Government Bill

As reported from the Health Committee

Commentary

Recommendation

The Health Committee has examined the Radiation Safety Bill and recommends that it be passed with the amendments shown.

Introduction

The Radiation Safety Bill seeks to repeal and replace the Radiation Protection Act 1965. The bill would establish a legislative framework that provides for the safe and beneficial use of ionising radiation while protecting the environment and people from the harmful effects of ionising radiation. The bill would also provide a means for New Zealand to meet its international obligations relating to radiation protection, radiation safety and security, and nuclear non-proliferation.

This commentary covers the major amendments that we recommend; it does not discuss minor or technical amendments.

Commencement

As introduced, the bill would be brought into force by Order in Council. The Regulations Review Committee noted that an Order in Council should only be used in exceptional circumstances. At the time of drafting it was thought that several provisions of the bill would need to come into effect at the earliest possible time to enable New Zealand to meet its international obligations under the instruments named in clause 3(b). The Ministry of Foreign Affairs and Trade is now satisfied that clause 98, regarding amendments to the Terrorism Suppression Act 2002, is the only provision that would need to come into force in order to proceed with ratification of the international conventions.

We therefore recommend amending clause 2 by deleting subclauses (1) and (2), which would eliminate the reference to the Order in Council. We also recommend re-

placing subclause (3) with new subclause (1) to replace the provisions to bring the Act into force by Order in Council with a provision for the Act to come into force one year after the date on which the Act receives the Royal assent. We further recommend inserting new subclause (2) which would enable clause 98 to be brought into effect immediately upon enactment.

Interpretation

We recommend amending clause 5, which defines the meaning of specific terms used in the bill. We recommend inserting that "occupational exposure" means exposure to ionising radiation experienced by workers during the course of their work. We also recommend inserting the definition of "public exposure" as being exposure to ionising radiation experienced by a member of the public, and that the definition does not include the exposures listed in paragraphs (a) to (d). This amendment would clarify that any occupational exposure, or any exposure experienced by patients for the purposes of medical or dental diagnosis or treatment; by caregivers and comforters; and by volunteers subject to exposure as part of a programme of biomedical research does not count as "public exposure". The inclusion of specific definitions for occupational and public exposure would also support Schedule 3, which details dose limits for ionising radiation in both occupational and public exposure.

For the purposes of avoiding repetition throughout the bill, we also recommend amending clause 5 by inserting a definition of "radiation safety requirements", which would mean

- (a) the requirements of this Act, regulations, and the codes of practice; and
- (b) the requirements of any radiation safety plan; and
- (c) the conditions of any authorisation; and
- (d) the conditions of any exemption granted under clause 89(1B).

Fundamental requirements

Clauses 8 to 12 as introduced would provide a range of fundamental requirements that any person dealing with a radiation source must comply with.

Clause 10 prohibits a person from dealing with a radiation source unless it is fit for its intended purpose. We recommend amending clause 10 to clarify that a suitably authorised person may deal with a radiation source that is not fit for its intended purpose if there is a need to service, repair, or otherwise make the source fit for its intended purpose.

We recommend amending clause 11 so that it would require all people dealing with a radiation source to ensure there are appropriate security measures in place to prevent the security risks listed in clause 11(a) to (e). Specific security measures for particular practices and material would be provided in codes of practice issued by the Director for Radiation Safety.

We recommend replacing clauses 12 and 13 with new clause 12. This would simplify the fundamental requirements to safely and securely transport, store, or dispose of a radiation source by combining them in one clause. Reference to regulations in clause 13 would no longer be required, due to recommended amendments discussed below relating to the codes of practice and regulations.

Activities that require authorisation

We recommend deleting clause 14(d), which would eliminate the requirement to approve ancillary services. The bill as introduced would provide that no person may perform a radiation ancillary service without an approval. Some ancillary services are provided for New Zealand-owned radiation measuring equipment by a person sending the equipment overseas for calibration. We acknowledge that there are practical problems involved in approving overseas ancillary service providers. We are also aware there are concerns about requiring approval for only New Zealand ancillary service providers. We therefore recommend the above amendment to clause 14. Instead, ancillary services would be regulated through a duty placed on the holders of source licences and use licences to ensure these and other services are carried out to the required standard. We also recommend deleting clause 93(1)(9), as there would no longer be any requirement to define further ancillary services in regulations.

We further recommend amending clause 5 by removing the reference to, and definition of, "calibration service", "personal dosimetry service", and "radiation ancillary service" which would no longer be required terms in the bill due to the recommended amendment to clause 14.

As a consequence of the amendment to clause 14 we also recommend amending clause 5, in the definition of "authorisation", paragraph (c), and deleting clauses 27, 28, 43(2)(c)(ii), and 68(5), as provisions for an approval, or approvals, of ancillary services would no longer be required. We further recommend amending clause 15 by removing the reference to an application for an approval. We also recommend deleting clause 66(2), which relates to offences contravening clause 14(d), and would no longer be required.

We recommend amending clause 17(a) and (d) to clarify that a use licence is not required for the performance of any prescribed activity involving a radiation source by a person authorised by regulations, or where the use of the radiation source is in accordance with clause 22(4)(a) or (b). Clause 22(4)(a) and (b) would allow an unlicensed user, who is able to meet the fundamental requirements, to use a radiation source under direct supervision of an authorised person, or in certain circumstances under the written instruction of an authorised person.

To complement the amendment to clause 17(a) we recommend deleting clause 93(1)(11) and inserting new clause 93(1)(h) and (i). This amendment would address the recommendation of the Regulations Review Committee to restrict the scope of any regulations that can be made to exempt users from requiring a use licence. We further recommend deleting clauses 17(b) and 93(1)(2) in order to simplify the regime in a situation when a use licence is not required.

We also recommend amending clause 93 by inserting new subclause (5). This would provide that a regulation authorising a person to perform an activity for the purpose of clause 17(a) would be made on the recommendation of the Minister.

Source licences and radiation safety plans

We recommend amending clause 18(1) to insert new paragraph (c), which would allow a source licence to apply to one or more radiation sources. Provisions in the bill as introduced imply that a source licence and radiation safety plan must refer to a single radiation source. We consider that this could create administrative and cost burdens on organisations that own a number of radiation sources. We also recommend amending clause 19(1) to allow a single radiation safety plan to apply to more than one radiation source.

We recommend amending clause 20 by inserting new subclause (3A) which would allow the Director for Radiation Safety to impose different conditions for each radiation source included on a source licence. We further recommend amending clause 20(4)(a) to specify that an applicant for a source licence must comply with New Zealand's international obligations referred to in clause 3(b).

We recommend amending clause 21(2) by specifying that the holder of a source licence should undertake the duties outlined in paragraphs (a) to (f) in respect of each radiation source to which the licence applies.

We recommend amending clause 21(3)(d) by removing the requirement that a source licence holder must ensure that a person who is exposed to radiation has a medical examination. We consider this amendment would eliminate unnecessary examinations and that in rare cases where an examination is appropriate as the result of an overexposure the Director for Radiation Safety could require an examination under clauses 21(3)(e) and 26(2)(e).

Use licences

We recommend amending clause 22 by replacing subclause (4) with new subclauses (4), (5), and (6). This would allow an unlicensed user to use a radiation source under the direct supervision of an authorised person, or under the written instruction of an authorised person in certain circumstances. Applying these amendments would prevent unnecessary restrictions in some situations and eliminate the potential for needless and costly use licences.

We recommend amending clause 24 to reflect the amendments to clause 22, which would ensure that a person using a radiation source in accordance with clause 22(4)(a) or (b) must comply with the radiation safety requirements. We further recommend amending clause 68(2) to clarify that a person who uses a radiation source in accordance with clause 22(4)(a) or (b) would be committing an offence if they do not comply with clause 24. These recommended amendments would manage the risks of allowing unlicensed users to use radiation sources.

Consents

We recommend amending clause 25(4)(a) which would require that the Director for Radiation Safety must not grant a consent to import or export radioactive nuclear material unless he or she is satisfied that the applicant will comply with New Zealand's international obligations referred to in clause 3(b). We also recommend amending clause 5(a) of Schedule 1, to allow consents given under the former Act to continue until their expiry.

Authorisations

We recommend amending clause 30(1) by clarifying the grounds on which the Director for Radiation Safety may suspend, vary, or cancel an authorisation. We believe it would strengthen clause 30(1) to insert references in paragraph (a) to the failure to comply with the radiation safety requirements and also by inserting new paragraph (da) regarding the holder of an authorisation failing to comply with a compliance order.

Power to inspect places

We recommend amending clause 40(1)(a) to clarify that an enforcement officer may, subject to clauses 40(3) and (6), at any reasonable time enter and inspect any place for the purpose of monitoring compliance with the radiation safety requirements; or monitoring compliance with any compliance order. We further recommend amending clauses 43(2)(a) and (ba) to reflect the amendment to clause 40(1)(a) which would enable an enforcement officer inspecting any place under clause 40 to require answers to questions for the purpose of monitoring compliance with the radiation safety requirements; or monitoring compliance with any compliance order.

We recommend amending clause 40 to insert new subclause (6). This amendment would require an enforcement officer to exercise his or her powers under clause 40 in a manner that does not prejudice either the security or defence of New Zealand or the international relations of the Government of New Zealand. We believe this amendment would address concerns about enforcement officers entering and inspecting New Zealand Defence Force areas.

Compliance orders

We recommend amending clause 47(1) to ensure that the Director for Radiation Safety must give his or her approval before an enforcement officer may issue a compliance order. This would manage the risk of compliance orders being issued unnecessarily.

We also recommend amending clauses 47(1)(a), 47(2)(a)(i), 47(2)(b)(i) and 47(2)(b)(ii) to clarify that an enforcement officer would be able to issue a compliance order to a person, with the approval of the Director, if the person is not complying with the radiation safety requirements.

We recommend amending clause 51(1) by inserting new paragraph (f). This would allow a person who is affected by a decision to impose conditions or a particular condition on a compliance order to appeal that decision in the District Court.

Seizure, storage, and disposal of a radiation source

We recommend amending clause 49(4)(b) by removing reference to regulations, and inserting new subparagraphs 49(4)(b)(i) to (iii) which would specify that the storage of a radiation source should comply with the radiation safety requirements.

Emergencies

We recommend amending clause 56 by removing paragraph (b) of the definition of "enforcement officer" and replacing it with new paragraphs (b) and (c). This amendment would allow any constable, chief fire officer, or person exercising the powers of a chief fire officer under sections 28, 28A, or 29 of the Fire Services Act 1975; or a person appointed for the purpose of enforcing the Hazardous Substances and New Organisms Act 1996, by a person referred to in section 97 of that Act, to use the emergency provisions in the bill. This would clarify who is able to use the emergency provisions. For consistency we also recommend amending clause 59(1) to reflect the amendment to clause 56 regarding the use of emergency powers under the Hazardous Substances and New Organisms Act.

Codes of practice

We recommend that codes of practice become the only means of specifying how to comply with the bill's fundamental requirements detailed in clauses 8 to 12. This would address advice from the Regulations Review Committee recommending clarification on the distinction between regulation-making provisions in clause 93(1)(1) and the issuing of codes of practice in clause 89 for the purpose of implementing the fundamental requirements. The code requirements would vary widely from practice to practice and are often very technical. The recommended amendments would also simplify the regime for implementing the fundamental requirements.

We therefore recommend amending clause 89(1) to clarify that the purpose of issuing a code of practice is to specify technical requirements that must be observed in order to comply with the fundamental requirements and that are appropriate to the level of risk associated with the radiation source.

We recommend inserting new subclause (1A) which would provide for the Director for Radiation Safety to consult any person who the Director reasonably considers is likely to be affected by a proposed code before a code is issued.

We recommend deleting subclause (2), which would mean that complying with a code of practice is the same as complying with the fundamental requirements. We further recommend replacing subclause (3) with subclause (1B), which would allow the Director for Radiation Safety to exempt a person from complying with a provision in a code of practice if he or she is satisfied it is not practicable and that there is another way to meet the corresponding requirements set out in the bill.

