

Relevant qualifications for personal radiation licences

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EPA 1142/23: This information sheet details the requirements for a person applying for a licence, under the Radiation Protection and Control Act 2021 to use or handle radioactive material or operate radiation apparatus.

Introduction

The two different types of personal radiation licences issued under the *Radiation Protection and Control Act 2021* are:

- **Apparatus:** [Licence to operate ionising radiation apparatus](#) (Form 24).
- **Radioactive material:** [Licence to use or handle radioactive material](#) (Form 23).

This information sheet outlines the most common types of professionals and activities which require a radiation licence. The following table details the different scenarios which covers:

- the occupation or activity which involves the use of radiation
- a short description of the scope of practice for the use of radiation
- the appropriate supporting evidence required to be provided (unless otherwise specified, uncertified copies of documents are accepted)

If you feel your specific situation is not adequately described in this information sheet, please contact the EPA Radiation Protection Branch to seek advice specific to your circumstances.

GPO Box 2607
Adelaide SA 5001
Telephone: (08) 8463 7826
Facsimile: (08) 8124 4671
Website: <https://www.epa.sa.gov.au>
Email: EPARadiationProtectionBranch@sa.gov.au

Abbreviations

ACPSEM	Australasian College of Physical Scientists and Engineers in Medicine
AHPRA	Australian Health Practitioner Regulation Agency
AINDT	Australian Institute for Non-Destructive Testing
CMPS	Certified Medical Physics Specialist
CRPSS	Certified Radiopharmaceutical Science Specialist
EPA	South Australian Environment Protection Authority
TEAP	Training, Education and Assessment Program
TEQSA	Tertiary Education Quality and Standards Agency
VSBSA	Veterinary Surgeons Board of South Australia

Occupation	Licence type	General purpose	Supporting evidence
Medical radiation practitioners			
Diagnostic Radiographer	Apparatus	Operation of all diagnostic X-ray apparatus for the purpose of human radiography.	AHPRA (General Registration) Diagnostic Radiographer
Nuclear Medicine Technologist	Apparatus	Operation of X-ray absorptiometry apparatus. Operation of computed tomography apparatus for the purpose of nuclear medicine.	AHPRA (General Registration) Nuclear Medicine Technologist
	Radioactive materials	Handling of radioactive sources and material for the purpose of nuclear medicine.	
Radiation Therapists	Apparatus	Operation of radiotherapy apparatus.	AHPRA (General Registration) Radiation Therapist
	Radioactive materials	Handling of radioactive sources and material for the purpose of brachytherapy.	
Medical officers			
Radiologist	Apparatus	Operation of all diagnostic X-ray apparatus for the purpose of human radiography.	AHPRA (Specialist Registration) Radiology

Occupation	Licence type	General purpose	Supporting evidence
Nuclear Medicine Physician	Radioactive materials	Handling of radioactive sources and material for the purpose of nuclear medicine.	AHPRA (Specialist Registration) Nuclear Medicine
Radiation Oncologist	Apparatus	Operation of radiotherapy apparatus.	AHPRA (Specialist Registration) Radiation Oncology
	Radioactive materials	Handling of radioactive sources and material for the purpose of brachytherapy.	
Specialist Surgeons <i>Cardiothoracic, Orthopaedics, Plastics, Vascular. etc</i>	Apparatus	Operation of fluoroscopy apparatus for the purpose of clinical practice as a specialty surgeon.	AHPRA (Specialist Registration); and EPA radiation exam.
Specialist Surgery Registrars <i>Cardiothoracic, Orthopaedics, Plastics, Vascular, etc</i>	Apparatus	Operation of fluoroscopy apparatus for the purpose of clinical practice as a specialty surgeon registrar.	AHPRA (General Registration); and Proof of registrar employment or admission to registrar college program; and EPA radiation exam.
Remote area healthcare workers			
Remote Area General Practitioner	Apparatus	Operation of plain diagnostic X-ray apparatus for the purpose of human radiography in remote emergency settings.	AHPRA (General Registration); and Appropriate rural & remote radiography course.
Remote Area Registered Nurse	Apparatus	Operation of plain diagnostic X-ray apparatus for the purpose of human radiography in remote emergency settings.	AHPRA (General Registration) Registered Nurse; and Appropriate rural & remote radiography course.
Dental practitioners			
Dentists	Apparatus	Operation of plain, panoramic & cephalometric X-ray apparatus for dentistry.	AHPRA (General or Specialist Registration) Dentist
		Operation of plain, panoramic, cephalometric & cone-beam computed tomography X-ray apparatus for dentistry.	AHPRA (General or Specialist Registration) Dentist; and EPA radiation exam.

