

1970 Bill 117

Third Session, 16th Legislature, 19 Elizabeth II

THE LEGISLATIVE ASSEMBLY OF ALBERTA

BILL 117

An Act respecting the Control of Radiation Hazards

THE MINISTER OF HEALTH

First Reading

Second Reading

Third Reading

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1970

An Act respecting The Control of Radiation Hazards

(Assented to _____, 1970)

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

1. This Act may be cited as *The Radiation Protection Act*.

2. In this Act,

- (a) "maximum permissible dose of radiation" has the meaning assigned to it by the regulations;
- (b) "Minister" means the Minister of Health;
- (c) "operator" means any person in control of the use of any radiation equipment;
- (d) "owner" means any person in control of any radiation installation;
- (e) "radiation" means electromagnetic radiation (that is to say, x-ray photons or quanta) capable of producing ions or ionization in body tissues and emitted from a machine that is intended to produce radiation or from a machine in which electrons are accelerated by high voltage;
- (f) "radiation equipment" means any device capable of emitting radiation but does not include any radioactive substance;
- (g) "radiation health officer" means a person appointed under this Act as a radiation health officer or as the senior radiation health officer;
- (h) "radiation installation" means any premises or part thereof in which radiation equipment is repaired, used, handled or tested;
- (i) "radiation medical officer" means a duly qualified medical practitioner appointed under this Act as the radiation medical officer;
- (j) "radiation worker" means any person whose occupation requires him to be exposed to radiation emitted by radiation equipment.

Explanatory Notes

1. This Bill will provide for the registration, inspection and control of radiation installations and equipment to ensure the safety of both workers and patients. It is designed to operate in conjunction with *The Radiological Technicians Act*.

2. Definitions.

3. (1) In accordance with *The Public Service Act, 1968* there may be appointed a senior radiation health officer, a radiation medical officer, radiation health officers and any other employees required for administration of this Act.

(2) The Minister may authorize any employee of the Department of Health to exercise any powers, duties and functions conferred upon the Minister by this Act.

4. (1) No person shall, on or after July 1, 1970 install or permit the installation of radiation equipment in any place until the owner thereof has obtained from the Minister a certificate of registration.

(2) No person shall, on or after July 1, 1970 use or permit the use of any radiation equipment for which a certificate of registration has been obtained until the owner has applied for and obtained from the Minister a certificate of inspection.

(3) Every person who is on July 1, 1970 the owner of any radiation installation shall, not later than August 1, 1970 register with the Minister particulars of the radiation installation.

(4) No person who is on July 1, 1970 the owner of any radiation installation shall use or permit the use of the radiation installation after December 31, 1970 or such later date as the Minister may prescribe unless he has applied for and obtained a certificate of inspection from the Minister.

(5) No person who has obtained a certificate of inspection shall

- (a) install any different radiation equipment, or
- (b) install any additional radiation equipment, or
- (c) modify the radiation equipment or the radiation installation

without obtaining from the Minister a new certificate of registration and a new certificate of inspection.

5. Every radiation installation shall be so constructed and all radiation equipment shall be so operated that no person, other than a patient, shall be exposed to radiation in excess of the maximum permissible dose of radiation.

6. An owner of a radiation installation or an operator of radiation equipment shall, for the purpose of this Act:

- (a) permit a radiation health officer to
 - (i) enter, at any reasonable time, the radiation installation or the place where the radiation equipment is used, and

3. Administration.

4. Certificates. A certificate of registration is required to approve the proposed installation and a certificate of inspection is required when the installation is completed but before it becomes operative.

5. Restrictions on construction and use.

6. Inspections.

- (ii) make such technical tests as he may require in order to establish the condition of the installation or equipment;
- (b) provide such information as the radiation health officer may request, concerning
 - (i) the extent and manner of use of the radiation installation or radiation equipment;
 - (ii) the qualifications and training of the radiation workers;
 - (iii) the protective procedures which have been established;
 - (iv) any incident involving the over-exposure of any person;
- (c) permit the radiation medical officer to interview radiation workers and facilitate his review of medical examination records pertaining to such workers;
- (d) report any incident leading to the exposure or suspected exposure of any person, other than a patient undergoing examination, to radiation in excess of the maximum permissible dose.

7. If the Minister is satisfied either

- (a) that any radiation installation or radiation equipment is in such condition or is so constructed or is so placed that it cannot be used without risk of unnecessary exposure to radiation, or
- (b) that any radiation installation or radiation equipment is used in such a manner as to cause risk of unnecessary exposure to radiation, or
- (c) that any radiation installation or radiation equipment is exposing persons to radiation beyond the maximum permissible dose of radiation,

he may, by order,

- (d) prohibit the use of the radiation installation or radiation equipment, or, if it is capable of repair or alteration, prohibit its use until it is repaired or altered, or
- (e) require the operator to take all steps which may be specified in the order for remedying the danger.

