NORTHERN TERRITORY OF AUSTRALIA

RADIATION (SAFETY CONTROL) ACT

As in force at 1 May 1997

Table of provisions

Part IV Registration of irradiating apparatus

Part V Transport of radioactive substances

Part VI Stores

Part VII Miscellaneous

Schedule 1 Maximum permissible concentration for discharge of radioactive substances in air and water

Schedule 2 Radiation warning labels and notices

Schedule 3

NORTHERN TERRITORY OF AUSTRALIA

As in force at 1 May 1997

RADIATION (SAFETY CONTROL) ACT

An Act relating to the control, regulation, possession, use and transport of radioactive substances and irradiating apparatus

Part I Preliminary

1 Short title

This Act may be cited as the *Radiation (Safety Control) Act*.

2 Commencement

This Act shall commence on a date to be fixed by the Administrator by notice in the *Gazette*.

3 Definitions

(1) In this Act, unless the contrary intention appears:

absorbed dose of any radiation means the amount of energy imparted to matter by ionizing particles per unit of mass of irradiated material at a particular place and is expressed in rads.

alpha particle means a corpuscle consisting of the nucleus of a helium atom emitted by a radioactive atomic nucleus.

beta particle means a high speed corpuscle having the same mass or charge as the electron or positron and originating from nuclear disintegration.

Chief Health Officer means the Chief Health Officer appointed under the *Public Health Act*.

container means a freight container.

curie is the measure of radioactivity and one curie represents an activity of 3.7×10^{10} nuclear transformations per second.

dose equivalent is the quantity, measured in rems, which expresses on a common scale for all ionizing radiation the irradiation incurred by exposed matter.

dose-rate means the absorbed dose received per unit of time.

electron means a high speed subatomic particle or corpuscle which is negatively charged and which originates from an extra-nuclear region of the atom.

exempted substance means a substance exempted in pursuance of section 35.

gamma ray means an electromagnetic ionizing radiation which originates from the nucleus of an atom but which is not otherwise distinguishable from X-rays.

handle includes load, unload, discharge, stack, stow, store, transport and any operation incidental to or arising out of those operations.

inspector means an inspector appointed under section 8.

irradiating apparatus means an instrument or apparatus that is capable of emitting radiation not originating from a radioactive substance in or on the instrument or apparatus, but does not include:

(a) an instrument or apparatus from which the dose rate to an organ or tissue of a person when situated at a distance 0.1 of a metre from the external surface of the instrument or apparatus does not exceed 0.1 millirem per hour;

(b) an instrument or apparatus in which electrons are accelerated to an energy not exceeding 5000 electron volts; or

(c) a television receiver from which the dose rate to an organ or tissue of a person when situated at a distance of 5 centimetres from the external surface of the receiver does not exceed 0.5 of a millirem per hour;

licensed premises means the premises described in a licence issued under this Act.

licensee means a person licensed under this Act.

maximum permissible dose, in relation to a person or a part of the body of a person exposed to radiation, means:

(a) for any quarter of a calendar year – the dose equivalent of the radiation specified in the third column of Part I of Schedule 3 received through the organs or parts of his body specified in the second column of that Part; and

(b) for the period of a calendar year – the dose equivalent of the radiation specified in the third column of Part II of Schedule 3 received through the organs or parts of his body specified in the second column of that Part.

maximum permissible concentration means a concentration of a radioactive substance specified in the first column of Schedule 1:

(a) in air, being that specified in the second column of that Schedule; or

(b) in water, being that specified in the third column of that Schedule,

for the radioactive substance.

neutron means a radioactive corpuscle which has no electric charge and has a mass slightly greater than the proton.

nuclide means a variety of an atom characterized by a specific atomic number and a specific mass number.

package includes a pack, packet, parcel, carton, box or receptacle of any kind that contains a radioactive substance.

place and ***premises*** includes buildings, ships, aircraft, vehicles and any other premises on land or water and all other land, vacant or otherwise whether public or private.

positron means a high speed, subatomic particle or corpuscle which is positively charged and which originates from an extra nuclear region of the atom.

proton means a nuclear particle of unit mass number having a charge equal to and opposite to that of an electron.

rad is the unit of measurement of the absorbed dose and one rad represents the absorbed dose received when energy of 0.01 joule is imparted to one kilogram of irradiated matter.

radiation means:

(a) electromagnetic radiation, being X-rays, gamma rays, photons or quanta; or

(b) corpuscular radiation being alpha particles, beta particles, electrons, protons, neutrons and heavy particles capable of causing ionization of matter on which it impinges;

radiation hazard means a thing or situation that creates a danger to the health of a person and that arises from exposure of ionizing radiation because of radiation from an external source or from within the body.

Radiation Safety Officer means a person appointed to be a Radiation Safety Officer under section 15.

radiation worker means a person who receives or is likely to receive radiation in the course of his employment whether from a radioactive substance or from irradiating apparatus.

radioactive contamination means the lodgement, attachment or incorporation of a radioactive substance, on, to or in an organ or tissue of a person or on or to any other material or substance.

radioactive substance means a substance which consists of or contains radioactive nuclides whether natural or artificial.

radioactivity means the spontaneous disintegration of an unstable nuclide with the emission of a particle or proton to form a different nuclide.

rem is the unit measurement of dose equivalent and one rem is the dose equivalent when irradiated matter receives an absorbed dose of one rad. and

X-ray means electromagnetic, ionizing radiation which originates from the field outside the nucleus of the atom and resulting from the loss of energy of charged particles.

(2) Where in this Act a unit of measurement is used coupled with the prefix "milli" or "micro", the prefix signifies that the measurement referred to is one-thousandth or one-millionth respectively of the unit of measurement.

4 Application

(1) Subject to subsection (2), this Act is binding upon all persons in the Territory whether or not they are in the service of any government or any governmental authority.

(2) For 21 days immediately following the date of commencement of this Act, this Act shall not apply to a person who, on that date of commencement has in his possession or is using irradiating apparatus or a radioactive substance.

5 Exemptions

(1) A radioactive substance specified in Schedule 5 is exempt from the operation of this Act if its radioactivity does not exceed the maximum specified for it in that Schedule.

(2) Nothing in this Act applies to the mining, production, possession, treatment, handling, sale, use or disposal of uranium ores or uranium oxide (U_3O_8).

(3) The Chief Health Officer, by notice in the *Gazette*, may exempt from the operation of this Act any radioactive substance or irradiating apparatus which he is satisfied does not produce a significant radiation hazard.

Part II Administration

6 Administration of Act

The Chief Health Officer is, in the performance of his duties and functions and the exercise of his powers under this Act, subject to the direction and control of the Minister.

7 Delegation

(1) The Chief Health Officer may, by instrument in writing, delegate to a person all or any of his powers, functions and authorities under this Act (except this power of delegation) in relation to a matter or class of matters or to a district or part of the Territory so that the delegated powers, functions and authorities may be exercised by the delegate with respect to the matter or class of matters or the district or part of the Territory specified in the instrument of delegation.

(2) A delegation under subsection (1) is revocable in writing at will and does not prevent the exercise of a power, function or authority by the Chief Health Officer.

8 Inspectors and their powers

(1) The Chief Health Officer may appoint such inspectors as he thinks necessary for the purposes of the administration of this Act.

