides in the source, or sources, is not more than 100 | <input type="checkbox"/> |
| 9 | Mammographic x-ray unit | <input type="checkbox"/> |
| 10 | Conventional dental x-ray unit | <input type="checkbox"/> |
| 11 | X-ray unit used for bone densitometry | <input type="checkbox"/> |
| 12 | X-ray unit used for veterinary radiography | <input type="checkbox"/> |
| 13 | Fully enclosed x-ray analysis unit | <input type="checkbox"/> |
| 14 | Baggage inspection x-ray unit | <input type="checkbox"/> |
| 15 | Mobile or portable medical x-ray unit | <input type="checkbox"/> |
| 16 | Magnetic field non-destructive testing device | <input type="checkbox"/> |
| 17 | Induction heater or induction furnace | <input type="checkbox"/> |
| 18 | Industrial radiofrequency heater or welder | <input type="checkbox"/> |
| 19 | Radiofrequency plasma tube | <input type="checkbox"/> |
| 20 | Microwave or radiofrequency diathermy equipment | <input type="checkbox"/> |
| 21 | Industrial microwave or radiofrequency processing system | <input type="checkbox"/> |
| 22 | Optical source, other than a laser product, emitting ultraviolet radiation, infra-red or visible light. | <input type="checkbox"/> |
| 23 | A laser product with an accessible emission level more than the accessible emission limit of a Class 3R laser product as set out in AS/NZS IEC 60825.1:2011 <i>Safety of Laser Products – Equipment classification and requirements</i> | <input type="checkbox"/> |
| 24 | An optical fibre communication system exceeding Hazard Level 3R as defined by AS/NZS IEC 60825.2:2011 <i>Safety of Laser Products, Part 2: Safety of optical fibre communications systems (OFCS)</i> | <input type="checkbox"/> |
| 24A | Sealed source of controlled material not mentioned in another item of this Schedule, dealings with which have the potential for accidental exposure but the exposure would be unlikely to exceed the dose limits mentioned in regulations 59 and 62 Select from (1) to (6)** below. If none apply, provide a brief description | <input type="checkbox"/> |
| | (1) Sealed source for training and education purposes of activity 40MBq or less | <input type="checkbox"/> |
| | (2) Manufactured item or component containing thorium | <input type="checkbox"/> |
| | (3) Clock, watch, heritage object, luminous dial or indicator with paint containing radium 226 of activity of 1MBq or less and no other controlled material | <input type="checkbox"/> |
| | (4) Clock, watch, heritage object, luminous dial or indicator with paint containing promethium 147 of activity of 1GBq or less and no other controlled material | <input type="checkbox"/> |
| | (5) Clock, watch, heritage object, luminous dial, indicator or electronic component containing gaseous tritium (H-3) of an activity between 1GBq and 100GBq and no other controlled material | <input type="checkbox"/> |
| | (6) Tritium as an ionisation source | <input type="checkbox"/> |