We recommend amending clause 89(4) to specify that a code of practice is a disallowable instrument but not a legislative instrument for the purposes of the Legislation Act 2012. This would allow Parliament to consider all codes of practice.

We recommend amending clause 90(1) by inserting new paragraph (c) which would require that a code of practice must state the scope of the code of practice.

The bill as introduced would enable the code of practice to implement any fundamental requirement or provision of the Act. We recommend amendments to clauses 89 and 90 to limit the scope of the code of practice to the fundamental requirements only.

As a consequence of the amendments regarding the codes of practice we recommend amending clause 38(1). This amendment would clarify that a person who is granted an authorisation must keep records that contain sufficient information to enable the Director for Radiation Safety to ascertain whether the person is complying with the radiation safety requirements.

As a further consequence of the amendments regarding the codes of practice we also recommend amending clause 80(3)(b)(ii) to specify that when the Director for Radiation Safety is performing his or her functions or duties, he or she is subject to any general policy directions given by the Minister that are not inconsistent with the Act, regulations, or the codes of practice.

We recommend amending clause 92 by inserting subclause 92(1A). This would provide for the Director for Radiation Safety to consult with any person who the Director reasonably considers is likely to be affected by the proposed amendment or revocation of a code of practice. We further recommend clarifying clause 92(2) which would provide that an amendment or revocation of a code of practice does not have a retrospective effect.

Review of codes of practice

We recommend inserting new clause 92A, which would require the Director for Radiation Safety to review each code of practice at least once every five years. There would also be a requirement to consult any person the Director reasonably considers is likely to be affected by the review before starting a review of a code of practice. This amendment would acknowledge that codes of practice deal with fields of activity that are subject to scientific review and technological development and should therefore be periodically reviewed.

Regulations

We recommend deleting clauses 93(1)(1), 93(1)(5), and 93(1)(14). This would remove regulation-making powers that are no longer required due to the recommended amendments to make the codes of practice the only means of specifying how to comply with the bill's fundamental requirements.

We recommend replacing clause 93(1)(3), which currently allows for the making of regulations that enable the Director for Radiation Safety to grant exemptions from a provision of Subpart 2 or 3 of Part 1 of the bill. New clause 93(1)(a) would provide for exemptions to be made by regulation rather than by the Director. This would al-

low for regulations to exempt items such as domestic smoke detectors that are classified as radiation sources under the bill but pose very low risks to health and the environment. We also recommend amending clause 93(4) by deleting paragraphs (a) to (e) and instead specifying that no regulations may be made under 93(1)(a) that relate to nuclear material. We believe these amendments would address concerns about the scope of the bill as introduced regarding the regulation of radiation source.

We also recommend amending clause 93(1)(3)(b) by deleting it and replacing it with new clause 93(1)(a)(ii) to make it clear that radiation sources on ships or aircraft entering New Zealand would be regulated and not the ships or aircraft themselves.

We recommend deleting clause 93(1)(16) and inserting new clause 93A. This would clarify regulations relating to fees. This amendment would provide that fees are payable in respect of both processing the application for an authorisation or renewal and the verification of compliance with the Act.

We recommend amending clause 93 by inserting new clause 93B which would provide for the Governor-General, by Order in Council, to make regulations for all or any of the purposes set out in clause 93B, paragraphs (a) to (g). This would clarify the purposes for which other regulations can be made.

We recommend amending clause 1 of Schedule 1, Transitional, savings and related provisions, to specify that "former regulations" would include the Radiation Protection (Appeals) Regulations 1974 as well as the Radiation Protection Regulations 1982. This would clarify the definition of "former regulations".

We also recommend amending clause 7(1) of Schedule 1 to allow exemptions prescribed in former regulations to continue until a year after the date of commencement of the new Act. We further recommend amending clause 7(2) of Schedule 1 to allow exemptions made under Part 2 of the former regulations to continue until they expire, or if there is no expiry date, until a year after the date of commencement of the new Act.

Schedule 5: Consequential amendments

We recommend amending Schedule 5, Part 2, Amendments to legislative instrument, by replacing the definition of "radiologist" in regulation 3 of the Accident Compensation (Liability to Pay or Contribute to Cost of Treatment) Regulations 2003. This replacement would clarify and strengthen the definition of a "radiologist", particularly regarding registration with the New Zealand Medical Council. We also recommend amending regulation 12(2) by replacing it. This amendment would specify that if a claimant receives treatment from a radiologist whose scope of practice includes the branch of medicine known as diagnostic and interventional radiology, the Accident Compensation Corporation is liable to pay the amount specified for the treatment.

Appendix

Committee process

The Radiation Safety Bill was referred to the committee on 10 March 2015. The closing date for submissions was 22 April 2015. We received and considered 14 submissions from interested groups and individuals. We heard three submissions.

We received advice from the Ministry of Health. The Regulations Review Committee reported to the committee on the powers contained in clauses 2, 93(1)(1), 89, and 93.

Committee membership

Simon O'Connor (Chairperson)

Jacqui Dean

Kevin Hague

Hon Annette King

Barbara Kuriger

Dr Shane Reti

Scott Simpson

Barbara Stewart

Louisa Wall

Key to symbols used in reprinted bill

As reported from a select committee

text inserted unanimously text deleted unanimously

Hon Jonathan Coleman

Radiation Safety Bill

Government Bill

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The 1	Parliament of New Zealand enacts as follows:	
1	Title This Act is the Radiation Safety Act 2014.	
2	Commencement	
(1)	This Act comes into force on a date appointed by the Governor-General by Order in Council.	5
(2)	For the purpose of subsection (1) , 1 or more orders may be made appointing different dates for different provisions and for different purposes.	
(<u>31</u>)	To the extent that it is not previously brought into force under subsection (1) , the rest of this Act This Act, other than section 98 , comes into force on the date that is 1 year after the date on which this Act receives the Royal assent.	10
<u>(2)</u>	Section 98 comes into force on the day after the date on which this Act receives the Royal assent.	
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3	Purposes	
	The purposes of this Act are to— (a) establish a framework to protect the health and safety of people and protect the environment from the harmful effects of ionising radiation while allowing for the safe and beneficial use of ionising radiation; and	20

	(b)	ation	le New Zealand to meet its international obligations relating to radi- protection, radiation safety and security, and nuclear non-prolifera- including (but not limited to) its obligations under—	
		(i)	the Convention on the Physical Protection of Nuclear Material done at New York and Vienna on 3 March 1980; and	5
		(ii)	the International Convention for the Suppression of Acts of Nuclear Terrorism done at New York on 14 September 2005; and	
		(iii)	the Agreement between New Zealand and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons done at Vienna on 29 February 1972; and	10
		(iv)	the Protocols to the agreement described in subparagraph (iii) .	
4	Appl	licatio	n	
	This	Act ap	oplies to—	
	(a)	-	radioactive material listed in the first column of Schedule 2 if the pactive material—	15
		(i)	has a radioactivity concentration that exceeds the acceptable activity concentration level for that material (as listed in the second column of Schedule 2); and	
		(ii)	has a radioactivity that exceeds the acceptable activity level for that material (as listed in the third column of Schedule 2); and	20
	(b)	any i	rradiating apparatus.	
	Comp	are: SR	1982/72 r 5	
5	Inter	preta	tion	
(1)	In th	is Act,	unless the context otherwise requires,—	25
	auth	orisati	ion means—	
	(a)	a sou	arce licence:	
	(b)	a use	e licence:	
	(e)	an ar	oproval:	
	(d)	a cor	nsent	30
			service means a service that calibrates instruments used to measure diation and radioactivity	
	code	of pra	actice means a code of practice issued under section 89	
	cond	itions	includes any restrictions	
	cons	ent me	eans a consent granted under section 25	35
	cont	rolled	radiation source has the meaning given in section 33(2)	

Vienna on 3 March 1980

Convention on Physical Protection of Nuclear Material means the Convention on the Physical Protection of Nuclear Material done at New York and

Cour 83	icil means the Radiation Safety Advisory Council established by section	5
	terms by the Customs and Excise Act 1996	
deal	with, in relation to a radiation source, means—	
(a)	to manufacture, possess, control, use, export, import, sell, or supply manage, use, transport, store, export, import, sell, supply, or dispose of a radiation source; or	10
(b)	to carry out any other activity or practice involving the radiation source	
	t supervision means supervision by a person who is physically present ble to intervene	
Direc	etor means the Director for Radiation Safety appointed under section 79	15
agenc	etor-General means the chief executive of the department of State or by that, with the authority of the Prime Minister, is for the time being resible for the administration of this Act	
docu	ment means any record of information and includes—	
(a)	anything on which there is writing or any image; and	20
(b)	anything on which there are marks, figures, symbols, or perforations that have a meaning for people qualified to interpret them; and	
(c)	anything from which sounds, images, or writing can be reproduced, with or without the aid of anything else	
	tive dose means the tissue-weighted sum of equivalent doses in all speci- issues and organs of the body	25
enfor 39	recement officer means a person appointed by the Director under section	
equiv body	valent dose means the radiation-weighted dose in a tissue or organ of the	30
_	rt means to transport, send, or cause to be transported or sent from a point e New Zealand to a point outside New Zealand	
	amental requirements means the fundamental requirements set out in ions 9 to 13 12	
IAEA	means the International Atomic Energy Agency	35
-	rt means bring or cause to be brought into New Zealand in any manner a point outside New Zealand	
ionisi mater	ing radiation means radiation capable of producing ion pairs in biological rial	

irrad	iating apparatus means electrical equipment that—	
(a)	means any device capable of generating ionising radiation; but	
(b)	does not include any apparatus specified in regulations	
<u>(a)</u>	is designed to generate ionising radiation such as X-rays, neutrons, electrons, or other charged particles; or	5
<u>(b)</u>	produces ionising radiation as a by-product—	
	(i) resulting in a dose equivalent rate of or exceeding 1 microsievert per hour at a point 0.1 metres from any accessible surface; and	
	(ii) that has a maximum energy of or exceeding 5 kiloelectronvolts	
rant c	ster means the Minister of the Crown who, under the authority of a war- or with the authority of the Prime Minister, is for the time being respon- for the administration of this Act	10
	stry means the department of State that, with the authority of the Prime ster, is for the time being responsible for the administration of this Act	
nucle	ear material means any source material or any special fissionable material	15
_	pational exposure means exposure to ionising radiation experienced by ers during the course of their work	
_	Dier , in relation to a place, includes a person who is present at or in the and who is in apparent control of the place	
-	onal dosimetry service means a service that measures and records the ra- on doses received by people exposed to ionising radiation	20
place	includes—	
(a)	any dwelling, premises, vehicle, ship, craft, or aircraft; and	
(b)	a building or a structure; and	
(c)	part of a place	25
posse	ss includes store	
	c exposure means exposure to ionising radiation experienced by a mem- f the public and, for the avoidance of doubt, does not include—	
<u>(a)</u>	occupational exposure; or	
<u>(b)</u>	exposure experienced by patients for the purpose of medical or dental diagnosis or treatment; or	30
<u>(c)</u>	exposure experienced by caregivers or comforters while providing care, support, or comfort to patients undergoing radiological procedures for medical or dental diagnosis or treatment; or	
<u>(d)</u>	exposure experienced by volunteers in a programme of biomedical research	35

radiation means ionising radiation in the form of particles or waves that are

emitted from a radioactive material or an irradiating apparatus, or both

radia	ation ancillary service means—	
(a)	a personal dosimetry service; or	
(b)	a calibration service; or	
(c)	any other service that directly or indirectly supports or is supported by the radiation source and is prescribed by regulations	5
radia	ation danger means actual or imminent danger to—	
(a)	the health or safety of people as a result of their exposure to radiation; or	
(b)	the environment as a result of its exposure to radiation	
radia	ation safety plan means a plan submitted under section 19	
<u>radia</u>	ation safety requirements means—	10
<u>(a)</u>	the requirements of this Act, regulations, and the codes of practice; and	
<u>(b)</u>	the requirements of any radiation safety plan; and	
<u>(c)</u>	the conditions of any authorisation; and	
<u>(d)</u>	the conditions of any exemption granted under section 89(1B)	
	ation source means radioactive material to which this Act applies or an irting apparatus	15
	pactive material means any material that spontaneously emits ionising ra- on, including any naturally occurring radioactive material or any nuclear rial	
regul	lations means regulations made under this Act	20
seale	d radioactive material means radioactive material that is—	
(a)	permanently sealed in a capsule; or	
(b)	closely bonded and in solid form	
seize	includes secure against interference	
sell in	ncludes—	25
(a)	supply or otherwise deal in or dispose of, whether by way of sale, barter, loan, or gift; and	
(b)	receive for sale, expose for sale, have in possession for sale, or send or deliver for sale; and	
(c)	offer or attempt to sell; and	30
(d)	cause or allow to be sold	
sourc	ce licence means a licence described in section 18	
trans	sport—	
(a)	means the deliberate physical movement of a radiation source (other than that forming part of the means of propulsion) from one place to another; and	35