(2) An inspector may:

(a) with the consent, expressed or implied, of the owner or occupier of premises enter those premises and search for and examine:

(i) registers and licences kept or held under this Act;

(ii) books, records and documents relating to irradiating apparatus or equipment used in connection with that apparatus and any instruments, devices or accessories for measuring or detecting radiation or radioactive substances; and

(iii) packages containing or which he believes, on reasonable grounds, contain irradiating apparatus or a radioactive substance;

(b) use or install any equipment or measuring device for sampling, measuring or analyzing any substance; or

(c) make copies of or reproduce writings, books, records or other recorded information whether the information be recorded in writing or in some other form.

(3) An inspector, without the consent of any person but in pursuance of a search warrant, may enter any premises or place and do all such acts as are permitted to be done by subsection (2) with the consent of the owner or occupier of the premises.

(4) Where there are reasonable grounds for an inspector to believe that a radiation hazard exists and that that hazard is such that action under this section is urgent, he may do all such acts as are permitted to be done under this section in pursuance of a search warrant without the consent of the owner or occupier and without obtaining a search warrant and he shall report any action taken under this subsection to the Chief Health Officer within 48 hours.

(5) If a Justice of the Peace is satisfied by information on oath that there are reasonable grounds for suspecting that there is in any place any thing:

(a) with respect to which an offence against this Act has been or is suspected on reasonable grounds to have been committed;

(b) as to which there are reasonable grounds for suspecting that it will afford evidence of that offence; or

(c) as to which there are reasonable grounds for believing that it is intended to be used for the purpose of committing such an offence against this Act,

he may grant a search warrant authorizing an inspector or member of the Police Force named in the warrant, with such assistance as he thinks necessary, to enter at any time a place described in the warrant and to seize any such thing that he may find in that place.

9 Seizure of articles

(1) When an inspector has reasonable grounds to believe that a radiation hazard exists or that an offence has been or is being committed against this Act he may:

(a) seize and remove any thing constituting or contributing to a health hazard;

(b) seize any thing likely to afford evidence of an offence against this Act; and

(c) if a thing seized is, in the opinion of the inspector, too dangerous or too bulky to be removed, forthwith prohibit the use, removal or alteration of, and interference or contact with, the thing by all persons for a period of 14 days by a notice in writing served on the owner or occupier of the premises and exhibited on the premises as near as possible to the thing seized.

(2) A person shall not use, move or alter, or interfere or make contact with, a thing to which a notice under subsection (1)(c) applies.

Part III Radiation safety

10 Exemptions from Part

This Part does not apply:

(a) in the case of a person lawfully possessing, using or operating irradiating apparatus under and in accordance with the *Radiographers Act* – to or in relation to that apparatus;

(b) in the case of a patient undergoing treatment which involves the possession of a radioactive substance – to or in relation to that treatment; or

(c) in the case of the owner of an animal undergoing treatment which involves the retention in or on the animal of a radioactive substance – to or in relation to that treatment.

11 Licences

(1) Subject to this section, a person shall not have in his possession, manufacture, purchase, use, sell, handle or dispose of a radioactive substance or irradiating apparatus or carry out maintenance on irradiating apparatus.

(2) On the application of a person in the prescribed form, the Chief Health Officer may, subject to section 12(1), grant that person a licence under this section.

(3) A licence under this section authorizes the person to whom it is granted to do, subject to section 12(2), such of the things prohibited by subsection (1) as are specified in the licence.

12 Conditions and terms of licences

(1) The Chief Health Officer shall not grant a licence under section 11 unless:

(a) the applicant is a natural person over the age of 18 years; and

(b) the Chief Health Officer approves the means to be used in storing the radioactive substance or irradiating apparatus.

(2) A licence granted under section 11 may be issued subject to such conditions as the Chief Health Officer considers necessary and as are specified in the licence.

(3) A licence granted under section 11:

(a) remains in force for such period not exceeding 12 months as is specified in the licence;

(b) is renewable, on application by the licensee, for such period not exceeding 12 months as the Chief Health Officer may specify in a written notice given to the licensee;

(c) may be cancelled by the Chief Health Officer:

(i) where it has been issued subject to conditions and the licensee is in breach of any of those conditions;

(ii) where the licensee has failed, refused or neglected to comply with this Act; or

(iii) where the Chief Health Officer is of the opinion that, in the interest of the safety of members of the public, the licence should be cancelled; and

(d) shall describe the premises to which the licence applies.

13 Records to be kept

A licensee shall keep in a register a record of all irradiating apparatus and radioactive substances that come into his possession and the use to which that irradiating apparatus or those radioactive substances are put and any change in that use.

14 Duty of licensee to ensure compliance

A licensee shall take all reasonable steps to ensure that every person under his supervision complies with this Act.

15 Obligations of a licensee in relation to irradiating apparatus, &c.

(1) A licensee who has in his possession any irradiating apparatus or radioactive substance shall:

(a) appoint a person to be a Radiation Safety Officer in respect of the licensed premises and all irradiating apparatus and radioactive substances in his possession;

(b) give notice to the Chief Health Officer in writing within 24 hours:

(i) of the first occasion upon which an irradiating apparatus or a radioactive substance comes into his possession; and

(ii) of the appointment of a Radiation Safety Officer furnishing his own private address and telephone number and the name, private address and telephone number, if any, of the Radiation Safety Officer appointed;

(c) forward a copy of all reports and recommendations of the Radiation Safety Officer to the Chief Health Officer within 24 hours of the receipt of the report or the recommendation;

(d) at least 24 hours before he employs a person as a radiation worker, notify the Chief Health Officer of the name, qualifications (if any) and experience of the person proposed to be so employed; and

(e) within 24 hours after a person ceases to be so employed notify the Chief Health Officer of the cessation.

(2) Before a Radiation Safety Officer is appointed or during the absence from licensed premises of the Radiation Safety Officer, the licensee has, with respect to the licensed premises and all irradiating apparatus and radioactive substances on those premises, all the duties, powers, liabilities and responsibilities prescribed by this Act in respect of a Radiation Safety Officer.

16 Medical examinations

(1) The Chief Health Officer may require a licensee, a person appointed to be a Radiation Safety Officer or a radiation worker to submit to such medical examination as the Chief Health Officer may specify.

(2) A person required to submit himself to a medical examination under subsection (1) shall not fail, refuse or neglect to do so.