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| | Controlled apparatus that produces ionizing radiation not mentioned in another item of this Schedule, dealings with which have the potential for accidental exposure but the exposure would be unlikely to exceed the dose limits mentioned in regulations 59 and 62 Select from (1) to (11)** below. If none apply, provide a brief description | <input type="checkbox"/> |
| 24B | (1) Fully enclosed x-ray unit (radiography for special purposes) | <input type="checkbox"/> |
| | (2) Portable handheld dental x-ray apparatus | <input type="checkbox"/> |
| | (3) Optical source, other than a laser product, emitting ultraviolet radiation, infrared or visible light – solar tower array | <input type="checkbox"/> |
| | (4) Ion beam etching unit | <input type="checkbox"/> |
| | (5) CT scanner (for inspection of baggage/freight etc.) | <input type="checkbox"/> |
| | (6) Dual energy x-ray absorptiometry (DEXA) unit for veterinary studies | <input type="checkbox"/> |
| | (7) Fully enclosed x-ray biological irradiator (low power) | <input type="checkbox"/> |
| | (8) CT, SPECT/CT or PET/CT scanner for imaging of small animals | <input type="checkbox"/> |
| | (9) Klystron amplifier for radio communication or radar | <input type="checkbox"/> |
| | (10) Laser used on animals | <input type="checkbox"/> |
| | (11) Handheld backscatter x-ray security inspection system | <input type="checkbox"/> |
| GROUP 2* ITEM | | |
| 25 | Sealed source for calibration purposes of activity of more than 40MBq | <input type="checkbox"/> |
| 26 | Sealed source in a partially enclosed analytical device | <input type="checkbox"/> |
| 27 | Sealed source of activity of more than 400MBq in a fixed gauge | <input type="checkbox"/> |
| 28 | Sealed source in a mobile gauge | <input type="checkbox"/> |
| 29 | Sealed source for medical or veterinary diagnostic nuclear medicine use | <input type="checkbox"/> |
| 30 | Unsealed source, or sources, in a laboratory or premises, having nuclides of 1 kind only with a maximum activity of more than 100, but not more than 10 000, times the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2 to the Regulations | <input type="checkbox"/> |
| 31 | Unsealed source, or sources, in a laboratory or premises, having nuclides such that when the maximum activity of each nuclide in the source, or sources, is divided by the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2 to the Regulations, the total of the results for all nuclides in the source, or sources, is more than 100 but not more than 10 000 | <input type="checkbox"/> |
| 32 | Unsealed sources used for tracer studies | <input type="checkbox"/> |
| 33 | Industrial radiography x-ray unit | <input type="checkbox"/> |
| 34 | Fixed medical x-ray unit, including a unit used for fluoroscopy, tomography and chiropractic radiography | <input type="checkbox"/> |
| 35 | Partially enclosed x-ray analysis unit | <input type="checkbox"/> |
| 36 | Medical therapy simulator | <input type="checkbox"/> |
| 37 | CT scanner | <input type="checkbox"/> |
| | Sealed source of controlled material not mentioned in another item of this Schedule, dealings with which have the potential for accidental exposure that is likely to exceed a dose limit mentioned in regulations 59 and 62 but that is unlikely to result in acute effects Select from (1) to (4)** below. If none apply, provide a brief description | <input type="checkbox"/> |
| 37A | (1) Sealed source for training and education purposes of activity more than 4MBq | <input type="checkbox"/> |
| | (2) Clock, watch, heritage object, luminous dial or indicator with paint containing radium 226 of activity of more than 1MBq and no other controlled material | <input type="checkbox"/> |
| | (3) Clock, watch, heritage object, luminous dial or indicator with paint containing promethium 147 of activity of more than 1GBq and no other controlled material | <input type="checkbox"/> |
| | (4) Clock, watch, heritage object, luminous dial, indicator or electronic component containing gaseous tritium (H-3) of an activity more than 100GBq but not exceeding 10TBq and no other controlled material | <input type="checkbox"/> |

| | | |
|--------------------------|---|--------------------------|
| | Controlled apparatus that produces ionising radiation not mentioned in another item of this Schedule, dealings with which have the potential for accidental exposure that is likely to exceed a dose limit mentioned in regulations 59 and 62 but that is unlikely to result in acute effects Select from (1) to (9)** below. If none apply, provide a brief description | <input type="checkbox"/> |
| 37B | (1) Mobile backscatter x-ray security inspection system | <input type="checkbox"/> |
| | (2) Mobile fluoroscopic x-ray apparatus | <input type="checkbox"/> |
| | (3) CT scanner for imaging of non-human objects | <input type="checkbox"/> |
| | (4) Fixed medical x-ray unit used for research purposes, including a unit designed for fluoroscopy, tomography, mammography and chiropractic radiography | <input type="checkbox"/> |
| | (5) Personnel security screening system using backscatter x-rays | <input type="checkbox"/> |
| | (6) Orthopantomogram (OPG) (dental panoramic x-ray unit) | <input type="checkbox"/> |
| | (7) Fully enclosed x-ray biological irradiator | <input type="checkbox"/> |
| | (8) Personnel anti-smuggling screening system using transmission x-rays | <input type="checkbox"/> |
| | (9) Handheld X-ray Fluorescence Spectrometer | <input type="checkbox"/> |
| GROUP 3* ITEM | | |
| 38 | Sealed source for industrial radiography | <input type="checkbox"/> |
| 39 | Sealed source for medical and veterinary radiotherapy | <input type="checkbox"/> |
| 40 | Sealed source in a bore hole logger | <input type="checkbox"/> |
| 41 | Sealed source of controlled material not mentioned in another item of this Schedule, dealings with which have the potential for accidental exposure that is likely to exceed a dose limit mentioned in regulations 59 and 62 and that is likely to result in acute effects Select (1)** below if it applies. Otherwise, provide a brief description | <input type="checkbox"/> |
| | (1) Reactor start-up source | <input type="checkbox"/> |
| 42 | Unsealed source, or sources, in a laboratory or premises, having nuclides of 1 kind only with a maximum activity of more than 10 000, but not more than 1 000 000, times the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2 to the Regulations | <input type="checkbox"/> |
| 43 | Unsealed source, or sources, in a laboratory or premises, having nuclides such that when the maximum activity of each nuclide in the source, or sources, is divided by the activity value for that nuclide set out in an item in the table in clause 2 of Schedule 2 to the Regulations, the total of the results for all nuclides in the source, or sources, is more than 10 000 but not more than 1 000 000 | <input type="checkbox"/> |
| 44 | Veterinary or medical radiotherapy unit | <input type="checkbox"/> |
| 45 | Controlled apparatus that produces ionising radiation not mentioned in another item of this Schedule, dealings with which have the potential for accidental exposure that is likely to exceed a dose limit mentioned in regulations 59 and 62 and that is likely to result in acute effects Select from (1) to (5)** below. If none apply, provide a brief description | <input type="checkbox"/> |
| | (1) Industrial irradiator containing less than 100 TBq of a controlled material | <input type="checkbox"/> |
| | (2) Neutron Beam Instrument | <input type="checkbox"/> |
| | (3) Low Energy Implanter | <input type="checkbox"/> |
| | (4) Deuterium-tritium or deuterium-deuterium neutron generator | <input type="checkbox"/> |
| | (5) Industrial irradiator containing 100 TBq or more but less than 1 PBq of a controlled material | <input type="checkbox"/> |