	(b)	includes the temporary storage of the radiation source in transit, as well as carriage; but	
	(c)	does not include the movement of the radiation source from one place to another within a specified site	
		ealed radioactive material means radioactive material that is not a sealed pactive material	5
	use l	icence means a licence granted under section 23.	
(2)	For t	he purpose of the definition of nuclear material in subsection (1),—	
	sour	ce material means—	
	(a)	uranium containing a mixture of isotopes occurring in nature, uranium depleted in the isotope 235, or thorium; and	10
	(b)	any material described in paragraph (a) that is in the form of metal, alloy, chemical compound, or concentrate; and	
	(c)	any material prescribed under section 93(1)(4)(c)	
	spec	ial fissionable material means—	15
	(a)	plutonium-239, uranium-233, or uranium enriched in the isotopes 235 or 233 or both; or	
	(b)	any combination of the material described in paragraph (a); or	
	(c)	any material prescribed under section 93(1)(4)(c).	
<u>(3)</u>	mean	the purpose of the definition of public exposure, caregiver or comforter as a person who willingly and voluntarily helps (other than in the person's pation) in the care, support, and comfort of a patient.	20
6	Act	binds the Crown	
	This	Act binds the Crown.	
7	Rela	tionship with specified enactments	25
(1)		ning in this Act affects or limits the application of—	
		the New Zealand Nuclear Free Zone, Disarmament, and Arms Control Act 1987; or	
	(b)	the Nuclear-Test-Ban Act 1999; or	
	(c)	the Atomic Energy Act 1945; or	30
	(d)	any regulations made under an Act referred to in paragraphs (a) to (c).	
(2)	sub	e event of any inconsistency between the provisions of an Act specified in section (1) and the provisions of this Act, the provisions of the Act specinin subsection (1) prevail.	35
(3)		ne event of any inconsistency between the provisions of any regulations e under an Act specified in subsection (1) and any regulations made	

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under this Act,	the provisions	of the regulations	made under the	Act specified
in subsection	(1) prevail.			

(4) To avoid doubt, if any radioactive material to which this Act applies is also a substance to which the Atomic Energy Act 1945 applies, this Act applies to that material regardless of whether a consent has been obtained under the Atomic Energy Act 1945 for that material.

Fundamental requirements

8 Duty to comply with fundamental requirements

- (1) Every person who deals with a radiation source must ensure that people and the environment are protected now and in the future from the adverse effects of the radiation source by complying with the fundamental requirements set out in **sections 9 to-13 12**.
- (2) In **sections 10 to-13 12**, **unauthorised** means unauthorised by or under any enactment.

9 Protecting people from radiation

- (1) A person who deals with a radiation source must ensure that as a result of dealing with the radiation source, the expected benefits to people and society outweigh the risk of harm to people and the environment.
- (2) A person who deals with a radiation source must ensure that the magnitude of individual doses of ionising radiation to which a person may be exposed, the number of people subject to exposure, and the likelihood of exposures to ionising radiation are as low as is reasonably achievable, taking into account economic, social, and environmental factors.
- (3) A person who deals with a radiation source must ensure that any ionising radiation exposure that results from a planned operation or activity does not exceed the applicable dose limits set out in **Schedule 3**.

10 Safety of radiation sources

- (1) No person may deal with a radiation source unless it is fit for its intended purpose.
- (2) A person who deals with a radiation source must take all reasonable steps to— 30
 - (a) ensure the safe placement and containment of the radiation source while it is stored or used; and
 - (b) minimise the likelihood of any accident, incident, or emergency that is caused wholly or partly by, or involves, the radiation source; and
 - (c) plan for action to be taken to respond to and mitigate the consequences 35 of—
 - (i) any accident, incident, or emergency; or
 - (ii) any loss of or unauthorised removal of the radiation source.

(3)		pite subsection (1) , a person may deal with a radiation source that is not or its intended purpose if—	
	<u>(a)</u>	the purpose of the dealing is to enable the source to be serviced or repaired or otherwise made fit for its intended purpose; and	
	<u>(b)</u>	the person holds a use licence or satisfies the requirements of this Act for dealing with a radiation source without an authorisation.	5
11	Secu	rity of radiation source	
		y person who deals with a radiation source must ensure that there are apriate security measures in place to prevent—	
	(a)	unauthorised access to the radiation source or to the place where the radiation source is stored or used:	10
	(b)	the loss or theft of the radiation source:	
	(c)	sabotage of the radiation source:	
	(d)	the unauthorised transfer or unauthorised removal of the radiation source:	15
	(e)	any unauthorised act through the use of the radiation source.	
12	Safe	disposal of radiation source	
	Ever	y person who disposes of a radiation source must do so safely.	
13	Trai	nsport, storage, and disposal of radiation source	
		person may transport, store, or dispose of a radiation source except as pered by this Act or regulations.	20
<u>12</u>	<u>Trai</u>	nsport, storage, and disposal of radiation source	
		y person who transports, stores, or disposes of a radiation source must do ifely and securely.	
		Subpart 2—Activities that require authorisation	25
		General provisions	
14	Acti	vities that require authorisation under this Act	
	No p	person may, unless this Act or regulations provide otherwise,—	
	(a)	manufacture, possess, or <u>manage and</u> control a radiation source without a source licence:	30
	(b)	use a radiation source without a use licence:	
	(c)	import or export radioactive material without a consent:	

perform a radiation ancillary service without an approval.

(d)

15	App	licatio	ns for authorisations must be made to Director				
	An a	pplicat	tion for a source licence, use licence, or consent, or approval must—				
	(a)	be m	ade to the Director; and				
	(b)	conta	ain the prescribed information; and				
	(c)	be ac	ecompanied by the prescribed fee.	5			
16	Situ	ations	where source licence not required				
	Desp	oite se	ction 14(a), a source licence is not required for—				
	(a)	the ti	ransport of a radiation source:				
	(b)		emporary custody of a radiation source by a person other than the er of the source licence if—	10			
		(i)	the management and control of the radiation source is subject to the direction of the holder of the source licence; and				
		(ii)	the temporary custody is not inconsistent with any term or condition of the source licence.				
17	Situations where use licence not required						
	Desp	Despite section 14(b) , a use licence is not required—					
	(a)		the performance of any prescribed activity <u>involving a radiation</u> ce by a person authorised by regulations; or				
	(b)	in an	y situation or class of situation prescribed by regulations; or				
	(c)		re the use of the radiation source is authorised by a source licence or section 18(2)-; or	20			
	<u>(d)</u>		the use of the radiation source is in accordance with section (a) or (b).				
			Source licences				
18	Soui	rce lice	ence	25			
(1)	A so	urce li	cence—				
	(a)	authorises a person to manage and control a radiation source regardless of whether the person owns or has physical possession of the radiation source; and					
	(b)	may	authorise a person to—	30			
		(i)	manufacture a radiation source; or				
		(ii)	have possession of a radiation source-; and				
	<u>(c)</u>	may	apply to 1 or more radiation sources.				

(2)	A source licence that authorises a person to have possession of a radiation
	source may authorise activities involving passive or limited use of the radiation
	source, such as the observation of the radiation source to obtain information.

19 Radiation safety plan

- (1) The Director may require an applicant for a source licence or renewal of that 5 licence to submit a radiation safety plan to the Director in respect of 1 or more radiation sources to which the application relates.
- A requirement by the Director to submit a plan must be in writing and state the (2) matters that the plan must address.
- The plan must demonstrate how the applicant intends to comply with— 10 (3)
 - the fundamental requirements that apply to the radiation source to which the application relates; and
 - the requirements of this Act-and the regulations, regulations, and the co-(b) des of practice.
- **(4)** The plan must—
 - 15 identify any risks of adverse effects on people or the environment that
 - the radiation source; or (i)
 - the proposed use of the radiation source; or (ii)
 - the proposed location of the radiation source; and
 - (b) identify any risks involved in transporting the radiation source; and
 - (c) identify mechanisms to—

may be caused by—

(i) prevent risks of the kinds described in paragraphs (a) and (b) from arising; and

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- reduce and eliminate those risks if they do arise; and
- (d) if required by the Director, set out the steps that the applicant will take to
 - reduce the likelihood of an accident, incident, or emergency that is (i) caused by or involves the radiation source; and
 - mitigate any adverse effects of any such accident, incident, or 30 emergency; and
- (e) address any matter that the Director considers should be addressed (for example, how the radiation source is to be transported and how and where the radiation source is to be used or stored); and
- be in the prescribed form (if any). (f)
- Before submitting the plan, the applicant must consult any agency that has a (5) role in, or is likely to be affected by, the plan.

(6)	The Director may approve the plan only if satisfied that the plan complies with the requirements of this section.					
20	When Director may grant source licence					
(1)	The Director may grant a source licence if—					
	(a)	the D	Director is satisfied that—	5		
		(i)	the applicant is a suitable person to hold a source licence; and			
		(ii)	the activity proposed in relation to the radiation source does not present a significant risk to the health or safety of people or to the environment; and			
	(b)		Director has approved any radiation safety plan submitted by the ap- nt; and	10		
	(c)	the D justif	Director considers that granting the source licence is appropriate and ied.			
(2)			or may impose conditions on a source licence that the Director con- opriate.	15		
(3)	Conditions on a source licence may, without limitation, relate to—					
	(a)	•	ype of radiation source that the person is authorised to manufacture, ess, or control:			
	(b)	the p	ermitted uses of the radiation source:			
	(c)	the p	lace (or places) at which the radiation source may be held or stored:	20		
	(d)	the tr	ransport of the radiation source:			
	(e)		mation that must be disclosed to other agencies regarding the radisource.			
<u>(3A)</u>			e licence applies to more than 1 radiation source, the Director may erent conditions in respect of each radiation source.	25		
(4)	If the source licence relates to nuclear material, the Director must not grant the licence unless—					
	(a)	appli port Prote	Director has received, to his or her satisfaction, assurances from the cant that the material will be protected during international transat the levels specified in Annex I of the Convention on Physical applicant of Nuclear Material applicant will comply with New Zeas international obligations referred to in section 3(b) ; and	30		
	(b)	eithe				
		(i)	the Minister approves the licence; or			

the Director is authorised under section 81 to approve the li-

(ii)

cence.

			•	
21	Duting	of holders	a of control	a licomeo
_	17111168	OI HORGE	, and 200111 a	- 111 6111 6

- (1) The holder of a source licence is responsible at all times for the management and control of the radiation source, including the transport of the radiation source and control of each radiation source to which the licence applies.
- (2) The holder of a source licence <u>has the following duties in respect of each radiation</u> ation source to which the licence applies:
 - (a) the holder must ensure that the radiation source is properly maintained and stored; and
 - (b) <u>the holder must ensure that appropriate security arrangements are in</u> place to avoid accidental or malicious use of the radiation source; and

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- (c) the holder must not abandon the radiation source; and
- (d) must dispose of the radiation source only in accordance with regulations;
- (e) must comply with the requirements of the radiation safety plan (if any); and
- (f) <u>the holder must comply with this Act, regulations, and any conditions of the licence</u> the radiation safety requirements.
- (3) If the holder of a source licence believes that an incident has occurred that has resulted in unintended loss or release of radiation, or overexposure of a person to radiation, the holder must—
 - (a) notify the Director as soon as practicable; and
 - (b) take steps to mitigate the effects of the incident, including, as appropriate, limiting access to the affected area; and
 - (c) provide appropriate clothing; and
 - (d) ensure that any person who has been exposed to radiation has a medical 25 examination and is provided with appropriate information; and
 - (e) comply with any other steps as required by the Director or prescribed by regulations (if any).