17 Duties of Radiation Safety Officer

A Radiation Safety Officer shall:

(a) investigate and record all sources of ionizing radiation on premises under his control;

(b) within 14 days of his appointment and thereafter at 6 monthly intervals prepare a report:

(i) showing the names of all persons permitted by the licensee to be in a place where ionizing radiation exists or may, from time to time, exist;

(ii) specifying the times of the day during which each person is likely to be in such a place and exposed to ionizing radiation;

(iii) recommending the safe working procedures that should be adopted for work on the licensed premises in connection with irradiating apparatus or radioactive substances; and

(iv) recommending, if necessary, the installation or use of facilities for the purpose of minimizing the absorbed dose that each person may receive;

(c) provide a copy of each report made under paragraph (b) to each person working in the place to which his report relates who may be subjected to ionizing radiation and to the employer of each of those persons;

(d) take all reasonable steps to ensure that all persons likely to be subjected to ionizing radiation are adequately instructed in the use of all safeguards and procedures and are supplied with such apparatus, clothing, instruments, shields, devices or accessories as are necessary for the protection of those persons from ionizing radiation;

(e) take all reasonable steps to ensure that persons not engaged in work involving the use or handling of irradiating apparatus or radioactive substances cannot be subject to ionizing radiation (other than that naturally occurring) exceeding 10 millirems a week;

(f) take all reasonable steps to ensure that no radioactive substance is removed from the licensed premises in contravention of this Act;

(g) if he becomes aware of the existence of any ionizing radiation from a source not under his control – report the matter in writing immediately to the licensee and to the Chief Health Officer;

(h) take all reasonable steps to ensure that all persons employed on the licensed premises carry out all such procedures and do all such acts as will ensure the safe performance of their work;

(i) keep a register of every sealed radiation source on the licensed premises;

(j) at the cessation of work on each day, ensure that each source of ionizing radiation used on that day is accounted for and that other sources of ionizing radiation are held in a safe and secure place; and

(k) take all reasonable steps to ensure that all apparatus, instruments, devices and accessories used for the protection of persons from ionizing radiation or for the detection and measurement of ionizing radiation, absorbed doses and dose equivalents and of radioactive contamination are maintained in good working condition and are properly used.

18 Duties of persons on licensed premises

A radiation worker shall use in the proper manner all apparatus, instruments, devices, clothing, shields and accessories supplied to him for his protection and shall observe the working procedures laid down by the Radiation Safety Officer appointed for the premises in which the worker works.

19 Duties of licensees

A licensee shall:

(a) by means of doors, bars, locks or warning or cautionary notices, signs or lights, prohibit the access of unauthorized persons to all parts of the licensed premises in which they may be subjected to ionizing radiation;

(b) immediately upon becoming aware that a radioactive substance in his possession or under his control has been damaged, lost or involved in an accident or fire, notify the Chief Health Officer of the fact by telegram, telephone or personal communication and shall confirm that notification in writing as soon as is reasonably possible;

(c) carry out all instructions that the Chief Health Officer gives to him consequent upon a notification under paragraph (b); and

(d) take all reasonable steps to ensure that the concentration of radioactive substances in air and water does not exceed the concentrations prescribed in Schedule 1.

20 Measurement of ionizing radiation on premises

A licensee who employs persons as radiation workers shall:

(a) carry out, when and in the manner required by the Chief Health Officer, measurements of ionizing radiation in and around the licensed premises and in air and water discharged from the licensed premises;

(b) provide and maintain for each radiation worker such instruments, apparatus, devices or accessories as the Chief Health Officer requires for the purpose of measuring the amount of ionizing radiation to which a radiation worker is or has been exposed; and

(c) instruct those workers in the methods in which those instruments, apparatus, devices or accessories are to be used.

21 Use of measuring instruments, &c.

A radiation worker using or handling an irradiating apparatus or a radioactive substance shall, while doing so or while in the vicinity of an irradiating apparatus or a radioactive substance, carry attached to his person or his clothing such instrument, apparatus, device or accessory as shall have been provided in accordance with section 20(b).

22 Disposal of radioactive substances

A person shall not dispose of or abandon a radioactive substance without the approval of the Chief Health Officer.

Penalty: $5000 or imprisonment for 2 years.

23 Maximum doses of radiation

An employer or the person in charge of a place where irradiating apparatus or a radioactive substance is used shall take all reasonable steps to ensure that a person on premises under his control:

(a) does not receive a radiation dose in excess of the maximum permissible dose; and

(b) is not exposed to a concentration of radioactive substances in air or water in excess of the maximum permissible concentration.

24 Persons receiving dose exceeding maximum not to be employed

(1) Where the Chief Health Officer is satisfied that a radiation worker has been exposed to radiation in excess of the maximum permissible dose, he may direct the person by whom the worker is employed to cease to employ him, for such period as the Chief Health Officer specifies, in any employment in which he will or may be exposed to ionizing radiation.

(2) An employer shall not fail, refuse or neglect to comply with a direction given under subsection (1).

25 Precaution to be taken against receipt of excessive doses of radiation

(1) Where there is cause to believe that there will be a serious risk to the health of a radiation worker if he continues to be exposed to ionizing radiation, the Chief Health Officer may direct his employer

to cease to employ him in any work which may expose him to further ionizing radiation.

(2) An employer shall not fail, refuse or neglect to comply with a direction given under subsection (1).

26 Records to be kept

An employer of a radiation worker or the person in charge of a place where radiation workers are employed shall keep a record in a form approved by the Chief Health Officer showing:

(a) the full name, address, age and sex of each radiation worker;

(b) the date of commencement of employment;

(c) the dates from which and the periods during which the person has or may have been exposed to ionizing radiation;

(d) the details of all dose assessments for that person; and

(e) all known facts relating to any accidental dose of ionizing radiation that may have been received by that person.

27 Excessive doses to be reported

An employer of a radiation worker and a person in charge of a place in which irradiating apparatus or a radioactive substance is used:

(a) who has cause to suspect that a person has received (other than as a patient undergoing treatment) a dose equivalent in excess of 200 millirems per week or that some unusual occurrence has taken place in or about a source of ionizing radiation; or

(b) who becomes aware that a personal monitoring device has recorded in respect of a person a dose equivalent exceeding 200 millirems per week,

shall report the fact to the Chief Health Officer forthwith.

28 Matters to be considered in computing maximum permissible dose

(1) In calculating the maximum permissible dose of ionizing radiation for the purposes of this Act, doses:

(a) received by an organ or tissue of a person from any source of ionizing radiation as a consequence of the employment of that person shall be counted;

(b) received by a person in undergoing radiological procedures or ionizing radiation received by him as the result of exposure to naturally occurring radiation shall not be counted; and

(c) received in any quarter of a calendar year shall be counted in the dosage for the calendar year of which that quarter forms part.

(2) If the dose to the whole body, gonads or red bone marrow accumulated by a person in the course of employment is not known for any period, it shall be assumed that he has received, in each calendar year of the period, the relevant maximum permissible dose for those parts specified in Part II of Schedule 3.

Part IV Registration of irradiating apparatus

29 Irradiating apparatus to be registered

A person shall not use irradiating apparatus unless the apparatus is registered under this Part.

30 Conditions under which apparatus registered

(1) A person who is in possession of irradiating apparatus shall forthwith make application to the Chief Health Officer for the registration of that irradiating apparatus.

(2) If the Chief Health Officer is satisfied that:

(a) the equipment is in a safe and good operating condition;

(b) the equipment is suitable for the use proposed;

(c) the location and installation of the equipment are appropriate; and

(d) the equipment is adequately protected and, if shielding of the equipment is necessary, that it is properly shielded,

he shall register the irradiating apparatus.

31 Certificate to be issued and displayed

(1) the Chief Health Officer shall issue a certificate of registration in respect of each item of irradiating apparatus that is registered.

(2) A person to whom a certificate of registration is issued shall display the certificate in a prominent position on or near the irradiating apparatus to which it relates.

32 Apparatus not to be altered or modified

A person shall not alter or modify any registered irradiating apparatus without the approval of the Chief Health Officer.

33 Inspection

(1) An inspector shall regularly inspect each item of registered irradiating apparatus and report to the Chief Health Officer on that inspection.