Occupation	Licence type	General purpose	Supporting evidence
Dental Hygienists	Apparatus	Operation of plain, panoramic & cephalometric X-ray apparatus for dentistry.	AHPRA (General Registration) Dental Hygienist; and OPG specific training.
		Operation of plain, panoramic, cephalometric & cone-beam computed tomography X-ray apparatus for dentistry.	AHPRA (General Registration) Dental Hygienist; and EPA radiation exam.
Dental Prosthetists	Apparatus	Operation of plain X-ray apparatus for dentistry	AHPRA (General Registration) Dental Prosthetists; and Cert IV Dental radiography modules (HLTDEN021, 022 and 023).
		Operation of plain, panoramic and/or cephalometric X-ray apparatus for dentistry.	AHPRA (General Registration) Dental Prosthetists; and Cert IV Dental radiography modules (HLTDEN021, 022 and 023); and OPG and/or Cephalometric specific training.
		Operation of plain, panoramic and/or cephalometric & cone-beam computed tomography X-ray apparatus for dentistry.	AHPRA (General Registration) Dental Prosthetists; and Cert IV Dental radiography modules (HLTDEN021, 022 and 023); and OPG and/or Cephalometric specific training; and EPA radiation exam.
Dental Therapists	Apparatus	Operation of plain, panoramic & cephalometric X-ray apparatus for dentistry.	AHPRA (General Registration) Dental Therapist
		Operation of plain, panoramic, cephalometric & cone-beam computed tomography X-ray apparatus for dentistry.	AHPRA (General Registration) Dental Therapist; and EPA radiation exam.
Oral Health Therapists	Apparatus	Operation of plain, panoramic & cephalometric X-ray apparatus for dentistry.	AHPRA (General Registration) Oral Health Therapist

Occupation	Licence type	General purpose	Supporting evidence
		Operation of plain, panoramic, cephalometric & cone-beam computed tomography X-ray apparatus for dentistry.	AHPRA (General Registration) Oral Health Therapist; and EPA radiation exam.
Dental Assistants	Apparatus	Operation of plain X-ray apparatus for dentistry.	TEQSA Cert III in Dental Assisting; and Academic transcripts of Cert IV modules in Dental radiography (HLTDEN021, 022 and 023).
		Operation of plain, panoramic and/or cephalometric for dentistry.	TEQSA Cert III in Dental Assisting; and Academic transcripts of Cert IV modules in Dental radiography (HLTDEN021, 022 and 023); and OPG and/or Cephalometric specific training OR EPA radiation exam.
Chiropractors			
Chiropractors	Apparatus	Operation of plain diagnostic X-ray apparatus for the purpose of chiropractic practice.	AHPRA (General Registration) Chiropractor
Scientists			
Radiochemist	Apparatus	Operation of a cyclotron for the purpose of radiochemistry.	Relevant professional qualification (eg degree in science, chemistry, etc); and EPA radiation exam.
	Radioactive materials	Handling of radioactive sources and material for the purpose of radiochemistry.	
Radiology Medical Physicist OR Radiology Medical Physicist Registrar	Apparatus	Operation of plain X-ray apparatus in the practice of a radiology medical physicist.	ACPSEM Registration: CMPS in Radiology Medical Physics OR Enrolment in the relevant ACPSEM TEAP; and EPA radiation exam.
Nuclear Medicine Medical Physicist OR	Apparatus	Operation of hybrid-computed tomography X-ray apparatus in the practice of a nuclear medicine medical physicist.	ACPSEM Registration: CMPS in Nuclear Medicine Physics OR