Use licences

22 Use licence 30

- (1) A use licence may authorise the licence holder to use any radiation source, a specified radiation source, or a radiation source of a specified class.
- (2) Only a natural person may apply for a use licence.
- (3) The use of a radiation source includes—
 - (a) the use of radiation emitting from the radiation source:
 - (b) causing the radiation source to emit radiation:

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	(c)	if the radiation source is radioactive material, administering, injecting, or implanting the material into a person, animal, plant, or thing.	
(4)	sour	ntural person who does not hold a use licence for a specified radiation are may, despite section 14(b) , use the radiation source if the person is g under the direct supervision of	5
	(a)	the person who holds the use licence for the radiation source; or	
	(b)	a person who is authorised by regulations to perform a prescribed activity.	
<u>(4)</u>		tural person (person A) who does not hold a use licence for a specified tion source may, despite section 14(b),—	10
	<u>(a)</u>	use the radiation source under the direct supervision of an authorised person; or	
	<u>(b)</u>	use the radiation source under the written instructions of an authorised person if—	
		(i) the use of the radiation source is of a mechanical or procedural nature; and	15
		(ii) person A is able to meet the fundamental requirements.	
<u>(5)</u>	The	written instructions referred to in subsection (4)(b) must—	
	<u>(a)</u>	contain procedures for the safe use of the radiation source; and	
	<u>(b)</u>	comply with the fundamental requirements; and	20
	<u>(c)</u>	be recorded by the authorised person in accordance with section 38.	
<u>(6)</u>	<u>In sı</u>	ubsections 4 and 5, authorised person means—	
	<u>(a)</u>	the person who holds the use licence for the radiation source; or	
	<u>(b)</u>	a person who is authorised by regulations to perform a prescribed activity involving the radiation source.	25
23	Grai	nt of use licence	
(1)	The	Director may grant a use licence if satisfied that—	
` /	(a)	the proposed use of the radiation source does not present a significant risk to the health or safety of people or to the environment; and	
	(b)	the proposed use of the radiation source is appropriate and justified; and	30
	(c)	the applicant has the appropriate training, qualifications, and experience; and	
	(d)	the applicant is a suitable person to hold the licence.	
(2)		Director may grant a use licence subject to any conditions impose condion a use licence that the Director considers appropriate.	35
(3)	Cond	ditions on a use licence may, without limitation, restrict—	
	(a)	the type of radiation source that may be used; and	

	(b)		ises of the radiation source, including any practices that may be carout that involve the radiation source; and	
	(c)	the p	laces at which the radiation source may be used.	
(4)		use li unles	icence relates to nuclear material, the Director must not grant the li-	5
	(a)	the N	Minister approves the licence; or	
	(b)	the I	Director is authorised under section 81 to approve the licence.	
24		es of h	nolders of use licences and persons under direct supervision and	
			ing people must comply with this Act, regulations, and the condise licence the radiation safety requirements:	10
	(a)	the h	older of the licence; and	
	(b)	- 1	person who uses the <u>a</u> radiation source (to which the licence applies) or the direct supervision of <u>in accordance with section 22(4)(a)</u> <u>b).</u>	15
		(i)	the holder of the licence; or	
		(ii)	a person who is authorised by regulations to perform a prescribed activity.	
			Consents	
25	Gran	t of co	onsent to import or export radioactive material	20
(1)			or may grant a consent to import or export radioactive material if the satisfied that—	
	(a)	the a	pplicant is a suitable person to hold the consent; and	
	(b)		proposed import or export does not present a significant risk to the th or safety of people or to the environment; and	25
	(c)	the p	roposed import or export is appropriate and justified; and	
	(d)	the p	roposed import or export is consistent with the purposes of this Act.	
(2)			or may grant the consent subject to any conditions impose condictions impose conditions impose conditi	
(3)	Cond	itions	on a consent may, without limitation, include—	30
	(a)		ictions on the type and quantity of radioactive material that may be orted or exported; and	
	(b)		ictions relating to the date by which the importation or exportation take place.	
(4)		conse unless-	ent relates to nuclear material, the Director must not grant the con-	35

	(a)	(a) the Director has received, to his or her satisfaction, assurances from the applicant that the material will be protected during international transport at the levels specified in Annex I of the Convention on the Physical Protection of Nuclear Material applicant will comply with New Zealand's international obligations referred to in section 3(b); and				
	(b)	either—				
		(i) the Minister approves the consent; or				
		(ii) the Director is authorised under section 81 to approve the consent.				
26	Duti	es of consent holders	10			
(1)	A co	nsent holder must—				
	(a)	ensure that appropriate security arrangements are in place to prevent or avoid accidental or malicious use of the radiation source; and				
	(b)	comply with this Act, regulations, and any conditions of the consent the radiation safety requirements.	15			
(2)	unin	e consent holder believes that an incident has occurred that has resulted in tended loss or release of radiation, or overexposure of a person to radiate, the holder must—				
	(a)	notify the Director as soon as practicable; and				
	(b)	take steps to mitigate the effects of the incident, including, as appropriate, limiting access to the affected area; and	20			
	(c)	provide appropriate clothing; and				
	(d)	ensure that any person who has been exposed to radiation has a medical examination and is provided with appropriate information; and				
	(e)	comply with any other steps required by the Director or prescribed by regulations (if any).	25			
		<i>Approvals</i>				
27	No p	erson may perform radiation ancillary services without approval				
	A pe	rson must not perform a radiation ancillary service unless—				
	(a)	the person has been granted an approval under section 28 to perform the service; and	30			
	(b)	the person complies with the conditions, if any, of that approval.				
28	Gra	nt of approval				
(1)		Director may grant an approval to a person to perform a radiation ancillary ce if he or she is satisfied that—	35			

	(b)	risk to the health or safety of people or to the environment.	
(2)		Director may grant an approval subject to any conditions that the Director ders appropriate.	
		Further provisions relating to all authorisations	5
29	Whe	n authorisation expires	
(1)	which	Director must determine the period for which an authorisation is in force, in must not exceed the maximum period prescribed by regulations (if any) in authorisation or class of authorisation.	
(2)	The a	authorisation expires on the expiry date specified by the Director unless—	10
	(a)	it is earlier renewed, suspended, or cancelled; or	
	(b)	section 31(6) applies.	
30	Susp	ension, variation, or cancellation of authorisation	
(1)		Director may suspend, vary, or cancel an authorisation if he or she believes asonable grounds that there is evidence of 1 or more of the following:	15
	(a)	the holder of the authorisation has failed to comply with-a fundamental requirement any of the radiation safety requirements:	
	(b)	the authorisation was obtained improperly:	
	(e)	the holder of the authorisation has contravened a condition of the authorisation:	20
	(d)	if the authorisation is a source licence, the holder of the authorisation has failed to comply with a requirement of the radiation safety plan (if any):	
	<u>(da)</u>	the holder of the authorisation has failed to comply with a compliance order:	
	(e)	the holder of the authorisation has been convicted of an offence against this Act:	25
	(f)	there would be a risk to the health or safety of people or to the environment if the authorisation were not suspended, varied, or cancelled:	
	(g)	there would be a risk to the security of the radiation source if the authorisation were not suspended, varied, or cancelled:	30
	(h)	the holder of the authorisation has ceased to hold a qualification, or meet other criteria, that formed the basis on which the authorisation was granted:	
	(i)	the holder of the authorisation has persistently or repeatedly compromised radiation safety:	35
	(j)	the holder of the authorisation has ceased working under the authorisa-	

tion:

(k)

the holder of the authorisation has failed to register a controlled radiation source in accordance with **section 34**.

(2)	The	Directo	or may vary an authorisation at the request of the holder.			
(3)	The	The Director must cancel an authorisation at the request of the holder.				
31	App	licatio	n to renew authorisation	5		
(1)	An application to renew an authorisation must—					
	(a)	be m	nade to the Director; and			
	(b)	comp	ply with any prescribed requirements; and			
	<u>(b)</u>	conta	ain the prescribed information; and			
	(c)	be ac	ecompanied by the prescribed fee.	10		
(2)			or may, subject to subsection (5) , renew an authorisation if the satisfied that—			
	(a)	the r	easons for granting the original authorisation still apply; or			
	(b)	there	e are other reasons that—			
		(i)	justify the renewal of the authorisation; and	15		
		(ii)	comply with the provisions of this Act that apply to the granting of the authorisation.			
(3)	The applicant, in the case of a source licence, must comply with-a any require ment to submit a radiation safety plan under section 19 .					
(4)	Subject to subsection (5) , if a radiation safety plan was required with the authorisation for which a renewal is sought,—					
	(a)	(a) the applicant must apply for the renewal of the approval for that plan; and				
	(b)	the I	Director may—			
		(i)	approve the plan if the reasons for approving the original plan still apply; or	25		
		(ii)	approve the plan for different reasons if satisfied that the plan complies with the requirements of section 19 .			
(5)	the I	Directo	orisation for which a renewal is sought relates to nuclear material, or must not renew the authorisation without the Minister's approval, Director is authorised under section 81 to approve the authorisa-	30		
(6)		mined	sation remains in force until an application for its renewal has been but only if the Director receives, before the authorisation ex-	35		
	(a)	the a	pplication for renewal; and			
	(b)	the p	prescribed fee; and			

(c) all necessary supporting information.

32 Director may require further information

- (1) If the Director considers that an applicant for an authorisation or a renewal of an authorisation is able to provide further relevant information, the Director may, by written notice to the applicant given not later than 10 working days after receipt of the application, request that the applicant provide the information specified in the notice.
- (2) If the applicant fails to comply with the request within 1 year after the date of the request, the application lapses and a new application will need to be made in relation to the same matter.

Compare: 1996 No 30 s 52

Subpart 3—Register of controlled radiation sources

33 Director must keep register of controlled radiation sources

- (1) The Director must keep a register of all controlled radiation sources.
- (2) In this Act, a **controlled radiation source** means—

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- (a) any irradiating apparatus:
 - (b) any sealed radioactive material:
- (c) any nuclear material (whether sealed or unsealed):
- (d) any unsealed radioactive material of a kind that regulations require to be registered.

(3) The purpose of the register is—

- (a) to help the Director to ascertain and monitor the location of controlled radiation sources; and
- (b) to facilitate the exercise of the compliance, assessment, and enforcement functions and powers of the Director; and
- (c) to support emergency preparedness and responses.

Person who holds authorisation for controlled radiation source must register source

The holder of a source licence must,—

- (a) as soon as practicable after the source licence is granted, register the controlled radiation source (to which the licence applies) with the Director; and
- (b) comply with requirements for registration that are prescribed in regulations, (if any); and
- (c) after registration of the radiation source, notify the Director as soon as 35 possible—

	(i)	of any change in the location of the radiation source; and	
	(ii)	of any change in the possession of the radiation source; and	
	(iii)	as to whether the radiation source has been disposed of or removed from New Zealand's jurisdiction; and	
	(iv)	of any other matter prescribed by regulations for the purpose of this section.	5
Info	matio	n that must be on register	
	register source	must include the following information for each controlled radi-	
(a)	a des	cription of the radiation source:	10
(b)	chang 34(c)	ges in the location of the radiation source as notified under section (i) :	
(c)		ame and contact address of the person who holds the relevant au- action and the owner of the radiation source:	
(d)		ature of the authorisation, and the date that the authorisation was ed and, if applicable, renewed or varied:	15
(e)	any o	ther information that may be required by the Director or by regula-	
		r may include in the register any other information in respect of the adiation source that the Director considers relevant.	20
Forn	n of re	gister	
	_	may be kept in any manner that the Director thinks fit, including, y or partly, by means of a device or facility that—	
(a)	recor	ds or shares information electronically or by other means; and	
(b)	-	its the recorded information to be readily inspected or reproduced sable form; and	25
(c)		its the recorded information to be accessed by electronic means, in-	

37 Search of register by approved persons

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(1)

(2)

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(1)

(2)

curate.