(2) If he is satisfied upon the report of an inspector that any registered irradiating apparatus is in a dangerous condition or requires repair or modification, the Chief Health Officer may cancel the registration of the apparatus and require the person in possession of the apparatus to deliver to the Chief Health Officer the certificate of registration forthwith.

(3) A person shall not fail, refuse or neglect to comply with a requirement of the Chief Health Officer under subsection (2).

34 Limitation of use of irradiating apparatus

(1) A certificate of registration may be issued subject to such conditions as the Chief Health Officer considers necessary and as are endorsed on the certificate.

(2) Where a certificate of registration is endorsed under subsection (1), a person shall:

(a) not use the irradiating apparatus for a purpose other than the purpose specified in the certificate; and

(b) observe the conditions endorsed on the certificate.

Part V Transport of radioactive substances

35 Exemptions

(1) The Chief Health Officer, by notice published in the *Gazette*, may exempt from the provisions of this Part a radioactive substance of a weight or activity specified in the notice.

(2) A radioactive substance referred to in a notice published in pursuance of subsection (1), is exempt from this Part.

36 Conditions for transport of radioactive substances

A person shall not transport a radioactive substance unless:

(a) it is an exempted substance;

(b) it is contained in a package that complies with this Part and with Schedule 6 and is transported in a manner prescribed in this Part; or

(c) it is transported in accordance with the requirements of Safety Series No. 6 Regulations for the Safe Transport of Radioactive Materials 1973 Revised Edition published by the International Atomic Energy Agency.

Penalty: $1,000 or imprisonment for 12 months.

37 Classification of packages

(1) For the purposes of this Part, packages are described as Type A packages and Type B packages.

(2) Type A packages shall comply with the specifications prescribed in Schedule 6.

(3) Type B packages:

(a) shall comply with the specifications prescribed in Schedule 6 and with such additional requirements as may be prescribed or specified by the Chief Health Officer; and

(b) shall have their outer receptacles resistant to fire and water.

38 Materials enclosed in type a or type B packages

A person shall not transport:

(a) a radioactive substance specified in the first column of Schedule 4 and classified in the second column of that Schedule opposite that substance as being:

(i) in Group I if it has a maximum radioactivity of 100 microcuries;

(ii) in Group II if it has a maximum radioactivity of 10 millicuries; or

(iii) in Group III if it has a maximum radioactivity of 2 curies; or

(b) a radioactive substance in the form of a nonfriable massive solid that:

(i) has a melting point exceeding 537 degrees Celsius;

(ii) is not soluble in water;

(iii) does not react with air or water; and

(iv) has a maximum radioactivity of 20 curies,

except in a Type A package or a Type B package.

Penalty: $2,000 or imprisonment for 2 years.

39 Materials to be enclosed in type B packages

A person shall not transport:

(a) a radioactive substance specified in the first column of Schedule 4 and classified in the second column of that Schedule opposite the substance specified in the first column as being:

(i) in Group I if it has a maximum radioactivity of 20 curies;

(ii) in Group II if it has a maximum radioactivity of 20 curies; or

(iii) in Group III if it has a maximum radioactivity of 200 curies; or

(b) a radioactive substance in the form of a nonfriable massive solid that:

(i) has a melting point exceeding 537 degrees Celsius;

(ii) is not soluble in water;

(iii) does not react with air or water; and

(iv) has a maximum radioactivity of 2000 curies,

except in a Type B package.

40 Packages to be tested

A person shall not carry a package unless it has been subjected to such tests as are prescribed or, failing prescription, as are set out in a notice in writing served by the Chief Health Officer upon the person licensed to transport the substance in the package.

41 Packages not to be altered

A person shall not alter or modify a package during transport.

42 Other articles not to be carried with radioactive substances

A person shall not include in a package any other article or thing except such articles, things or documents as are necessary for the use or identification of the radioactive substances.

43 Conditions for transport

(1) A person in charge of a vehicle, vessel or aircraft shall ensure that a radioactive substance in the course of transport is kept in a place which is separate and shielded from:

(a) living or sleeping accommodation;

(b) regularly occupied working places;

(c) all places which may be at any time occupied by passengers or members of the public; and

(d) all places in which there is stowed an explosive or corrosive material or a material which is capable of spontaneous combustion.

(2) A person shall not load a package into the same vehicle or aircraft or hold, compartment or deck area of a vessel as an explosive or corrosive material or a material which is capable of spontaneous combustion which might damage the package in the event of an accident.

(3) A person shall not transport or permit the transportation of a package which is required under Schedule 6 to be labelled Category II or Category III in a compartment which is occupied by passengers.

44 Sign to be displayed

The person in charge of a vehicle transporting a package shall cause a sign:

(a) conforming with figure 5 in Schedule 2; and

(b) complying with the colour and other requirements indicated in that Schedule for that figure,

to be displayed on the 2 sides and on the rear of the vehicle so that one of those signs is clearly visible from all directions except from in front of the vehicle.

45 Standards for conveyance of packages in single container

Notwithstanding anything contained in this Act, where a load of packages is transported in one container, from one consignor having the sole use of the vehicle and in respect of which all loading and unloading is carried out by the consignor or consignee, the following levels of radiation may be observed:

(a) 1000 millirems per hour at any point on the external surface of the container if:

(i) the vehicle is equipped with an enclosure to hold the container so that, during normal transport, access by unauthorized persons to the interior of the enclosure is prevented;

(ii) the packages and the container are secured within the enclosure so that their position remains fixed during transport; and

(iii) there are no loading or unloading operations between the beginning and the end of the transport;

(b) 200 millirems per hour at any point on the outer surface of the vehicle, including the upper and lower surfaces, or, in the case of an open vehicle, at any point on the verticle planes projected from the outer edges of the vehicle, on the upper surfaces of the load and on the lower external surfaces of the vehicle;

(c) 10 millirems per hour at any point 2 metres from the outer surfaces of the vehicle or, if the load is transported in an open vehicle, at any point 2 metres from the verticle planes projected from the outer edges of the vehicle; and

(d) 2 millirems per hour in any position in the vehicle occupied by persons, except with the approval of the Chief Health Officer.

46 Liquid pyrophoric substances not to be carried

A person shall not load into an aircraft or carry by air a liquid pyrophoric radioactive substance.

47 Leaking packages not to be used

(1) A person shall not use an empty package as a container for a radioactive substance where there are reasonable grounds for suspecting that a leakage of a radioactive substance from the package has occurred unless the package has been repaired and decontaminated.

(2) A person having in his possession or under his control a package from which there are reasonable grounds for suspecting a leakage of a radioactive substance has occurred shall prevent other persons from having access to the package and shall notify the Chief Health Officer forthwith of the suspected leakage.

48 Check of vehicles for radioactive contamination

(1) A person having in his possession or under his control a vehicle or equipment used regularly for the transportation of radioactive substances shall, at least once a month, check that vehicle or equipment to determine the level of radioactive contamination.

(2) A person having in his possession or under his control a vehicle or equipment which has been contaminated by a radioactive substance shall ensure that it is not used to transport other goods until it has been decontaminated and has been declared to be safe by a person appointed by the Chief Health Officer for the purpose.