Occupation	Licence type	General purpose	Supporting evidence
Nuclear Medicine Medical Physicist Registrar	Radioactive materials	Handling of radioactive sources and material in the practice of a nuclear medicine medical physicist.	Enrolment in the relevant ACPSEM TEAP; and EPA radiation exam.
Radiation Oncology Medical Physicist OR Radiation Oncology Medical Physicist Registrar	Apparatus Radioactive materials	Operation of plain X-ray apparatus in the practice of a radiation oncology medical physicist. Handling of radioactive sources and material in the practice of a radiation oncology medical physicist.	ACPSEM Registration: CMPS in Radiation Oncology OR Enrolment in the relevant ACPSEM TEAP; and EPA radiation exam.
Radiopharmaceutical Scientist OR Radiopharmaceutical Scientist Registrar	Apparatus Radioactive materials	Operation of a cyclotron for the purpose of radiopharmacology. Handling of radioactive sources and material for the purpose of radiopharmacology.	ACPSEM Registration: CRPSS OR Enrolment in the relevant ACPSEM TEAP; and EPA radiation exam.
Engineering, mining, industrial & research			
Engineers <i>Installation & Service Technicians, Calibration & Quality Assurance, etc</i>	Apparatus	Operation of X-ray apparatus for the purpose of installation, service, and maintenance of X-ray apparatus.	Relevant professional qualification (eg degree in engineering, biomedical science, applied science, etc); and EPA radiation exam.
Borehole logging <i>Geologist, Geophysics Technician, Wireline Field Technician, etc</i>	Apparatus Radioactive materials	Operation of borehole logging apparatus which produces ionising radiation. Operation of borehole logging apparatus which contains a sealed radioactive source.	Relevant professional qualification (eg degree in geophysics, environmental science, etc); and EPA radiation exam.
X-Ray analysis <i>X-Ray Diffraction Open Beam, X-Ray Diffraction Enclosed, X-Ray Fluorescence Analysis, etc</i>	Apparatus	Operation of an X-ray analysis apparatus.	Relevant occupational training; and EPA radiation exam.
Radiation gauges <i>Moisture/Density Meter, Neutron Generator, Sealed Source Gauge, etc</i>	Radioactive materials	Handling of radioactive sources and material contained within a radiation gauge.	Relevant occupational training; and EPA radiation exam.

Occupation	Licence type	General purpose	Supporting evidence
Industrial Radiography <i>NDT Technicians, Mineral Exploration, Manufacturing, etc</i>	Apparatus	Operation of X-ray apparatus for the purpose of industrial radiography.	Certification in NDT Radiography & Radiation Safety by a provider endorsed by the AINDT Certification Board OR EPA radiation exam.
	Radioactive materials	Handling of radioactive sources and material for the purpose of industrial radiography.	
Researcher <i>Laboratory Technician, Research Scientist, etc</i>	Apparatus	Operation of X-ray apparatus for the purpose of research. Animals and/or inanimate objects only.	Relevant professional qualification (eg degree in science, applied science, medicine, etc); and EPA radiation exam.
	Radioactive materials	Handling of radioactive sources and material for the purpose of research.	
Veterinary practitioners			
Veterinary Surgeon General	Apparatus	Operation of plain X-ray apparatus for veterinary practice.	VSBSA (Primary Registration)
Veterinary Surgeon Specialist	Apparatus	Operation of all diagnostic X-ray apparatus for veterinary practice.	VSBSA (Specialist Registration) Diagnostic Imaging

Further information

Legislation

[Online legislation](#) is freely available.

General information

Environment Protection Authority
 GPO Box 2607 Adelaide SA 5001
 Telephone: (08) 8204 2004
 Facsimile: (08) 8124 4670
 Website: <https://www.epa.sa.gov.au>
 Email: epainfo@sa.gov.au