



Province of Alberta

# **RADIATION PROTECTION ACT**

Revised Statutes of Alberta 2000  
Chapter R-2

Current as of November 1, 2010

Office Consolidation

© Published by Alberta Queen's Printer

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### Note

All persons making use of this consolidation are reminded that it has no legislative sanction, that amendments have been embodied for convenience of reference only. The official Statutes and Regulations should be consulted for all purposes of interpreting and applying the law.

### Regulations

The following is a list of the regulations made under the *Radiation Protection Act* that are filed as Alberta Regulations under the Regulations Act

	<b>Alta. Reg.</b>	<i>Amendments</i>
<b>Radiation Protection Act</b>		
Radiation Protection.....	182/2003	74/2004, 37/2013, 144/2013

# **RADIATION PROTECTION ACT**

## Chapter R-2

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HER MAJESTY, by and with the advice and consent of the  
Legislative Assembly of Alberta, enacts as follows:

#### **Definitions**

**1** In this Act,

- (a) “Director” means the Director of Radiation Health appointed under the *Public Service Act*;
- (b) “employer” means an employer as defined under the *Occupational Health and Safety Act*;
- (c) “injury” includes cellular or genetic damage;
- (d) “ionizing radiation” means electromagnetic energy, atomic particles or nuclear particles that are capable of ionizing atoms;
- (e) “maximum exposure limit” means the maximum exposure limit prescribed in the regulations;
- (f) “Minister” means the Minister determined under section 16 of the *Government Organization Act* as the Minister responsible for this Act;
- (g) “non-ionizing radiation” means electromagnetic energy that is not capable of ionizing atoms, but that may cause photochemical, heating or other effects;
- (h) “operator” means a worker who uses or controls the use of any radiation source or radiation equipment;
- (i) “overexposure” means exposure of a person, other than a patient undergoing medical examination or treatment, to radiation in excess of the maximum exposure limit of that form of radiation;
- (j) “owner” includes, with respect to a radiation facility, radiation equipment or a radiation source, a person who leases the radiation facility, radiation equipment or radiation source or a person who acts as an agent for the owner;
- (k) “radiation” means ionizing or non-ionizing radiation and includes ultrasound;
- (l) “radiation equipment” means equipment or machinery associated with the use or operation of a radiation source, and includes the radiation source itself and any structure used to support or shield the equipment, machinery or radiation source;
- (m) “radiation facility” means any premises or part of premises in which radiation equipment or a radiation source is installed;

- (n) “radiation health officer” means a person appointed under the *Public Service Act* as a radiation health officer and includes the Director and a radiation medical officer;
- (o) “radiation medical officer” means a person appointed under the *Public Service Act* as a radiation medical officer;
- (p) “radiation source” means a device or substance that emits radiation, but does not include a device, substance or other thing that is subject to the regulations under the *Nuclear Safety and Control Act* (Canada);
- (q) “ultrasound” means mechanical energy having frequencies above 20 kilohertz;
- (r) “worker” means a worker as defined under the *Occupational Health and Safety Act*.

1985 cR-2.1 s1

**Application**

**2(1)** This Act and the regulations do not apply to the use, storage, disposal or transportation of radiation sources governed by the following statutes:

- (a) *Nuclear Safety and Control Act* (Canada);
- (b) *Environmental Protection and Enhancement Act*;
- (c) *Transportation of Dangerous Goods Act, 1992* (Canada);
- (d) *Dangerous Goods Transportation and Handling Act*.

**(2)** If there is a conflict between this Act and the *Occupational Health and Safety Act*, the *Occupational Health and Safety Act* prevails.

1985 cR-2.1 s2;1998 cD-3.5 s33

**Crown bound**

**3** The Crown is bound by this Act.

1985 cR-2.1 s3

**Delegation**

**4** The Minister may, in writing, authorize any employee of the Government under the Minister’s administration to exercise any powers and perform any duties and functions conferred or imposed on the Minister by this Act or the regulations.

1985 cR-2.1 s4

**General obligation**

**5(1)** Every person owning, installing, supplying, operating or servicing a radiation facility, radiation equipment or radiation source shall take all reasonable precautions to protect persons from radiation injury.

**(2)** Every worker employed in connection with a radiation facility or a business or undertaking involving the use of radiation shall

- (a) take all reasonable precautions to ensure the worker's own safety and the safety of fellow workers, and
- (b) use the protective devices and equipment and wear the protective clothing provided by the employer.