(3) A person shall not for any purpose other than the transportation of a radioactive substance, use or carry a package which has contained radioactive substances unless:

(a) all labels referring to a radioactive substance have been removed or covered; and

(b) a person authorized by the Chief Health Officer is satisfied that all accessible surfaces of the package have been monitored and that radiation has been reduced to a safe level.

49 Warning to be given

The driver of a vehicle transporting a radioactive substance shall ensure that there is affixed to the inside of the driver's cabin a conspicuous metal plate engraved, stamped or embossed as follows:

"WARNING: This vehicle is carrying a radioactive substance. In case of damage to the vehicle or its contents notify the Chief Health Officer and the consignor of any goods on the vehicle.".

50 Procedure in case of accident

Where a vehicle transporting a radioactive substance:

(a) is involved in an accident;

(b) is subjected to an unusual delay; or

(c) may have been or may become contaminated by a leakage of a radioactive substance,

the driver shall:

(d) forthwith notify the Chief Health Officer of the occurrence;

(e) obey such instructions as the Chief Health Officer may give; and

(f) take all reasonable steps to prevent access of any person not authorized by the Director to the vehicle or to a place in the vicinity of the radioactive substance.

51 Isolation of site of accident

Where an accident to a vehicle results in damage to a package, the driver of the vehicle and all members of the Police Force shall act as though radioactive contamination exists at the site of the accident and shall take steps to isolate the site and, until otherwise

directed by the Chief Health Officer, shall ensure that no person enters or remains on the site, unless with the Chief Health Officer's authority.

52 Fissile substances not to be carried

(1) A package containing a radioactive substance that is also a fissile substance shall not be transported, unless the transportation is authorized by the Chief Health Officer in writing.

(2) In this section ***fissile substance*** means plutonium 238, plutonium 239, plutonium 241, uranium 233 and uranium 235 but does not include uranium ores, nonirradiated uranium or depleted uranium or any substance obtained as a result of benefication of uranium ore in the form of oxides or uranium 238, uranium 234 or uranium 235 in any proportion in which they occur naturally.

Part VI Stores

53 Approved stores

(1) A person shall not use a place (other than licensed premises) to store a radioactive substance unless the Chief Health Officer has approved of the place as a store.

(2) The Chief Health Officer shall not approve of a place as a store for radioactive substances unless he is satisfied that the facilities provided and the precautions taken are adequate to prevent any radiation hazard arising and to prevent radioactive substances being taken or used by unauthorized persons.

(3) The Chief Health Officer shall notify the officer in charge of the nearest police station and the Chief Fire Officer of each place in which radioactive sources are stored or held.

(4) A store in which radioactive substances are held shall have displayed close to it or on it a radioactive warning sign:

(a) conforming with figure 6 in Schedule 2; and

(b) complying with the colour requirements specified in that Schedule for that figure.

Part VII Miscellaneous

54 Offences

A person shall not fail, refuse or neglect to comply with this Act.

Penalty: $500 or imprisonment for 6 months, or the greater penalty fixed by the relevant provision of the Act.

54A Regulatory offences

An offence of failing, refusing or neglecting to comply with section 11(1), 13, 24, 25, 26, 29, 30(1), 31(2), 33(3), 44, 48, 49, 50(d) or (e), 52(1) or 53(1) or (4) is a regulatory offence.

55 Evidentiary certificates

Where, in a prosecution for an offence against this Act, it is necessary to prove:

(a) the quantity of an absorbed dose;

(b) the nature of a radioactive substance;

(c) the activity of a radioactive substance; or

(d) the strength of a dose equivalent,

a certificate purporting to be signed by the Chief Health Officer stating any such measurement or other fact is evidence, in the absence of proof to the contrary, of the matters so certified and of the facts on which they are based.

56 Regulations

The Administrator may make regulations, not inconsistent with this Act, prescribing all matters which by this Act are required or permitted to be prescribed or which are necessary or convenient for giving effect to this Act including prescribing fees for the issue and renewal of licences under Part III and the registration of irradiating apparatus under Part IV.

Schedule 1 Maximum permissible concentration for discharge of radioactive substances in air and water

sections 3, 19 and 23

First Column	Second Column	Third Column
Radioactive substance	Microcuries per millilitre of air	Microcuries per millilitre of water
A41	5x10-7	5x10-4
Ag105	1x10-5	2
Ag111	3x10-5	4
Am241	3x10-11	1x10-4
As76	2x10-6	0.2
At211	3x10-10	2x10-6
Au198	1x10-7	3x10-3
Au199	2.5x10-7	7x10-3
Ba140+La140	6x10-8	2x10-3
Be7	4x10-6	1
C14	5x10-7	3x10-3
Ca45	3x10-8	5x10-4
Cd109+Ag109m	7x10-8	7x10-2
Cel144+Pr144	7x10-9	4x10-2
C1 36	4x10-7	9x10-4
Cm242	2x10-10	9x10-4
Co60	1x10-6	2x10-2
Cr51	8x10-6	0.5
Cs137+Ba137m	2x10-7	1.5x10-3
Cu64	6x10-6	8x10-2
Eu154	6x10-9	3x10-2
F18	1x10-4	0.9
Fe55	6x10-7	4x10-3
Fe59	1.5x10-8	1x10-4
Ga72	3x10-6	9

First Column	Second Column	Third Column
Radioactive substance	Microcuries per millilitre of air	Microcuries per millilitre of water
Ge71	4x10-5	9
H3(HTO or T20)	2x10-5	0.2
Ho166	3x10-6	23
I131	5x10-9	3x10-5
Ir190	7x10-7	1x10-2
Ir192	5x10-8	9x10-4
K42	2x10-6	1x10-2
La140	1x10-6	1
Lu177	5x10-6	24
Mn56	3x10-6	0.15
Mo99	2x10-3	14
Na24	2x10-6	8x10-3
Nb95	4x10-7	4x10-3
Ni59	2x10-5	0.25
P32	1x10-7	2x10-4
Pb203	6.5x10-6	0.1
Pd103+Rh103	7x10-7	1x10-2
Pm147	2x10-7	1
Po210 (soluble)	2x10-10	3x10-5
Po210 (insoluble)	7x10-11	-
Pr143	7.5x10-7	0.4
Pu239 (soluble)	2x10-12	1.5x10-6
Pu239 (insoluble)	2x10-12	-
Ra226+½dr	8x10-12	4x10-8
Rb86	4x10-7	3x10-3
Re183	8x10-6	8x10-2
Rh105	1x10-6	1.5x10-2
Rn222+dr	1x10-7	2x10-6
Ru106+Rh106	3x10-8	0.1
S35	1x10-6	5x10-3

Schedule 1 Maximum permissible concentration for discharge of radioactive substances in air and water

First Column	Second Column	Third Column
Radioactive substance	Microcuries per millilitre of air	Microcuries per millilitre of water
Sc46	7x10-8	0.4
Sm151	1x10-8	0.2
Sn113	6x10-7	0.2
Sr89	2x10-8	7x10-5
Sr90+Y90	2x10-10	8x10-7
Tc96	3x10-6	3x10-2
Te127	1x10-7	3x10-2
Te129	4x10-8	1x10-2
Th234	6x10-7	3
Th-natural (insoluble)	3x10-11	-
Th-natural	3x10-11	4x10-7
Tm170	5x10-8	0.25
U233 (soluble)	1x10-10	1.5x10-4
U233 (insoluble)	1.6x10-11	-
U-natural (soluble)	1.7x10-11	7x10-5
U-natural (insoluble)	1.7x10-11	-
V48	1x10-6	0.5
Xe133	4x10-6	4x10-3
Xe135	2x10-6	1x10-3
Y91	4x10-8	0.2
Zn65	2x10-6	6x10-2
All other emitters of beta or gamma radiation	1x10-9	1x10-7
All other emitters of alpha radiation	5x10-12	1x10-7

NOTES

(1) The figures given in the Second and Third Column of this Schedule apply to continuous exposures for 24 hours a day. Where the exposure is incurred only during a work day of 8 hours the values in the Second Column may be multiplied by 3.