- **(1)** A search of the register may be carried out by an approved person—
 - (a) for a purpose specified in section 33(3)(a) to (c); or
 - (b) if it is necessary to prevent or lessen a serious and imminent threat to the 35 health or safety of people or to the environment; or

The Director may, as he or she thinks fit, remove any information on the regis-

ter to update the register or to ensure that the information on the register is ac-

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(c)

if it is necessary to avoid prejudice to the maintenance of the law (in-

	,	cluding the prevention, detection, investigation, prosecution, and punishment of offences); or	
	(d)	for a purpose authorised by the Privacy Commissioner under section 54(1) of the Privacy Act 1993; or	5
	(e)	if the information from the search is needed to plan for responses to any emergency.	
(2)	In this section, approved person means—		
	(a)	the Director-General; or	
	(b)	an enforcement officer; or	10
	(c)	the chief executive of the New Zealand Fire Service; or	
	(d)	a person approved by the Director.	
		Records	
38	Duty	to keep records and make them available	
(1)	A person who is granted an authorisation must keep records that contain sufficient information to enable the Director to ascertain whether the person is complying with the radiation safety requirements.		15
	(a)	the requirements of this Act; and	
	(b)	regulations; and	
	(e)	the conditions (if any) of the person's authorisation; and	20
	(d)	the requirements of any radiation safety plan.	
(2)	Without limiting subsection (1), the records kept must include details of—		
	(a)	the steps taken to ensure compliance with the matters described in sub- section (1) radiation safety requirements; and	
	(b)	any analysis undertaken or management or emergency management plans prepared by the person to assist him or her in complying with his or her duties under this Act; and	25
	(c)	the monitoring of steps taken to ensure compliance with any of the matters described in subsection (1) the radiation safety requirements; and	
	(d)	any complaints relating to the activity to which the authorisation relates that are received from any person, and the actions taken in relation to those complaints.	30
(3)	If a person is granted an authorisation in relation to radioactive material, he or she must also keep, in sufficient detail, records of—		
	(a)	the nature and quantity of any radioactive material that is held; and	35
	(b)	the nature and quantity of any radioactive material that is imported, exported, or proposed to be imported or exported, and the dates and times	

the place where the radioactive material is held; and

where it is held in a Customs controlled area; and

active material; and

(c)

(d)

(e)

(including expected dates and times) of each export or import of radio-

the site plans of the place where the radioactive material is held, except

any radioactive waste associated with the radioactive material (regard-

5

		less of whether the radioactive material is held, imported, or exported).	
(4)		person who holds the authorisation must ensure that the records are mad able to the Director when requested.	e
(5)		Director may, for the purposes of this Act, disclose any information ob d or made available under this section to—	- 10
	(a)	the Ministry of Foreign Affairs and Trade; and	
	(b)	any agency inside or outside New Zealand.	
	Comp	are: 1956 No 65 s 69ZD	
		Subpart 4—Enforcement	15
		Enforcement officers	
39	App	ointment of enforcement officers	
(1)	Tem	porary or permanent enforcement officers may be appointed—	
	(a)	to perform the functions and duties, and exercise the powers, of enforcement officers conferred by this Act; or	20
	(b)	to perform particular functions or duties, or exercise particular powers whether conferred on enforcement officers by this Act or delegated by the Director.	-
(2)	isfie perfo	re appointing a person as an enforcement officer, the Director must be said that the person—is qualified has appropriate experience and expertise to the functions and duties and exercise the powers to which the appoint relates.	o 25
(3)	The ficer	Director may impose conditions on the appointment of an enforcement of	f-
(4)		Director must issue a warrant of appointment to every person appointed a nforcement officer.	s 30
(5)	A wa	arrant of appointment must—	
	(a)	specify the functions, duties, and powers of the holder; and	
	(b)	be in the prescribed form; and	
	(c)	bear the photograph and signature of the holder; and	35
	(d)	contain any other particulars that may be prescribed.	
		2	:5

(6)	cient	A warrant of appointment is, in the absence of evidence to the contrary, sufficient proof that the holder of the warrant may perform the functions and duties, and exercise the powers, conferred on an enforcement officer.						
(7)	-	A person who ceases to be an enforcement officer must return the person's warrant of appointment.						
40	Powe	er to i	nspect places					
(1)			ement officer may, subject to subsection (3) subsections (3) and reasonable time enter and inspect any place for the purpose of—					
	(a)	monitoring compliance with this Act and regulations the radiation safety requirements; or						
	(b)	(b) monitoring compliance with New Zealand's international obligations referred to in section 3(b) ; or						
	<u>(ba)</u>	mon	itoring compliance with any compliance order; or					
	(c)	investigating and reporting on any complaints made to the Director in respect of any matter to which this Act applies.						
(2)	An enforcement officer may, subject to subsection (3) subsections (3) and (6), at any time enter and inspect—							
	(a)		place in which the officer reasonably believes a radiation source is ted or is used for providing radiation services; and					
	(b)	any p	place that the officer reasonably suspects—	20				
		(i)	has been, is being, or will be used in the commission of an offence against this Act; or					
		(ii)	contains a threat to the health or safety of-the people or to the environment.					
(3)	sent	of an	ement officer must not enter a private dwelling except with the con- occupier or owner of that dwelling or pursuant to a warrant issued on 98 of the Search and Surveillance Act 2012.	25				
(4)	subs	ectio	o whom a request for entry is made by an enforcement officer under on (1) or (2) must comply with that request on the production of the nt officer's warrant of appointment.	30				
(5)		An enforcement officer may, when inspecting any place for the purpose in subsection (1)(b) , be accompanied by an international inspector.						
<u>(6)</u>	,		ement officer must exercise his or her powers under this section in a t does not prejudice—					
	<u>(a)</u>	the s	ecurity and defence of New Zealand; or	35				
	<u>(b)</u>	the in	nternational relations of the Government of New Zealand.					

41 Powers of enforcement officers when inspecting places

- (1) An enforcement officer has, when inspecting any place under **section 40**, the power to—
 - (a) inspect any item reasonably believed to be a radiation source (an **item**):
 - (b) take samples or measurements of any thing reasonably believed to involve a radiation source:
 - (c) record, by any means, any thing, process, or situation reasonably believed to involve a radiation source:
 - (d) check the functioning and calibration of instruments and measuring equipment associated with the item:
 - (e) install and use equipment required for the measurement, surveillance, calibration, or containment of the item:
 - (f) take possession of and remove any equipment or device inspected:
 - (g) take possession of and remove any radiation source:
 - (h) inspect any document that is found in the place and that is believed on reasonable grounds to relate to a radiation source (whether in the place or elsewhere):
 - (i) take or make copies of, or copies of extracts from, any document inspected and, for that purpose,—
 - (i) take possession of and remove the document from the place for 20 any reasonable period:
 - (ii) in the case of a document stored otherwise than on paper, take any reasonable steps to reproduce, in usable form, any or all of the information in it.
- (2) Any person at the place must comply with a request made by an enforcement officer for the purpose of facilitating the exercise of any power under **subsection (1)**.
- (3) If an enforcement officer has taken any thing in accordance with subsection (1)(f), (g), or (i),—
 - (a) the officer must, within 5 working days after taking the thing, give the occupier of the place written notice of the thing taken, the reason for taking the thing, and where the thing will be kept; or
 - (b) the officer must, within 20 working days after taking the thing, give the person in charge of the place written notice that states—
 - (i) whether the thing will be returned or destroyed; and 35
 - (ii) either—
 - (A) the time and date of the return of the thing to the place; or
 - (B) the results of the analysis of the thing and why it is being destroyed.

(4)	An enforcement officer exercising powers under this section may be accompanied by—							
	(a)	any c	constable or international inspector; and					
	(b)	any a	assistants necessary in the circumstances.					
42	Com	plianc	ce with Building Act 2004	5				
(1)	ers the	If, while inspecting a place under section 40 , an enforcement officer considers that any building or sitework does not comply with the Building Act 2004, the enforcement officer must by written notice give to the appropriate territorial authority details of how the building or sitework is considered not to comply.						
(2)			ion, building , sitework , and territorial authority have the meanto them by section 7 of the Building Act 2004.	10				
43	Requ	ıireme	ent to answer questions					
(1)	charg	this section, an applicable person means any person who appears to be in arge of, to be employed in, or to be undertaking any work in, or to have dertaken any work in, the place concerned (or any part of it).						
(2)	quire	an ap	ecting any place under section 40 , an enforcement officer may replicable person to answer any question that the officer may reasonathe purpose of—					
	(a)	monitoring compliance with this Act and regulations the radiation safety requirements; or						
	(b)	b) monitoring compliance with New Zealand's international obligations referred to in section 3(b) ; or						
	<u>(ba)</u>	moni	itoring compliance with any compliance order; or					
	(c)	ascer	rtaining whether the place concerned—					
		(i)	is where a radiation source is located; or	25				
		(ii)	is used to provide a radiation ancillary service; or					
		(iii)	has been, is being, or will be used in the commission of an offence against this Act; or					
		(iv)	contains a threat to the health or safety of people or to the environment.	30				
44	Gene	eral po	ower to request information					
(1)		An enforcement officer may request in writing any information about any radiation source from—						
	(a)		person who holds an authorisation under this Act or any person act- inder that person's supervision; or	35				
	(b)		person who is exempted by regulations from the requirement to hold elicence or any person acting under that person's supervision; or					

	(c)	•	person who the officer reasonably believes possesses or uses a radi- n source.			
(2)	_		o whom the request is made must comply with the request within 10 ays after receiving it.			
			International inspectors	5		
45	App	ointm	ent of international inspectors			
(1)			rpose set out in section 3(b) , the Director may appoint an interspector for a period specified by the Director.			
(2)		r is sa	or must not appoint a person under subsection (1) unless the Dirtisfied that the person has been designated by the IAEA as an in-	10		
(3)	The	Direct	or must issue a certificate identifying the international inspector.			
46	Inte	rnatio	nal inspector must be accompanied by enforcement officer			
(1)	An international inspector must be accompanied by an enforcement officer during the period specified by the Director under section 45(1) .					
(2)	An i requ		tional inspector must produce his or her identification certificate on			
			Compliance orders			
47	Com	plian	ce orders			
(1)	An enforcement officer may, with the prior approval of the Director, issue a compliance order to a person if—					
	(a)	tions	officer believes the person is not complying with the Act, regulas, or any condition of an authorisation the radiation safety requirets; or			
	(b)	the c	officer believes on reasonable grounds that—	25		
		(i)	the person has done or omitted to do anything that involves a radiation source; and			
		(ii)	the act or omission has caused or is likely to cause significant adverse effects on the health or safety of people or on the environment.	30		
(2)	A co	mplia	nce order made under this section—			
	(a)	son	require the person to cease anything being done, or prohibit the per- from commencing anything to be done, by or on behalf of that per- that the enforcement officer believes—			
		(i)	contravenes or is likely to contravene this Act, regulations, or any condition of an authorisation the radiation safety requirements; or	35		