* See the table in clause 1 of Schedule 3C to the Regulations

** These numbers have been created for purposes of ARPANSA's Licence Administration Database. As such, they will not appear in the table in clause 1 of Schedule 3C to the Regulations.

2. Describe the source (s)

3. Describe the proposed dealing

4. Provide the physical address of the source(s)

SECTION C – SOURCE DETAILS

Complete the Excel Spreadsheet known as the Source Inventory Workbook (SIW) for any sources used in connection with the facility. [Click here for template](#)

Note: For sealed sources, a copy of any source certificate or special form certificate should accompany the application as per item 5(d) of Part 2 of the Regulations.

SECTION D – PLANS & ARRANGEMENTS FOR MANAGING SOURCES

Describe the plans and arrangements for managing sources (include reference to codes and standards where relevant)

EFFECTIVE CONTROL ARRANGEMENTS

SAFETY MANAGEMENT PLAN

RADIATION PROTECTION PLAN

RADIOACTIVE WASTE MANAGEMENT PLAN

ULTIMATE DISPOSAL OR TRANSFER PLAN

SECURITY PLAN

EMERGENCY PLAN

SECTION E – MATTERS TO BE TAKEN INTO ACCOUNT BY THE CEO

INTERNATIONAL BEST PRACTICE IN RADIATION PROTECTION AND NUCLEAR SAFETY

Describe how international best practice in radiation protection and nuclear safety will be considered with respect to the source

INFORMATION ASKED FOR BY THE CEO

Confirm that all information asked for by the CEO has been provided

UNDUE RISK

Provide information to show that there is no undue risk from radiation associated with the facility

NET BENEFIT

Provide information that demonstrates a net benefit from the proposed conduct

ALARA

Provide information in relation to the proposed conduct to show that the magnitude of individual doses, the number of people exposed, and the likelihood that exposure will happen, are as low as reasonably achievable, having regard to economic and social factors

CAPACITY TO COMPLY

Provide information to show that the applicant has the capacity to comply with the Regulations and any licence conditions that may be imposed

AUTHORISED SIGNATORY

Confirm that the application has been signed by an office holder of the applicant or a person authorised by an office holder of the applicant

CHECKLIST

| ITEM | Check | N/A |
|--|--------------------------|--------------------------|
| 1. Completed and signed Section A – Applicant Information | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Copy of Instrument of Authorisation for authorised person | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Organisational chart showing nominee | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Completed Section B – Description of proposed dealing | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Documents to support Section B | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Completed Section C – SIW (CD-ROM or email attachment) | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Copy of sealed source or special form certificate(s) | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Completed Section D – Plans and Arrangements (including identification of relevant codes and standards) | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Documents to support Section D | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Completed Section E – Other Matters | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Documents to support Section E | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Application fee | <input type="checkbox"/> | <input type="checkbox"/> |

SUBMITTING THE APPLICATION

The completed application form and any supporting documentation should be sent to licenceadmin@arpansa.gov.au. Arrangements must be made for payment of the application fee either by cheque or electronic funds transfer. Applicants should refer to regulation 40B and the table in clause 1 of Schedule 3C of the Regulations to determine the appropriate fee.

Alternatively, the completed application, supporting documents and application fee may be sent to:

The CEO of ARPANSA
PO Box 655
MIRANDA NSW 1490