*(2) In this Schedule the expression **dr** means daughter products of the radioactive substance preceding the expression.*

Schedule 2 Radiation warning labels and notices

sections 44 and 53

1. Radiation warning labels shall be printed in black letters on a white or yellow background (according to the appropriate category).

2. A source container shall be labelled as follows:

"CAUTION

RADIATION GAUGE ENCLOSING RADIOACTIVE SOURCE"

and the appropriate radiation symbol shall be displayed.

3. A store for radioactive substance shall be labelled as follows:

"CAUTION

STORE FOR RADIOACTIVE SUBSTANCE"

and the appropriate radiation symbol shall be displayed.

Figure 1.

Basic trefoil symbol with proportions based on a central circle of radius 4 millimetres.

(See printed copy of Act)

Figure 2.

Category I – White label with lettering and trefoil black and category sign "I" denoted in red.

(See printed copy of Act)

Figure 3.

Category II – Yellow label with lettering and trefoil black and category sign "II" denoted in red.

(See printed copy of Act)

Figure 4.

Category III – Yellow label with lettering and trefoil black and category sign "III" denoted in red.

(See printed copy of Act)

Figure 5.

Placard for vehicles

The overall shape of the placard may be diamond or square as indicated by the broken lines. Minimum dimensions are given; when larger dimensions are used the relative proportions must be maintained.

A contrasting colour other than white may be used for the background.

The lower half of the placard may be used for other hazard identification codes, letters, &c., as may be required by any law in the Territory or by conventions relating to emergency incident information systems for all classifications of dangerous goods.

(See printed copy of Act)

Figure 6.

Colours: Background yellow lettering and trefoil black.

(See printed copy of Act)

Schedule 3

sections 3, 23, 24 and 28

PART I

MAXIMUM PERMISSIBLE DOSE ACCUMULATED IN ANY QUARTER OF A CALENDAR YEAR

First Column	Second Column	Third Column
Item No.	Organ or part of the body	Dose
1.	Gonads	3 rems
2.	Red bone marrow	3 rems
3.	Whole body radiation exposure	3 rems
4.	Skin	15 rems
5.	Bone	15 rems
6.	Thyroid	15 rems
7.	Hands and forearms	40 rems
8.	Feet and ankles	40 rems
9.	Any other single organ (including lens of the eye)	8 rems
10.	Abdomen of women of reproductive capacity	1.3 rems

PART II

MAXIMUM PERMISSIBLE DOSE ACCUMULATED IN ONE CALENDAR YEAR

First Column	Second Column	Third Column
Item No.	Organ or part of the body	Dose
1.	Gonads	5 rems
2.	Red bone marrow	5 rems
3.	Whole body radiation exposure	5 rems
4.	Skin	30 rems
5.	Bone	30 rems
6.	Thyroid	30 rems
7.	Hands and forearms	75 rems
8.	Feet and ankles	75 rems
9.	Any other single organ (including lens of the eye)	15 rems

Schedule 4 Classification of radioactive substances into groups for transport purposes

sections 38 and 39

First Column	Second Column
Nuclide	Group
Actinium 227	I
Actinium 228	II
Americium 241	I
Americium 243	I
Antimony 122	III
Antimony 124	III
Antimony 125	III
Argon 37	III
Argon 41	III
Arsenic 73	III
Arsenic 74	III
Arsenic 76	III
Arsenic 77	III
Astatine 211	III
Barium 131	III
Barium 140	III
Berkelium 249	II
Beryllium 7	III
Bismuth 206	III
Bismuth 207	III
Bismuth 210	III
Bismuth 212	III
Bromine 82	III
Cadmium 109	III
Cadmium 115m	III
Cadmium 115	III
Caesium 131	III
Caesium 134m	III
Caesium 134	III
Caesium 135	III
Caesium 136	III
Caesium 137	III

First Column	Second Column
Nuclide	Group
Calcium 45	III
Calcium 47	III
Californium 249	I
Californium 250	I
Californium 252	I
Carbon 14	III
Cerium 141	III
Cerium 143	III
Cerium 144	II
Chlorine 36	III
Chlorine 38	III
Chromium 51	III
Cobalt 57	III
Cobalt 58m	III
Cobalt 58	III
Cobalt 60	III
Copper 64	III
Curium 242	II
Curium 243	I
Curium 244	I
Curium 245	I
Curium 246	I
Dysprosium 165	III
Dysprosium 166	III
Erbium 169	III
Erbium 171	III
Europium 152 (9.2hr)	III
Europium 152 (13yrs)	III
Europium 154	II
Europium 155	III
Fluorine 18	III
Gadolinium 153	III
Gadolinium 159	III
Gallium 72	III
Germanium 71	III
Gold 196	III
Gold 198	III

First Column	Second Column
Nuclide	Group
Gold 199	III
Hafnium 181	III
Holmium 166	III
Hydrogen 3	III
Indium 113m	III
Indium 114m	III
Indium 115m	III
Indium 115	III
Iodine 126	III
Iodine 129	III
Iodine 131	III
Iodine 132	III
Iodine 133	III
Iodine 134	III
Iodine 135	III
Iridium 190	III
Iridium 192	III
Iridium 194	III
Iron 55	III
Iron 59	III
Krypton 85m	III
Krypton 85	III
Krypton 87	III
Lanthanum 140	III
Lead 203	III
Lead 210	II
Lead 212	III
Lutecium 177	III
Manganese 52	III
Manganese 54	III
Manganese 56	III
Mercury 197m	III
Mercury 197	III
Mercury 203	III
Molybdenum 99	III
Neodymium 144	III
Neodymium 147	III

First Column	Second Column
Nuclide	Group
Neodymium 149	III
Neptunium 237	I
Neptunium 239	III
Nickel 59	III
Nickel 63	III
Nickel 65	III
Niobium 93m	III
Niobium 95	III
Niobium 97	III
Osmium 185	III
Osmium 191m	III
Osmium 191	III
Osmium 193	III
Palladium 103	III
Palladium 109	III
Phosphorus 32	III
Platinum 191	III
Platinum 193	III
Platinum 193m	III
Platinum 197m	III
Platinum 197	III
Plutonium 238	I
Plutonium 239	I
Plutonium 240	I
Plutonium 241	II
Plutonium 242	I
Polonium 210	II
Potassium 42	III
Praseodymium 142	III
Praseodymium 143	III
Promethium 147	III
Promethium 149	III
Protactinium 230	II
Protactinium 231	I
Protactinium 233	III
Radium 223	II
Radium 224	II