		(ii)	relates to any radiation source and has, or is likely to have, an adverse effect on the health or safety of people or on the environment; or					
		(iii)	relates to any radiation source and has, or is likely to have, an adverse effect on the safety or security of the radiation source; or	5				
	(b)	-	require the person to do something that the enforcement officer besis—					
		(i)	necessary to ensure that the person complies with-this Act, regulations, or any conditions of an authorisation the radiation safety requirements; or	10				
		(ii)	necessary to avoid, remedy, or mitigate any actual or likely adverse effects on people or the environment caused by or on behalf of the person that result from any breach of this Act, regulations, or any condition of an authorisation the radiation safety requirements.	15				
(3)			ace order may be made subject to any conditions that the enforcer considers reasonable in the circumstances.					
(4)	ment officer considers reasonable in the circumstances. The person to whom the compliance order is issued must—							
	(a)	(a) comply with the order within the time specified in the order; and						
	(b)		all the costs and expenses of complying with the order, unless the directs otherwise.	20				
48	Fori	n, cont	ent, and service of compliance order					
(1)	A co	mplian	ce order must contain—					
	(a)	the n	ame of the person to whom it is addressed; and					
	(b)	the re	easons for the order; and	25				
	(c)	the a	ctions required to be taken or ceased or not undertaken; and					
	(d)	_	eriod within which the actions must be taken or cease (which must period that is reasonable in the circumstances); and					
	(e)	the co	onsequences of not obeying the order; and					
	(f)	the n	ame and address of the person who served the order; and	30				
	(g)	any c	other information required by regulations.					
(2)	A co	mplian	ce order must be served in the manner prescribed in regulations.					
			Seizure of radiation source					
49	Seiz	ure, sto	orage, and disposal of radiation source					
(1)			or may at any time seize a radiation source in order to prevent or y immediate risk—	35				
	(a)	to the	e health or safety of people or to the environment; or					

	(b)	posed by the safety or security of the radiation source.	
(2)		Director may at any time seize a radiation source that the Director has reable cause to suspect—	
	(a)	is in the possession of a person who does not hold an authorisation for the radiation source; or	5
	(b)	is evidence of the commission of an offence under this Act or the Terrorism Suppression Act 2002.	
(3)	The that-	Director or any Customs officer may at any time seize a radiation source —	
	(a)	is being, or is to be, exported without consent under this Act; or	10
	(b)	has been imported without consent under this Act.	
(4)	The	Director must—	
	(a)	store the radiation source seized under this section safely and securely in order to minimise any risk to people and the environment; and	
	(b)	ensure that the storage of the radiation source complies with regulations (if any) the radiation safety requirements; and	15
	(c)	take steps to render the radiation source harmless.	
(5)	The	Director—	
	(a)	may store or dispose of the radiation source seized under this section in any manner that the Director considers appropriate in the circumstances; but	20
	(b)	if the radiation source is seized under subsection (2)(b) , the Director may dispose of it only after the completion of any proceedings that relate to the radiation source.	
(6)		costs of seizing, storing, or disposing of a radiation source under this secmay be recovered from—	25
	(a)	any person who, in failing to comply with a provision of this Act, caused or was likely to have caused the immediate risk referred to in subsection (1) ; or	
	(b)	the person described in subsection (2)(a); or	30
	(c)	the person who committed the offence under this Act or the Terrorism Suppression Act 2002.	
(7)	The	Director may,—	
	(a)	in any manner that he or she considers appropriate, take steps to remedy any adverse effects or damage associated with the radiation source, in- cluding remediation of a site associated with the source (remediation); and	35
	(b)	recover the costs of any remediation from a person referred to in sub-	

section (6).

50 Director may return seized materi	50	Director 1	may	return	seized	materia
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The Director may return material seized under **section 49(1)** to another State if—

- (a) the material—
 - (i) belongs to that State; or

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- (ii) belongs to a national or resident of that State; or
- (iii) was stolen or unlawfully obtained from that State; and
- (b) the return of the material is consistent with New Zealand's international obligations; and
- (c) the Director is satisfied with the arrangements, if any, for the recovery of all or some of the costs of the return.

Part 2

Appeals, emergencies, offences, and other matters

Subpart 1—Appeals

51 Appeal against Director's decision may be made to District Court

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- (1) A person affected by any of the following decisions of the Director may appeal against the decision to the District Court:
 - (a) a decision to grant an authorisation:
 - (b) a decision to impose conditions or a particular condition on an authorisation:

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- (c) a decision to decline an authorisation:
- (d) a decision to suspend, vary, or cancel an authorisation:
- (e) a decision to issue a compliance order-:
- (f) a decision to impose conditions or a particular condition on a compliance order.

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- (2) The appeal—
 - (a) must be brought to the District Court by way of notice of appeal in accordance with the rules of court; and
 - (b) must be lodged within 20 working days after notice of the decision is communicated to the appellant, or within any further time that a District 30 Court Judge allows on application made before or after the period expires.

52	Dist	rict Co	ourt may refer matter back for reconsideration					
(1)	rect	Instead of determining an appeal under section 51 , the District Court may direct the Director to reconsider, either generally or in respect of any specified aspect, the whole or any part of the decision.						
(2)	In gi	ving a	direction under subsection (1), the court—	5				
	(a)	must	t state its reasons for the direction; and					
	(b)		as it thinks just, give any other directions in relation to the matter red back for reconsideration.					
(3)	The	Directo	or—					
	(a)	must	reconsider the matter; and	10				
	(b)	in do	oing so, must—					
		(i)	take the court's reasons into account; and					
		(ii)	give effect to the court's directions.					
	Comp	are: 200	3 No 48 s 111					
53	Deci	sion to	have effect pending determination of appeal	15				
			of the Director against which an appeal is lodged continues in force District Court orders otherwise.					
54	Proc	edure	on appeal					
(1)		ppeal it is lo	under this Part must be heard as soon as is reasonably practicable odged.	20				
(2)	An a	ppeal	under this Part is by way of rehearing.					
(3)	On h	earing	the appeal, the District Court—					
	(a)	may	confirm, reverse, or modify the decision appealed against; and					
	(b)	may	make any other decision that the Director could have made.					
(4)	The	court r	must not review—	25				
	(a)	any j	part of a decision not appealed against; or					
	(b)	any o	decision not appealed against.					
(5)		ept as p is fina	provided in section 55 , the decision of the District Court on an ap-l.					
55	App	eal on	question of law to High Court	30				
(1)	A pa	rty to	an appeal to the District Court under section 51 may appeal to the against any determination of law arising in the appeal.					
2)	The	anneal	must be heard and determined in accordance with the High Court					

Rules.

Subpart 2—Emergencies

In this subpart, unless the context otherwise requires,—

emergency management powers. in relation to the Police, means any powers conferred on the Police under any enactment that relates to the functions of the Police described in section 9(h) of the Policing Act 2008

enforcement officer means—

- (a) an enforcement officer within the meaning of section 5(1); or
- (b) an enforcement officer within the meaning of section 135 of the Hazardous Substances and New Organisms Act 1996

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- (b) any constable, chief fire officer, or person exercising the powers of a chief fire officer under section 28, 28A, or 29 of the Fire Services Act 1975; or
- (c) a person appointed, for the purpose of enforcing the provisions of the Hazardous Substances and New Organisms Act 1996, by a person referred to in section 97 of that Act.

non-invasive radioactivity testing means the non-invasive testing of a person for the purpose of determining whether the person is so contaminated that the person has become a source of radiation

non-invasive testing means the testing of a person by visual inspection, 20 screening devices, or other means that do not involve physical contact, except where the physical contact is minor or transitory in nature

on site means at the place where there is an actual or imminent danger to the health or safety of people or to the environment resulting from possible exposure to radiation.

57 Declaration of radiation emergency

- (1) The Director may declare a radiation emergency if—
 - (a) the Director has reasonable grounds to believe there is a radiation danger; and
 - (b) a state of emergency is not in force under the Civil Defence Emergency 30 Management Act 2002; and
 - (c) the radiation danger is not being dealt with under the Fire Service Act 1975; and
 - (d) the Police are not exercising any emergency management powers in response to the radiation danger.
- (2) Despite subsection (1),—

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- (a) subsection (1)(c) does not apply if the fire officer in control of the emergency and an enforcement officer jointly decide that the provision does not apply:
 (b) subsection (1)(d) does not apply if the member of the Police in control of the emergency and an enforcement officer jointly decide that the provision does not apply.
- (3) The Director must specify the area to which the declaration of a radiation emergency applies.
- (4) A declaration of a radiation emergency—
 - (a) comes into force at the time and date on which the declaration is made; 10 and
 - (b) expires, subject to **subsection (5)**, at the end of 10 days; and
 - (c) may, subject to **subsection (5)**, be extended by the Director for a further 10 days; and
 - (d) may be terminated before its expiry by the Director at a time and date 15 specified by the Director.
- (5) A declaration of a radiation emergency that is not made in writing expires 48 hours after the declaration is made unless the Director confirms the declaration in writing within those 48 hours.
- (6) If a declaration of emergency under the Hazardous Substances and New Organisms Act 1996 is in force at the same time as a declaration under this section is in force, the declaration under this section overrides the declaration under that Act.
- (7) A declaration of a radiation emergency under this section has effect over the area specified under **subsection (3)**.
- (8) Despite **subsections (4) and (5)**, a declaration of a radiation emergency under this section ceases when a state of emergency is declared under the Civil Defence Emergency Management Act 2002.

58 On site declaration of radiation emergency

- (1) An enforcement officer may declare a radiation emergency on site if— 30
 - (a) the officer has reasonable grounds to believe there is a radiation danger; and
 - (b) a state of emergency is not in force under the Civil Defence Emergency Management Act 2002; and
 - (c) the radiation danger is not being dealt with under the Fire Service Act 35 1975; and
 - (d) the Police are not exercising any emergency management powers in response to the radiation danger.
- (2) Despite subsection (1),—

(3)

(4)

(5)

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59

(1)

21 59	Radiation Safety Bill	
(a)	subsection (1)(c) does not apply if the fire officer in control of the emergency and an enforcement officer jointly decide that the provision does not apply:	
(b)	subsection (1)(d) does not apply if the member of the Police in control of the emergency and an enforcement officer jointly decide that the provision does not apply.	5
The	enforcement officer must declare the radiation emergency by—	
(a)	identifying himself or herself to any people in the vicinity; and	
(b)	stating his or her authority to exercise emergency powers; and	
(c)	announcing the nature of the emergency and specifying the area to which the declaration applies.	10
	enforcement officer must as soon as is reasonably practicable notify the ctor that a radiation emergency has been declared under this section.	
	declaration of a radiation emergency under this section ceases on the earlif the following times:	15
(a)	48 hours after the time of declaration:	
(b)	when a state of emergency is declared under the Civil Defence Emergency Management Act 2002:	
(c)	when the radiation emergency is managed under the Fire Service Act 1975:	20
(d)	when the Police exercise their emergency management powers in response to the emergency.	
	on the subsection (5) , a declaration of a radiation emergency may be extensive the Director for a period of up to 10 days.	
isms	declaration of emergency under the Hazardous Substances and New Organ-Act 1996 is in force at the same time as a declaration under this section is ree, the declaration under this section overrides the declaration under that	25
	eclaration of a radiation emergency under this section has effect over the announced under subsection (3) .	30
Effe	ct of declaration on <u>certain</u> enforcement officers under other enact-	
force	ong as a declaration of a radiation emergency under section 57 or 58 is in e, an enforcement officer described in paragraph (c) of the definition of recement officer in section 56 within the meaning of section 135 of the	35

Hazardous Substances and New Organisms Act 1996 may (in addition to any powers conferred under this subpart) exercise in respect of the radiation emergency any power under that Act the Hazardous Substances and New Organisms

	Act 1996 that the officer may exercise during an emergency within the meaning of Part 9 of that Act.						
(2)	othe	r powe	section (1) does not limit the exercise by the enforcement officer of any power that the officer may exercise under the Hazardous Substances and Organisms Act 1996.				
60	Eme	Emergency powers					
(1)			ement officer may, while a radiation emergency is in force or while on (2) applies, do 1 or more of the following:				
	(a)	ente	r a place at any time—				
		(i)	without a warrant; and	10			
		(ii)	without complying with section 40:				
	(b)		ire a person to undergo non-invasive radioactivity testing if the offinas reasonable cause to believe that the person—				
		(i)	has been exposed to radiation; and				
		(ii)	may pose a risk to the health or safety of any person or to the environment:	15			
	(c)	exer	cise 1 or more of the powers set out in section 40 :				
	(d)	exer	cise 1 or more of the powers set out in section 49 :				
	(e)	direct a person to stop an activity that may be contributing to the radiation danger:					
	(f)	request, either orally or in writing, a person to take action to prevent or limit the extent of the radiation danger:					
	(g)	direct a person to leave a place that is in the vicinity of the radiation danger:					
	(h)	direction direct	ct a person to refrain from entering the vicinity of the radiation dan-	25			
	(i)	requ	isition property for use in responding to the radiation danger:				
	(j)		roy property or anything else in order to prevent or limit the extent ne radiation danger:				
	(k)		are the site for up to 24 hours after the radiation danger or state of rgency has ceased.	30			
(2)	This	subsec	ction applies if—				
	(a)		ate of emergency is in force under the Civil Defence Emergency agement Act 2002; and				
	(b)		Director of Civil Defence Emergency Management or a Controller hin the meaning of the Civil Defence Emergency Management Act	35			