1985 cR-2.1 s5

**Informing workers**

**6(1)** Every employer shall ensure that workers employed by the employer who are likely to be exposed to radiation are informed of the potential hazards of the radiation and the precautions to be taken to protect the workers and other persons from those hazards.

**(2)** In complying with subsection (1), the employer shall ensure that the following have been brought to the attention of each worker:

- (a) the worker's responsibilities and duties under this Act and the regulations;
- (b) the type of radiation source with which the worker will be working;
- (c) radiation protection principles and maximum exposure limits of radiation appropriate to the type of radiation with which the worker will be working;
- (d) the uses and limitations of the radiation facility, radiation equipment and radiation sources the worker will use;
- (e) known or suspected health hazards associated with the form of radiation emitted by the radiation source.

1985 cR-2.1 s6

**Competent radiation workers**

**7(1)** In this section,

- (a) "competent", in relation to a worker, means adequately qualified, suitably trained and sufficiently experienced to

perform safely the assigned task without supervision or with only a minimal degree of supervision;

- (b) “direct supervision” means a relationship between a competent worker and a worker who is not competent whereby
  - (i) there is personal and continual visual supervision by the competent worker of the worker who is not competent, and
  - (ii) the 2 workers are able to communicate effectively with each other.

**(2)** Where a task is to be done that will involve the installation, maintenance, repair, testing, use or operation of radiation equipment, the employer shall ensure that the task is done by a competent worker or by a worker who performs the task under the direct supervision of a competent worker.

**(3)** No worker who is not competent, other than one who is under the direct supervision of a competent worker, shall do a task referred to in subsection (2).

1985 cR-2.1 s7

#### **Code of practice**

**8(1)** In this section, “code of practice” means a document prepared by an owner or employer to provide information to workers and other persons concerning the safe operation of radiation facilities, radiation equipment or radiation sources, including the following:

- (a) practical guidance on the requirements of this Act or the regulations;
- (b) safe working and operating procedures;
- (c) actions to be taken in emergency situations;
- (d) other matters required by the regulations or the Director.

**(2)** When required to do so by the regulations or the Director, an owner or employer shall

- (a) establish a code of practice,
- (b) ensure that the code of practice is readily available to workers and other persons, and
- (c) supply a copy of the code of practice to the Director for review.

(3) When required to do so by the Director, an owner or employer shall revise the code of practice established under subsection (2).

1985 cR-2.1 s8

#### **Maintenance of radiation equipment**

**9(1)** Every owner shall ensure that radiation equipment

- (a) is maintained in a condition that will not endanger the health or safety of persons operating or affected by the operation of the equipment, and
- (b) will perform the function for which it is intended and was designed.

(2) If an operator has radiation equipment under the operator's control that does not comply with subsection (1), the operator shall forthwith cease operating the radiation equipment and inform the operator's employer of the reason for ceasing to operate the equipment.

1985 cR-2.1 s9

#### **Registration certificates**

**10(1)** In this section,

- (a) "designated radiation equipment" means radiation equipment designated in the regulations as requiring a registration certificate;
- (b) "registration certificate" means a certificate issued by the Director in accordance with the regulations.

(2) No person shall install or operate designated radiation equipment unless a registration certificate has been issued by the Director for that equipment in accordance with the regulations.

(3) A registration certificate may be made subject to any restrictions that the Director considers appropriate for the protection of workers and other persons.

(4) A registration certificate has a term and a renewal date as provided for in the regulations.

(5) Unless the person first notifies the Director, a person who has obtained a registration certificate in accordance with this section shall not

- (a) install or operate radiation equipment different from the equipment designated on the certificate,