8. (1) Where a radiation health officer notes any condition that contravenes this Act or a regulation or is otherwise inconsistent with good operating practices relating to a radiation installation, he may bring the condition to the attention of the owner or his agent who shall take such remedial action as may be required by the radiation health officer within the time he so specifies.

7. Prohibiting use.

8. Remedial action.

(2) Where a radiation health officer notes an unsafe condition that in his opinion presents an immediate hazard to any person arising out of the use of any radiation equipment, the radiation health officer may direct that the radiation equipment be temporarily taken out of service until such time as the hazard is removed and the owner or his agent shall comply with the direction.

9. A radiation health officer may require the owner of a radiation installation to

- (a) post radiation warning signs or install warning devices,
- (b) provide radiation workers with personal or survey monitors, and
- (c) provide safety training for radiation workers.

10. A person affected by a decision of a radiation health officer may appeal to the Minister.

11. No person shall operate or maintain any shoe-fitting device or shoe-fitting machine that uses fluoroscopic, x-ray or radiation principles.

12. Any person who contravenes this Act or the regulations, or an order or direction made under this Act or the regulations is guilty of an offence and is liable on summary conviction to a fine not exceeding \$5,000 or to imprisonment for a term not exceeding two years, or to both fine and imprisonment.

13. (1) There shall be a committee known as the "Radiation Health Advisory Committee" appointed by the Lieutenant Governor in Council and shall consist of

- (a) the senior radiation health officer,
- (b) the radiation medical officer,
- (c) a diagnostic radiologist,
- (d) a physicist experienced in radiation physics.

(2) The committee shall

- (a) advise the Minister with respect to radiation health generally,
- (b) give general direction and professional advice to radiation health officers,
- (c) promote an educational program among operators and radiation workers respecting radiation protection, and

9. Safety measures.

10. Appeal.

11. Certain shoe-fitting devices prohibited. This is presently section 43a of *The Public Health Act*.

12. Penalty.

13. Radiation Health Advisory Committee.

(d) deal with such other matters of radiation health as the Minister may refer to it.

(3) Three members of the committee constitute a quorum.

(4) The members of the committee other than the senior radiation health officer and the radiation medical officer shall be paid such remuneration for their services and such allowances for their expenses necessarily incurred in the performance of their duties as may be fixed by the Lieutenant Governor in Council.

14. The Lieutenant Governor in Council may make regulations

- (a) with respect to the construction, installation, maintenance and use of any radiation equipment,
- (b) prescribing the nature and frequency of inspections to be made of radiation installations,
- (c) prescribing the requirements for or the conditions under which certificates may be issued pursuant to section 4,
- (d) prohibiting or restricting the use of any type or class of radiation equipment, either generally or for particular purposes,
- (e) exempting any type or class of radiation equipment from the application of any or all of the provisions of this Act or the regulations,
- (f) establishing for the purposes of this Act the maximum permissible dose of radiation to which any person or class of persons can be exposed,
- (g) respecting the issue of certificates of registration and certificates of inspection, including the conditions under which they may be granted, suspended, revoked or transferred,
- (h) prescribing the fees payable in respect of any application, inspection or certificate and designating the persons by whom the fees are to be paid, and
- (i) respecting such other matters as may be necessary for carrying out the intent of this Act, including the adoption of all or part of any safety code, standard, order or regulation.

15. The Crown is bound by the provisions of this Act.

16. *The Radiological Technicians Act* is amended by adding the following section after section 12:

14. Regulations.

15. Crown is bound.

16. Amendments to 1963, c. 56 are consequential amendments.

12a. (1) No person under the age of 18 years may be licensed under this Act except a student medical radiological technician.

(2) No person shall employ a woman to operate an x-ray machine while he knows or ought reasonably to know that she is pregnant.

(3) No woman shall operate an x-ray machine while she knows that she is pregnant.

17. *The Public Health Act* is amended

- (a) as to section 7, subsection (1), by striking out clause (aa1),
- (b) as to section 43, by striking out the words "Senate of the University of Alberta" and by substituting therefor the words "Universities Co-ordinating Council or any board or committee authorized by it for the purpose," and
- (c) by striking out section 43a.

18. This Act comes into force on July 1, 1970.

17. Amendments to chapter 255 of the Revised Statutes of Alberta. Clause (a) and (c) are consequential amendments. Section 43 presently reads:

43. No person shall use for the therapeutic treatment of human beings any radium or radon or any derivatives of radium unless such person is the holder of a certificate issued by the Senate of the University of Alberta certifying that he is qualified so to use the same.