2002)—

		(i)	has reasonable grounds to believe that a radiation danger has arisen as part of the emergency; and				
		(ii)	has requested that an enforcement officer respond to or assist in responding to the radiation danger.				
(3)	An 6 (1)—		ement officer may exercise the powers conferred by subsection	5			
	(a)		in or outside the declared radiation emergency area or the area in ch the radiation danger is located; and				
	(b)		to the extent that those powers are reasonably necessary to elimi- or reduce the extent of the damage caused by the radiation danger.	10			
(4)	red b	If an enforcement officer enters private property pursuant to the powers conferred by subsection (1) , he or she must advise the occupier of the property as soon as practicable.					
(5)	(1),		son who is required by an enforcement officer, under subsection e any action, or not to take any action, must comply with that re-	15			
(6)	New	Zeala	etion (1)(e)(f), person includes the New Zealand Defence Force or and Fire Service.				
			06 No 30 s 137				
61		-	tion for property requisitioned or destroyed	20			
(1)	emer emer dama	60(1) gency gency age ca	cement officer or a person acting at the officer's request under sec - (i) requisitions property from a person for use in responding to an or destroys property in order to prevent or limit the extent of the under section 60(1)(j) , reasonable compensation for any loss or used by the requisition or destruction of the property must, at the uest of a person with an interest in the property, be paid,—	25			
	(a)		e enforcement officer is a member of the Police, out of money appriated by Parliament for the purpose; or				
	(b)	if the	e enforcement officer was appointed under section 39 , by the Dir- r; or	30			
	(e)		ny other case, by the organisation whose chief executive appointed enforcement officer.				
<u>(1)</u>	<u>ment</u> 60(1	t offic	n applies if an enforcement officer or a person acting at the enforce- er's request requisitions property from a person under section or use in responding to an emergency or destroys property under sec- (i) in order to prevent or limit the extent of an emergency.	35			

(1A) If this section applies, reasonable compensation for any loss or damage caused

person with an interest in the property, be paid,—

by the requisition or destruction of the property must, at the written request of a

propriated by Parliament for the purpose; or

<u>(a)</u>

if the enforcement officer is a member of the Police, out of money ap-

	<u>(b)</u>	if the enforcement officer was appointed under section 39 , by the Director; or					
	<u>(c)</u>	in any other case, by the organisation whose chief executive appointed the enforcement officer.	5				
(2)	contr	pensation is not payable under this section to any person who caused, or ibuted substantially to, the emergency that brought about the requisition or uction.					
(3)	A court of competent jurisdiction must determine any dispute about a more of the following:						
	(a)	a person's entitlement to compensation under this section:					
	(b)	the amount of compensation:					
	(c)	the liability of the Crown, or any other person or organisation, to pay compensation.	15				
	Comp	are: 1996 No 30 s 138					
62	Prot	ection of enforcement officers and people assisting					
	perso any a	ction or proceedings may be brought against an enforcement officer or a on acting at an enforcement officer's request under this Part in respect of action taken by the person if the person acted in good faith and with reable care.	20				
63	Radi	Radiation response plan					
	may	Director must ensure that there is a radiation response plan for events that involve radiation safety and that the plan contains appropriate operational gements.	25				
64		ctor to contribute to development of emergency management planning strategies under other Acts					
	strate	Director must contribute to the development of emergency management gies and emergency management plans under other Acts to the extent that strategies or plans relate to radiation safety.	30				
		Subpart 3—Offences					
65	Offe	nce to contravene fundamental requirements					
(1)	-	rson who contravenes any of the fundamental requirements commits an ce and is liable on conviction,—					
	(a)	in the case of an individual, to a fine not exceeding \$100,000; or	35				
	(b)	in the case of a person or an organisation other than an individual, to a fine not exceeding \$500,000.					
		39					

(2)	If a person is convicted of an offence under this section, the court may, instead of or in addition to imposing a fine, order the person to mitigate or remedy, or pay the costs of mitigating or remedying, any adverse effects on people or the environment that—				
	(a)	were caused by or on behalf of the person; or	5		
	(b)	relate to any land of which the person is the owner or the occupier.			
(3)		prosecution for an offence against this section, it is not necessary to prove the defendant intended to commit the offence.			
(4)	Section.	tion 76 contains a defence to a prosecution for an offence against this sec-	10		
66	Offe	nce to do certain things without authorisation			
(1)	-	rson who contravenes any of paragraphs (a) to (c) of section 14 coman offence and is liable on conviction,—			
	(a)	in the case of an individual, to a fine not exceeding \$100,000; or			
	(b)	in the case of a person or an organisation other than an individual, to a fine not exceeding \$500,000.	15		
(2)	-	rson who contravenes section 14(d) commits an offence and is liable on iction,—			
	(a)	in the case of an individual, to a fine not exceeding \$20,000; or			
	(b)	in the case of a person or an organisation other than an individual, to a fine not exceeding \$100,000.	20		
(3)		prosecution for an offence against this section, it is not necessary to prove the defendant intended to commit the offence.			
(4)	Section.	tion 76 contains a defence to a prosecution for an offence against this sec-	25		
67	Offe	nce to provide false or misleading information			
(1)	A person commits an offence who provides false or misleading information in any—				
	(a)	application for an authorisation or a renewal of an authorisation; or			
	(b)	radiation safety plan submitted to the Director.	30		
(2)	A pe	rson who commits an offence under this section is liable on conviction,—			
	(a)	in the case of an individual, to a fine not exceeding \$50,000; or			
	(b)	in the case of a person or an organisation other than an individual, to a fine not exceeding \$250,000.			
(3)		prosecution for an offence against this section, it is not necessary to prove the defendant intended to commit the offence.	35		

(4)	Section 76 contains a defence to a prosecution for an offence against this section.					
68	Duties of persons who hold authorisations					
(1)	A holder of a source licence commits an offence who fails to comply with section 21 .					
(2)	unde with	A person who uses a radiation source (whether as a holder of a use licence or under the direct supervision of a person who holds a use licence in accordance with section 22(4)(a) or (b)) commits an offence if the person fails to comply with section 24.				
(3)	A co	nsent holder commits an offence who fails to comply with section 26 .	10			
(4)	-	rson who commits an offence against any of subsections (1) to (3) is e on conviction,—				
	(a)	in the case of an individual, to a fine not exceeding \$50,000; or				
	(b)	in the case of a person or an organisation other than an individual, to a fine not exceeding \$250,000.	15			
(5)	A person with approval to perform a radiation ancillary service who fails to comply with any conditions of that approval commits an offence and is liable to a fine not exceeding \$20,000.					
(6)	In a prosecution for an offence against this section, it is not necessary to prove that the defendant intended to commit the offence.					
(7)	Section.	ion 76 contains a defence to a prosecution for an offence against this sec-				
69	Offe	nces relating to register				
(1)	A person who contravenes section 34 commits an offence and is liable on conviction,—					
	(a)	in the case of an individual, to a fine not exceeding \$20,000; or				
	(b)	in the case of a person or an organisation other than an individual, to a fine not exceeding \$100,000.				
(2)		prosecution for an offence against this section, it is not necessary to prove the defendant intended to commit the offence.	30			
(3)	Sect tion.	ion 76 contains a defence to a prosecution for an offence against this sec-				
70	Offe	nce relating to record keeping				
(1)	A person who contravenes section 38 commits an offence and is liable on conviction,—					
	(a)	in the case of an individual, to a fine not exceeding \$20,000; or				

	(b)	in the case of a person or an organisation other than an individual, to a fine not exceeding \$100,000.	
(2)		prosecution for an offence against this section, it is not necessary to prove the defendant intended to commit the offence.	
(3)	Section.	tion 76 contains a defence to a prosecution for an offence against this sec-	5
71	Offe	nce to refuse entry	
		rson who refuses an enforcement officer's request for entry under section ommits an offence and is liable on conviction,—	
	(a)	in the case of an individual, to a fine not exceeding \$50,000; or	10
	(b)	in the case of a person or an organisation other than an individual, to a fine not exceeding \$250,000.	
72	Offe	nce not to answer questions or provide requested information	
(1)	A pe	rson commits an offence who,—	
	(a)	in response to a question by an enforcement officer under section 43 , fails to provide an answer or provides a false or misleading answer:	15
	(b)	in response to a request under section 44 , fails to provide information or provides false or misleading information:	
	(c)	alters, conceals, or destroys a document or information, contrary to section 38(1) and (2) or any other applicable requirement of this Act.	20
(2)	A potion,	erson who commits an offence against this section is liable on convic-	
	(a)	in the case of an individual, to a fine not exceeding \$50,000; or	
	(b)	in the case of a person or an organisation other than an individual, to a fine not exceeding \$250,000.	25
73	Offe	nce to obstruct, etc, enforcement officers	
(1)	-	erson commits an offence who obstructs, hinders, resists, or deceives an en-	
	(a)	any power or function under section 60; or	
	(b)	any other power or function under this Act.	30
(2)		erson who commits an offence against subsection (1)(a) is liable on con- on,—	
	(a)	in the case of an individual, to a fine not exceeding \$100,000; or	
	(b)	in the case of a person or an organisation other than an individual, to a fine not exceeding \$500,000.	35
(3)	A pe	erson who commits an offence against subsection (1)(b) is liable on con-	

to a

5

(a)	in the case of an individual, to a fine not exceeding \$50,000; or
(b)	in the case of a person or an organisation other than an individual
	fine not exceeding \$250,000.

- (4) In a prosecution for an offence against this section, it is not necessary to prove that the defendant intended to commit the offence.
- (5) **Section 76** contains a defence to a prosecution for an offence against this section.

Offence not to comply with requirement of enforcement officer in emergency

- (1) A person who contravenes **section 60(5)** commits an offence and is liable on 10 conviction,—
 - (a) in the case of an individual, to a fine not exceeding \$100,000; or
 - (b) in the case of a person or an organisation other than an individual, to a fine not exceeding \$500,000.
- (2) In a prosecution for an offence against this section, it is not necessary to prove 15 that the defendant intended to commit the offence.
- (3) **Section 76** contains a defence to a prosecution for an offence against this section.

75 Offence not to comply with compliance order

- (1) A person who does not comply with a compliance order commits an offence 20 and is liable on conviction,—
 - (a) in the case of an individual, to a fine not exceeding \$50,000; or
 - (b) in the case of a person or an organisation other than an individual, to a fine not exceeding \$250,000.
- (2) If the Director takes remedial action because a person has not complied with a compliance order, the Director may recover the costs of the remedial action from the person.
- (3) In this section, **remedial action** means any action that the Director reasonably takes to protect the health or safety of people or protect the environment.
- (4) In a prosecution for an offence against this section, it is not necessary to prove that the defendant intended to commit the offence.
- (5) **Section 76** contains a defence to a prosecution for an offence against this section.