- (b) install or operate radiation equipment additional to the equipment designated on the certificate, unless a registration certificate has been issued to the person in respect of that additional equipment, or
  - (c) modify the characteristics of the radiation emitted from the equipment that was the subject of the certificate or the protective properties of the facility in which the equipment is located.
- (6) Subsection (5)(c) does not apply when the radiation equipment or the facility is undergoing routine maintenance.
- (7) When the Director is notified under subsection (5), the Director may issue a new registration certificate for the different, additional or modified radiation equipment referred to in that subsection.
- (8) A radiation health officer may suspend a registration certificate for up to 72 hours, if the radiation health officer is of the opinion that
- (a) the conditions under which the registration certificate was issued have changed,
  - (b) the restrictions referred to in subsection (3) have not been complied with,
  - (c) the operation of the radiation equipment designated on the certificate constitutes or may constitute a hazard to persons, or
  - (d) a provision of this Act or the regulations relating to the installation, use, operation, maintenance or repair of radiation equipment has been contravened.
- (9) The Director may cancel a registration certificate for any of the reasons referred to in subsection (8).
- (10) A certificate of registration or a certificate of inspection issued under the *Radiation Protection Act*, RSA 1980 cR-2, is deemed to be a registration certificate under this section, unless the certificate of registration or inspection has expired or the conditions under which it was originally issued have changed.

1985 cR-2.1 s10;1994 c23 s38

**Prohibited radiation equipment**

**11(1)** No person shall use or operate radiation equipment if its use or operation is prohibited in the regulations or by order of the Minister.

(2) The *Regulations Act* does not apply to a Ministerial Order under subsection (1).

1985 cR-2.1 s11

#### **Radiation exposure limits**

**12(1)** The owner of radiation equipment that produces ionizing radiation shall ensure that

- (a) exposure of persons to ionizing radiation is kept as low as is reasonably achievable, and
- (b) notwithstanding clause (a), the exposure of persons to ionizing radiation does not exceed the maximum exposure limit for ionizing radiation prescribed in the regulations.

(2) The owner of radiation equipment that produces non-ionizing radiation or ultrasound shall ensure that the exposure of persons to the non-ionizing radiation or ultrasound does not exceed the maximum exposure limit for non-ionizing radiation or ultrasound, as the case may be, prescribed in the regulations.

1985 cR-2.1 s12

#### **Notice of incidents and overexposures**

**13(1)** If an overexposure or an incident that has the potential of causing overexposure of a person occurs, the owner of the radiation source shall forthwith

- (a) notify the Director as to the time, place and nature of the overexposure or incident,
- (b) carry out an investigation into the circumstances surrounding the overexposure or incident, and
- (c) prepare a report outlining the circumstances of the overexposure or incident and the corrective action, if any, undertaken to prevent a recurrence of the overexposure or incident.

(2) On application by an employer, the Minister may waive all or any of the requirements of subsection (1)(b) and (c) if the Minister is satisfied that an investigation by a radiation health officer will be carried out with respect to the overexposure or incident.

(3) The owner of the radiation source shall ensure that a copy of the report prepared under subsection (1)(c), if any, is readily available for inspection by an officer.

1985 cR-2.1 s13

**Quality assurance program**

**14(1)** In this section, “diagnostic x-ray equipment” means x-ray equipment used in a medical, dental, chiropractic or other health occupation for the purpose of making a diagnosis, but does not include x-ray equipment used exclusively for radiation therapy or for producing industrial or veterinary radiographs.

**(2)** The owner of diagnostic x-ray equipment shall establish and implement a quality assurance program, including the implementation of

- (a) procedures to ensure the production of optimum quality radiographs with minimal exposure of the patient to radiation, and
- (b) a regular preventive maintenance program for the diagnostic x-ray equipment.

1985 cR-2.1 s14

**Inspections**

**15(1)** For the purposes of this Act and subject to subsection (5), a radiation health officer may, at any reasonable hour,

- (a) enter into any radiation facility or place where radiation equipment or a radiation source is located,
- (b) inspect a radiation facility, radiation equipment or a radiation source,
- (c) require the production of any records, books, plans or other documents that relate to the radiation health or safety of workers and the public and examine them, make copies of them or remove them temporarily to make copies,
- (d) inspect, seize or take samples of any material, product, appliance or equipment being produced or used or found in or on the radiation facility or place being inspected,
- (e) make tests and take photographs in respect of any radiation facility, radiation equipment or radiation source, and
- (f) interview and obtain statements from persons at the radiation facility or place.

**(2)** For the purposes of this Act and subject to subsection (5), a radiation medical officer or a person authorized in writing by a radiation medical officer may at any reasonable hour require the production of, or examine and make copies of, medical reports or

records or, unless the records are required for patient care, remove them temporarily to make copies.