First Column	Second Column
Nuclide	Group
Radium 226	I
Radium 228	II
Radon 222	III
Radon 221	II
Rhenium 183	III
Rhenium 186	III
Rhenium 187	III
Rhenium 188	III
Rhenium natural	III
Rhodium 103m	III
Rhodium 105	III
Rubidium 86	III
Rubidium 87	III
Rubidium natural	III
Ruthenium 97	III
Ruthenium 103	III
Ruthenium 105	III
Ruthenium 106	III
Samarium 147	III
Samarium 151	III
Samarium 153	III
Scandium 46	III
Scandium 48	III
Selenium 75	III
Silicon 31	III
Silver 105	III
Silver 110m	III
Silver 111	III
Sodium 22	III
Sodium 24	III
Strontium 85m	III
Strontium 85	III
Strontium 89	III
Strontium 90	II
Strontium 91	III
Strontium 92	III
Sulphur 35	III

First Column	Second Column
Nuclide	Group
Tantalum 182	III
Technetium 96m	III
Technetium 96	III
Technetium 97m	III
Technetium 97	III
Technetium 99m	III
Technetium 99	III
Tellurium 125m	III
Tellurium 127m	III
Tellurium 127	III
Tellurium 129m	III
Tellurium 129	III
Tellurium 131m	III
Tellurium 132	III
Terbium 160	III
Thallium 200	III
Thallium 201	III
Thallium 202	III
Thallium 204	III
Thorium 227	II
Thorium 228	I
Thorium 230	I
Thorium 231	III
Thorium 232	III
Thorium 234	III
Thorium natural	III
Thulium 170	III
Thulium 171	III
Tin 113	III
Tin 125	III
Tungsten 181	III
Tungsten 185	III
Tungsten 187	III
Uranium 230	II
Uranium 232	II
Uranium 233	II
Uranium 234	II

First Column	Second Column
Nuclide	Group
Uranium 235	III
Uranium 236	II
Uranium 238	III
Uranium natural	III
Vanadium 48	III
Xenon 131m	III
Xenon 133	III
Xenon 135	III
Ytterbium 175	III
Yttrium 90	III
Yttrium 91m	III
Yttrium 91	III
Yttrium 92	III
Yttrium 93	III
Zinc 65	III
Zinc 69m	III
Zinc 69	III
Zirconium 93	III
Zirconium 95	III
Zirconium 97	III

Schedule 5 Maximum amounts of radioactive substances exempted from this Act

section 5

GROUP I :	Maximum allowed :	1 microcurie
	Lead (210)	Radium (226)
	Actinium (227)	Plutonium (230)
	Americium (241)	Polonium (219)
	Astatine (211)	Uranium (233)
GROUP II :	Maximum allowed:	10 microcuries
	Scandium (46)	Cobalt (60)
	Strontium (90)	Ruthenium (106)
	Silver (105)	Tellurium (129)
	Iodine (131)	Caesium (137)
	Cerium (144)	Europium (154)
	Tungsten (181)	Rhenium (183)
	Iridium (192)	
GROUP III:	Maximum allowed:	100 microcuries
	Phosphorus (32)	Chlorine (36)
	Calcium (45)	Scandium (48)
	Vanadium (48)	Iron (59)
	Zinc (65)	Gallium (72)
	Arsenic (76)	Rubidium (86)
	Strontium (89)	Yttrium (91)
	Niobium (95)	Technetium (96)
	Rhodium (105)	Silver (111)
	Cadmium (109)	Tin (113)
	Tellurium (127)	Barium (140)
	Lanthanum (140)	Praesodymium (143)
	Samarium (151)	Holmium (166)
	Thulium (170)	Lutecium (177)
	Tantalum (182)	Platinum (191)
	Gold (198)	Thallium (200)
	Thallium (204)	Lead (203)
	Thorium (234)	
GROUP IV :	Maximum allowed :	1000 microcuries
	Hydrogen (3)	Beryllium (7)
	Carbon (14)	Sodium (24)
	Sulphur (35)	Potassium (42)
	Chromium (51)	Manganese (56)
	Iron (55)	Nickel (59)
	Copper (64)	Germanium (71)

Molybdenum (99)	Palladium (103)
Promethium (147)	Iridium (190)
Gold (196)	Thallium (201)
Thallium (202)	

NOTES

1. *Figures immediately following a substance in this Schedule refer to the atomic mass numbers of the substance, thus Hydrogen (3) means Hydrogen of Atomic Mass 3.*
2. *Any radioactive substance not specified in this Schedule shall be taken to be in Group II.*

Schedule 6 Specifications for packages

sections 36 and 37

PART I

DESIGN

1. The smallest dimension for any outer container for a radioactive substance is 10 centimetres.

2. A package shall be so designed that it can be easily handled and be properly secured in or on the conveyance during transport.

3. A package of gross mass of 10 kilograms or more up to 50 kilograms shall be provided with means for manual handling.

4. A package of gross weight exceeding 50 kilograms shall be so designed as to enable safe handling by mechanical means.

5. A design does not comply with rules 3 and 4 unless any lifting attachment on the package, when used in the intended manner, does not impose unsafe stresses on the structure of the package.

6. The outer layer of the package shall be such that it does not collect and retain water.

7. The external surfaces of the package shall be designed so that they may be easily decontaminated.

8. The maximum value of radiation originating from a package shall not exceed 200 millirems per hour at any point on the surface of the package or 10 millirems per hour at a distance of 1 metre from the package.

9. A package shall incorporate a seal on the outside which is not readily breakable and which, while intact, indicates that the package has not been opened.

10. A package shall be so designed to withstand the effects of any acceleration, vibration and vibration resonance which may arise during normal transport without any deterioration in the effectiveness of the closing devices in the various receptacles or in the integrity of the package as a whole.

11. The nuts, bolts and other securing devices shall be so designed as to prevent them from becoming loose or being released unintentionally, even after repeated use.

12. A package shall include in its design a containment system securely closed by a positive fastening device which cannot be opened unintentionally or by pressure which may arise within the package.

13. A package of which the outer component of a containment system forms a separate unit shall be capable of being securely closed by a fastening device that is independent of any other part of the package.

14. The materials of a package and its components or structures shall be physically and chemically compatible with each other and with the contents of the package.

15. The design of any component of the containment system shall take into account any likely radiolytic decomposition of liquids and other vulnerable materials and the generation of gas by chemical reaction and radiolysis.

16. The containment system shall retain its radioactive contents under the reduction of ambient pressure to 0.25 kilograms per square centimetre.

17. All valves other than pressure relief valves through which the radioactive contents could otherwise escape shall be protected against unauthorized operation and shall be provided with an enclosure to retain any leakage from the valve.

18. A radiation shield which encloses a component of a package specified as part of the containment system shall be so designed as to prevent the unintentional release of the component from the shield. Where the radiation shield and the component within it forms a separate unit, the radiation shield shall be capable of being securely closed by a fastening device which is independent of any other package structure.

19. A tie-down attachment on a package shall be so designed that, under both normal and accident conditions, the forces in those attachments will not impair the ability of the package to meet the requirements of this Schedule.

PART II

LABELLING AND MARKING

20. A package and a container shall display at least 2 appropriate labels as prescribed in this Part of this Schedule according to the category into which the package or the container falls.

21.(1) A package or a container falls into Category I when the radiation level originating from the package or any package within the container at any time during normal transport does not exceed 0.5 millirem per hour at any location on the external surface of the package.