**(3)** A radiation health officer, a radiation medical officer or a person authorized by a radiation medical officer who removes any records, books, plans or other documents under subsection (1)(c) or (2) shall

- (a) give to the person from whom those documents were taken a receipt for them, and
- (b) forthwith make copies of, take photographs of or otherwise record those documents and forthwith return them to the person to whom the receipt was given.

**(4)** A radiation health officer who seizes or takes samples of any material, product, appliance or equipment under subsection (1)(d) shall

- (a) give a receipt to the person from whom those items were seized or taken, and
- (b) on that person's request, return those items to that person when they have served the purposes for which they were seized or taken.

**(5)** If a person refuses to allow an officer or other person to exercise any powers under subsection (1) or (2) or interferes or attempts to interfere with the officer or other person in the exercise of those powers, the Director may apply to the Court of Queen's Bench for an order restraining that person from preventing or interfering in any manner with the officer exercising those powers.

**(6)** Notwithstanding subsections (1) to (5),

- (a) records of the diagnostic and treatment services provided in respect of a patient may be examined or removed only if the examination or removal is required for the purposes of this Act and will not interfere with the care of the patient, and
- (b) information obtained from the records referred to in clause (a) shall be treated as private and confidential information in respect of the patient and used solely for the purposes of this Act and shall not be published, released or disclosed in any manner that would be detrimental to the personal interests, reputation or privacy of the patient or the patient's attending physician or any other person providing diagnostic or treatment services to the patient.

RSA 2000 cR-2 s15;2009 c53 s155

**Remedial action**

**16(1)** If a radiation health officer considers that any condition contravenes this Act or the regulations, or is otherwise inconsistent with good operating practices relating to a radiation facility, radiation equipment or a radiation source, the radiation health officer may

- (a) by a written directive bring the condition to the attention of the owner, who shall take any remedial action that may be prescribed in the directive within the time specified in the directive, and
- (b) if the radiation health officer believes that the condition involves the conduct of a worker who is registered under the *Health Disciplines Act*, report that conduct to the Director of Health Disciplines appointed under that Act if the radiation health officer believes that the conduct is unbecoming conduct, conduct that displays a lack of skill or judgment in the practice of the discipline or conduct indicating that the worker is unfit to practise the discipline, and
- (c) if the radiation health officer believes that the condition involves the conduct of a worker who is a regulated member under Schedule 3 or 12 to the *Health Professions Act* and believes that the conduct is unprofessional conduct, report that conduct to the complaints director of the regulated member's college under the *Health Professions Act*.

**(2)** The Minister may do any of the things referred to in subsection

**(3)** if the Minister is satisfied that a radiation facility, radiation equipment or a radiation source

- (a) is in such a condition or at such a location that it cannot be used without risk of unnecessary exposure to radiation,
- (b) is used in such a manner that it causes risk of unnecessary exposure to radiation, or
- (c) is exposing persons to radiation beyond the maximum exposure levels of radiation.

**(3)** If subsection (2) applies, the Minister may by a written directive

- (a) prohibit the use of the radiation facility, radiation equipment or radiation source,

- (b) prohibit the use of the radiation facility, radiation equipment or radiation source until it is repaired or altered, or
- (c) require the owner to take any action that may be prescribed in the directive for remedying the danger.

RSA 2000 cR-2 s16;RSA 2000 cH-7 s155

### **Appeal**

**17(1)** A person may appeal the following to the Radiation Health Advisory Committee appointed under section 20:

- (a) a refusal by the Director to issue a registration certificate under section 10,
- (b) the suspension or cancellation of a registration certificate under section 10, or
- (c) a directive under section 16.

**(2)** An appeal shall be commenced by serving a notice of the appeal on the Director within 30 days from the date of the refusal, suspension, cancellation or directive.

**(3)** After considering the matter being appealed, the Radiation Health Advisory Committee may by order

- (a) confirm the refusal, suspension or cancellation,
- (b) order the Director to issue a registration certificate,
- (c) confirm, revoke or vary the directive being appealed,
- (d) reinstate the cancelled certificate,
- (e) substitute a suspension for a cancellation, or
- (f) remove or vary a suspension.

**(4)** Where an appeal is made to the Radiation Health Advisory Committee under subsection (2), the Committee shall hear the appeal and render a decision as soon as practicable.

**(5)** An appeal lies to the Court of Queen's Bench from a decision of the Radiation Health Advisory Committee on a question of law or a question of jurisdiction and, on hearing the matter, the Court may make any order, including the awarding of costs, that the Court considers proper.

(6) An appeal under subsection (5) shall be made by application within 30 days from the date that the order of the Radiation Health Advisory Committee is served on the person appealing.

(7) When an appeal is commenced under subsection (2), the commencement of that appeal does not operate as a stay of the suspension, cancellation or directive being appealed except insofar as the chair of the Radiation Health Advisory Committee may direct.

(8) When an appeal is commenced under subsection (5), the commencement of that appeal does not operate as a stay of the suspension, cancellation or directive of the Radiation Health Advisory Committee being appealed except insofar as a judge of the Court of Queen's Bench may direct.

RSA 2000 cR-2 s17;2009 c53 s155

### Regulations

**18** The Lieutenant Governor in Council may make regulations

- (a) prescribing the maximum exposure limits for ionizing radiation, non-ionizing radiation or ultrasound;
- (b) classifying radiation, radiation facilities, radiation equipment and radiation sources for the purposes of this Act and the regulations;
- (c) governing the installation and safe use of radiation facilities, radiation equipment or radiation sources;
- (d) prohibiting or restricting the installation and the use of any class of radiation facility, radiation equipment or radiation source, either generally or for particular purposes;
- (e) exempting any radiation facility, radiation equipment or radiation source or any class of radiation facility, radiation equipment or radiation source from the application of any or all of the provisions of this Act or the regulations;
- (f) governing codes of practice under section 8;
- (g) designating radiation equipment that requires a registration certificate under section 10;
- (h) governing the issue, suspension and cancellation of registration certificates under section 10;
- (i) governing the term and renewal dates of registration certificates under section 10;

- (j) prescribing the nature and frequency of inspections or maintenance programs for radiation facilities or radiation equipment to be undertaken by the owner of the facility or equipment;
- (k) requiring notification of the placement, installation, modification or transfer of ownership of radiation facilities or radiation equipment;
- (l) governing means of protecting persons from radiation injury;
- (m) adopting, in whole or in part, any health or safety code or standard respecting radiation facilities, radiation equipment or radiation sources;
- (n) requiring and governing medical examinations of workers or any class of workers;
- (o) regulating the methods of disposal of radiation equipment;
- (p) respecting fees for the registration of designated radiation equipment or services provided under this Act.

1985 cR-2.1 s18;1992 c21 s41;1994 c23 s38

### Offences

**19(1)** A person who contravenes this Act or the regulations or fails to comply with a directive made under this Act or the regulations is guilty of an offence and liable

- (a) for a first offence,
  - (i) to a fine of not more than \$15 000 and, in the case of a continuing offence, to a further fine of not more than \$1000 for each day or part of a day during which the offence continues after the first day, or
  - (ii) to imprisonment for a term not exceeding 6 months, or to both fines and imprisonment, and
- (b) for a 2nd or subsequent offence,
  - (i) to a fine of not more than \$30 000 and, in the case of a continuing offence, to a further fine of not more than \$2000 for each day or part of a day during which the offence continues after the first day, or
  - (ii) to imprisonment for a term not exceeding 12 months, or to both fines and imprisonment.



(2) A prosecution under this Act may be commenced within 2 years of the date of the alleged offence, but not afterwards.

1985 cR-2.1 s19

#### **Radiation Health Advisory Committee**

**20(1)** There shall be a committee known as the “Radiation Health Advisory Committee” consisting of not more than 12 members appointed by the Lieutenant Governor in Council, including

- (a) the Director, and
- (b) a radiation medical officer.

(2) The Minister shall appoint a member of the Committee as chair.

(3) In the absence of the chair at a meeting of the Committee, the members present shall appoint a member to act as chair at the meeting.

(4) The members of the Committee, other than employees of the Government, shall be paid remuneration for their services and allowances for their expenses necessarily incurred in the performance of their duties in an amount fixed by the Minister.

1985 cR-2.1 s20

#### **Duties of Committee**

**21(1)** The Radiation Health Advisory Committee shall

- (a) advise the Minister on matters concerning this Act or the regulations and radiation health generally,
- (b) hear appeals in accordance with this Act, and
- (c) deal with any other matters concerning radiation health that the Minister may refer to it.

(2) The Director is not eligible to sit as a member of the Radiation Health Advisory Committee when it is considering an appeal under section 17.

1985 cR-2.1 s21







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