(2) The appropriate label for packages falling in Category I –

(a) shall have a white background;

(b) shall be in the form of Figure 2 in Schedule 2;

(c) shall display the colours indicated in that Schedule for the lettering and designs in that figure; and

(d) shall comply with the dimensions indicated in that Schedule for that figure.

22.(1) A package falls into Category II when the radiation level originating from the package, at any time during normal transport, exceeds 0.5 millirem per hour but does not exceed 50 millirems per hour at any location on the external surface of the package and the maximum radiation level does not exceed one millirem per hour at one metre from the external surface of the package.

(2) A container falls into Category II when it contains at least one package falling into Category II and the maximum level of radiation does not exceed one millirem per hour at a distance of one metre from the container.

(3) The appropriate label for packages and containers falling into Category II –

(a) shall have a yellow background;

(b) shall be in the form of Figure 3 in Schedule 2;

(c) shall display the colour indicated in that Schedule for the lettering and designs in that figure; and

(d) shall comply with the dimensions indicated in that Schedule for that figure.

23.(1) A package falls into Category III when the radiation level originating from the package at any time during normal transport exceeds 50 millirems per hour but does not exceed 200 millirems per hour at any location on the external surface of the package.

(2) A container falls into Category III –

(a) when at any time during normal transport the radiation level exceeds 1 millirem per hour at a distance of 1 metre from the external surface of the freight container; or

(b) when the radiation level exceeds 200 millirems per hour but does not exceed 1000 millirems per hour at any location on the external surface of the container and the transportation is carried out under the conditions specified in section 45.

(3) The appropriate label for Category III packages and containers –

(a) shall have a yellow background;

(b) shall be in the form of Figure 3 in Schedule 2;

(c) shall display the colour indicated in that Schedule for the lettering and designs in that figure; and

(d) shall comply with the dimensions indicated in that Schedule for that figure.

24. Labels shall be fixed on 2 opposite sides of the outside of the package or container.

25. Each label shall be completed before despatch by marking on it where indicated in the figures in the Schedule the information relating to the contents and the radioactivity of the contents.

26. A package of gross mass exceeding 50 kilograms shall have its gross mass plainly and durably marked outside of the package.

27.(1) A package that conforms to a type A package design shall be plainly and durably marked on the outside of the package "Type A".

(2) A package that conforms to a type B package design shall be plainly and durably marked "Type B" and shall have the outside of the outermost receptacle which is resistant to fire and water plainly marked (by embossing, stamping or by using some other means of producing a mark resistant to fire and water) with a symbol in the form of Figure 1 in Schedule 2.

28. A package containing a radioactive substance which has additional hazardous characteristics shall carry additional labels to indicate those characteristics.

ENDNOTES

1 KEY

Key to abbreviations

amd = amended
app = appendix
bl = by-law
ch = Chapter
cl = clause
div = Division
exp = expires/expired
f = forms
Gaz* = *Gazette
hdg = heading
ins = inserted
lt = long title
nc = not commenced
od = order
om = omitted
pt = Part
r = regulation/rule
rem = remainder
renum = renumbered
rep = repealed
s = section
sch = Schedule
sdiv = Subdivision
SL = Subordinate Legislation
sub = substituted

2 LIST OF LEGISLATION

***Radiation (Safety Control) Ordinance 1978* (Act No. 87, 1978)**

Assent date	23 August 1978
Commenced	1 February 1980 (*Gaz* G4, 25 January 1980, p 7)

***Transfer of Powers (Health) Act 1978* (Act No. 122, 1978)**

Assent date	21 December 1978
Commenced	1 January 1979 (s 2)

***Statute Law Revision Act (No. 2) 1979* (Act No. 128, 1979)**

Assent date	15 October 1979
Commenced	15 October 1979

***Statute Law Revision Act (No. 2) 1982* (Act No. 54, 1982)**

Assent date	8 October 1982
Commenced	8 October 1982

***Criminal Law (Regulatory Offences) Act 1983* (Act No. 68, 1983)**

Assent date	28 November 1983
Commenced	1 January 1984 (s 2, s 2 *Criminal Code Act 1983* (Act No. 47, 1983), *Gaz* G46, 18 November 1983, p 11 and *Gaz* G8, 26 February 1986, p 5)

***Statute Law Revision Act 1997* (Act No. 17, 1997)**

Assent date	11 April 1997
Commenced	s 16: 10 December 1997; rem: 1 May 1997 (*Gaz* G17, 30 April 1997, p 2)

3 LIST OF AMENDMENTS

lt	amd No. 54, 1982, s 2
ss 1 – 2	amd No. 54, 1982, s 2
s 3	amd No. 122, 1978, s 77; No. 54, 1982, s 2; No. 17, 1997, s 17; No. 22, 1999, s 4
s 4	amd No. 54, 1982, s 2
s 5	amd No. 122, 1978, s 78; No. 54, 1982, s 2; No. 17, 1997, s 17
s 6	amd No. 122, 1978, s 78 sub No. 128, 1979, s 28 amd No. 17, 1997, s 17
ss 7 – 8	amd No. 122, 1978, s 78; No. 54, 1982, s 2; No. 17, 1997, s 17
ss 9 – 10	amd No. 54, 1982, s 2
s 11	amd No. 122, 1978, s 78; No. 17, 1997, s 17
s 12	amd No. 122, 1978, s 78; No. 54, 1982, s 2; No. 17, 1997, s 17
s 14	amd No. 54, 1982, s 2
s 15	amd No. 122, 1978, s 78; No. 54, 1982, s 2; No. 17, 1997, s 17
s 16	amd No. 122, 1978, s 78; No. 17, 1997, s 17
s 17	amd No. 122, 1978, s 78; No. 54, 1982, s 2; No. 17, 1997, s 17
s 19	amd No. 122, 1978, s 78; No. 17, 1997, s 17
s 20	amd No. 122, 1978, s 78
s 22	amd No. 122, 1978, s 78; No. 54, 1982, s 2; No. 17, 1997, s 17
ss 24 – 27	amd No. 122, 1978, s 78; No. 17, 1997, s 17
s 28	amd No. 54, 1982, s 2
ss 30 – 35	amd No. 122, 1978, s 78; No. 17, 1997, s 17
s 36	amd No. 54, 1982, s 2
s 37	amd No. 122, 1978, s 78; No. 17, 1997, s 17
s 38	amd No. 54, 1982, s 2
s 40	amd No. 122, 1978, s 78; No. 17, 1997, s 17
s 45	amd No. 122, 1978, s 78; No. 54, 1982, s 2; No. 17, 1997, s 17
ss 47 – 48	amd No. 122, 1978, s 78; No. 17, 1997, s 17
s 49	amd No. 122, 1978, s 79; No. 17, 1997, s 17
s 50	amd No. 122, 1978, s 78; No. 17, 1997, s 17
s 51	amd No. 122, 1978, ss 78 and 80; No. 17, 1997, s 17
ss 52 – 53	amd No. 122, 1978, s 78; No. 17, 1997, s 17
s 54	amd No. 54, 1982, s 2
s 54A	ins No. 68, 1983, s 28
s 55	amd No. 122, 1978, s 78; No. 54, 1982, s 2; No. 17, 1997, s 17
s 56	amd No. 122, 1978, s 81; No. 54, 1982, s 2