76 Defence in prosecution for strict liability offence

- (1) This section applies in a prosecution for an offence against any of sections **65** 35 **to 70 and 73 to 75**.
- (2) The defendant has a defence if the defendant proves that—

(a)

the commission of the offence was due to—

		(i)	an act or omission of another person; or	
		(ii)	an accident; or	
		(iii)	some other cause outside the defendant's control; and	
	(b)		defendant took all reasonable steps to avoid the commission of the nce or offences of the same kind.	5
77	Liab	oility of	f body corporate, principal, or individual	
(1)	This	section	n applies when—	
	(a)		dy corporate is charged with an offence against this Act for an act or ssion of a director, an employee, or an agent:	10
	(b)	_	principal is charged with an offence against this Act for an act or ssion of an agent:	
	(c)		ndividual is charged with an offence against this Act for an act or asion of an employee or agent.	
(2)			omission under subsection (1) is also treated as the act or omisbody corporate, principal, or individual.	15
(3)	In th	is secti	ion, agent includes a contractor.	
78	Cou	rt may	order person to mitigate or remedy adverse effects	
	cour	t may, r the p	is convicted of an offence under a provision of this subpart, the instead of or in addition to imposing a fine under that provision, person to mitigate or remedy, or pay the costs of mitigating or remarks adverse effects on people or the environment that—	20
	(a)	were	e caused by or on behalf of the person; or	
	(b)	relate	e to any land of which the person is the owner or the occupier.	
			Subpart 4—Director for Radiation Safety	25
79	App	ointmo	ent of Director for Radiation Safety	
(1)	Ther	e must	t be a Director for Radiation Safety.	
(2)	that	the pe	for-General must appoint a person as Director after being satisfied erson has the appropriate experience and expertise to perform the nd duties and exercise the powers of the Director.	30
(3)		-	h who is appointed Director must be an existing employee of the be appointed as an employee of the Ministry.	
80	Func	ctions,	duties, and powers of Director	
(1)			ons, duties, and powers of the Director are those conferred or imnis Act or any other enactment.	35

(2)

A function of the Director is to facilitate New Zealand's compliance with its

international obligations, including providing assistance to international in-

	spec	tors.				
(3)		In performing his or her functions or duties and in exercising his or her powers, the Director—				
	(a)	must	act independently of the Director-General; but			
	(b)	is sub	oject to any general policy directions given by the Minister that—			
		(i)	affect radiation safety; and			
		(ii)	are not inconsistent with this Act -or regulations, regulations, or the codes of practice.	10		
(4)			or is accountable to the Director-General for the performance of his ions and duties and the exercise of his or her powers.			
(5)	conf	licts of	or must have effective arrangements in place to avoid or manage any interest that may arise in the performance of his or her functions and the exercise of his or her powers.	15		
(6)	The	Directo	or must, after making any decision on an authorisation,—			
	(a)	tative ough	notice of the decision to any authorities or agencies or any represen- e of those authorities or agencies that, in the Director's opinion, t to be notified and are likely to have an interest in the subject mat- f the decision; and	20		
	(b)		e Director thinks appropriate, include in the notice the reasons for ecision.			
81		ister m r matei	ay authorise Director to approve authorisations relating to nurial			
	cenc	e, use	er may, in writing, authorise the Director to approve a source li- licence, or consent, or any class of source licence, use licence, or at relates to a specified type or quantity of nuclear material.	25		
82	Dele	gation	of powers, functions, or duties of Director			
(1)	The Director may delegate to any person any of his or her functions, duties, or			30		
(2)	A de	A delegation under subsection (1)—				
	(a)	may ate:	be made subject to any conditions that the Director thinks appropri-			
	(b)	may	be made generally or in any particular case:	35		
	(c)		not affect or prevent the performance of any function or duty, or the cise of any power, by the Director:			

	••••			
	(d)	does not affect the responsibility of the Director for the actions of any delegate acting under the delegation.		
(3)	may,	erson who is delegated any function, duty, or power under subsection (1) unless the delegation provides otherwise, perform the function or duty or cise the power in the same manner and with the same effect as if the delewere the Director.	5	
(4)	Ever	y person purporting to act under any delegation under subsection (1)—		
	(a)	is, in the absence of proof to the contrary, presumed to be acting in accordance with the terms of the delegation; and		
	(b)	must produce evidence of his or her authority to do so, if reasonably requested to do so.	10	
(5)	A de	legation under subsection (1) may be revoked at will by—		
	(a)	written notice to the delegate; or		
	(b)	any other method provided for in the delegation.		
		Subpart 5—Radiation Safety Advisory Council	15	
83	Rad	iation Safety Advisory Council		
(1)	This	section establishes the Radiation Safety Advisory Council.		
(2)		Council is the same organisation that immediately before the commencet of this Act was known as the Radiation Protection Advisory Council.		
(3)	The	members of the Council are appointed by the Minister.	20	
(4)	In appointing members to the Council, the Minister must, subject to subsection (5) , appoint—			
	(a)	at least 2 members who, in the Minister's opinion, have appropriate knowledge, expertise, or interest in radiation and nuclear safety; and		
	(b)	at least 2 members who, in the Minister's opinion, have appropriate knowledge and experience in the use of radiation and radiation sources; and	25	
	(c)	at least 1 lay member.		
(5)	Cour	oite subsection (4) , the Minister may appoint 1 or more members to the neil who do not have the qualifications or qualities set out in that subsectif the Minister is unable to find suitable people who are willing to accept prointment.	30	
(6)	The	Director-General and the Director must not be members of the Council.		
(7)	ing t	n member of the Council is appointed on any terms and conditions (includerms and conditions as to remuneration and travelling allowances and exes) that the Minister determines by written notice to the member.	35	

A person, other than the Director-General or the Director, who was a member

of the Radiation Protection Advisory Council immediately before the com-

(8)

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mencement of this Act remains in office until the expiry of the person's term of office.

84	Functions	of Coun	cil

The functions of the Council are to—

- (a) provide advice to the Director and the Minister on general matters relating to or affecting radiation safety and standards relating to radiation safety; and
- (b) advise and make recommendations to—
 - (i) the Minister on the exercise of the Minister's powers under this Act:

(ii) the Director on the adoption of recommendations, policies, codes of practice, and standards relating to radiation safety:

- (iii) the Director in respect of authorisations referred to it by the Director; and
- (c) provide advice as requested on any matter relating to radiation safety referred to it by the Minister, the Director-General, or the Director.

85 Advisory and technical committees

- (1) The Council may, as it thinks fit, appoint advisory or technical committees to advise it on any matters within the scope of the Council's functions that are referred to the committees by the Council.
- (2) The Council may appoint any person it thinks fit to be a member of a committee
- (3) Every committee may regulate its own procedure, subject to any direction from the Council.

86 Other matters 25

- (1) The Council may, subject to this Act and regulations, regulate its procedure in any manner it thinks fit.
- (2) **Schedule 4** contains further provisions that apply to the Council.

87 Consultation

The Council may, in carrying out any of its functions, consult any person or body it considers appropriate.

88 Annual report

- (1) The Council must, at least once each year, deliver to the Minister a report setting out its advice on the matters referred to in **section 84(a) and (b)**.
- (2) As soon as practicable after receiving a report under **subsection (1)**, the Minister must present a copy of it to the House of Representatives.

Subpart 6—Codes of practice and regulations

Codes of practice

89	Codes	of i	nra	ctice
0)	Coucs	U 1	<i>7</i> 1 4	\cdots

89	Code	s of practice	
(1)	The Director may, by notice in the <i>Gazette</i> , issue codes of practice for the purpose of implementing any fundamental requirement or provision of this Act. of specifying technical requirements that—		
	<u>(a)</u>	a person who deals with a radiation source must comply with in order to comply with the fundamental requirements; and	
	<u>(b)</u>	are appropriate to the level of risk posed by—	
		(i) the radiation source; and	10
		(ii) the use of the radiation source.	
<u>(1A)</u>		re issuing a code of practice, the Director must consult any person who the tor reasonably considers is likely to be affected by the proposed code.	
<u>(1B)</u>	The Director may exempt a person from a provision in a code of practice if satisfied that—		
	<u>(a)</u>	it is not practicable in the circumstances for the person to comply with the provision; and	
	<u>(b)</u>	compliance with the fundamental requirement to which the provision relates can be achieved in another way.	
<u>(1C)</u>	The I	Director may impose conditions on any exemptions granted under sub-	20
	<u>sect</u> i	<u>ion (1B).</u>	
<u>(1D)</u>	-	son who is granted an exemption must comply with any of the conditions exemption.	
(2)	with the po	rson who complies with a code of practice is presumed to have complied the fundamental requirement or provision to which the code relates unless erson knew or ought reasonably to have known that compliance with the did not achieve compliance with the fundamental requirement or provi-	25
(3)	Compliance with a code of practice is not the only way of complying with the fundamental requirement or provision to which the code relates.		
(4)	ment_ 2012	de of practice is-neither a legislative instrument nor a disallowable instrubut not a legislative instrument for the purposes of the Legislation Act and does not have to be presented to the House of Representatives under on 41 of that Act.	

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Content of codes of practice 90

A code of practice must state— (1)

Compare: 1996 No 30 ss 78(1), 117(3); 2004 No 72 ss 22, 23

	(a)	the date on which it comes into force; and		
	(b)	the fundamental requirement-or provision of this Act to which it relates: and		
	<u>(c)</u>	the scope of the code of practice.		
(2)	Act-€	de of practice must not contain a provision that is inconsistent with this or regulations. are: 2004 No 72 s 25	5	
91	Code	es of practice to be available on Internet site		
(1)	The l	Director must ensure that,—		
	(a)	promptly after a new code <u>of practice</u> is issued, a copy is publicly available on an Internet site maintained by, or on behalf of, the Director:	10	
	(b)	after a code <u>of practice</u> has been amended or revoked, a copy of it in its original form continues to be publicly available on the Internet site:		
	(c)	promptly after a code <u>of practice</u> is amended, the following are publicly available on the Internet site:	15	
		(i) a copy of the amendment; and		
		(ii) a copy of the code in its up-to-date form.		
(2)		electronic copies must be made available free of charge. are: 2004 No 72 s 25A		
92	Dire	ctor may amend or revoke codes of practice	20	
(1)	The Director may, by notice in the <i>Gazette</i> , amend or revoke a code of practice at any time.			
<u>(1A)</u>		Director must consult any person who the Director reasonably considers is to be affected by the proposed amendment or revocation.		
(2)	pract	ebsection (1) applies, the <u>An</u> amendment or <u>a</u> revocation <u>of a code of ice</u> does not have retrospective effect. are: 2004 No 72 s 24	25	
<u>92A</u>	Code	es of practice must be reviewed		
	The l	Director must—		
	<u>(a)</u>	review each code of practice at least once every 5 years; and	30	
	<u>(b)</u>	before reviewing a code of practice, consult any person who the Director reasonably considers is likely to be affected by the review.		
		Regulations		
93	Regu	lations		

The Governor-General may, by Order in Council, make regulations for all or

(1)

any of the following purposes:

(1)	prescribing requirements for the purpose of implementing 1 or more specified fundamental requirements, including—			
	(a)	requirements relating to the manner in which a fundamental requirement must be complied with; and		
	(b)	the standards that must be achieved to comply with the fundamental requirement:	5	
(2)	prescribing, for the purpose of section 14(b) , situations or classes of situations in which a use licence is not required:			
, , ,		ting, or enabling the Director, after consulting with the Council, to t, exemptions from any provision in subpart 2 or 3 of Part 1 in eet of—	10	
	(a)	the operation of the armed forces; or		
	(b)	subject to subsection (4) , the operation of ships or aircraft not registered in New Zealand that are visiting New Zealand:		
(4)	-	eribing, subject to subsection (2) , any material as a source matera special fissionable material:	15	
(5)	prese	eribing requirements for transport of radiation sources:		
(6)	in in	eribing requirements relating to the duties of source licence holders cidents involving unintended loss of, release of, or exposure to any attion source:	20	
(7)	prese	eribing requirements for radiation safety plans:		
(8)	prese	eribing requirements relating to radiation emergencies:		
(9)	specifying radiation ancillary services, other than dosimetry or calibration, that directly or indirectly support or are supported by a radiation source:		25	
(10)	preso	eribing information that must be included in—		
	(a)	an application for a source licence, use licence, consent, or approval; and		
	(b)	an application for a renewal of a source licence, use licence, consent, or approval:	30	
(11)	specifying situations or classes of situations where a use licence is not required and specifying activities or classes of activities that may be performed by a specified person or persons in that situation or class of situation:			
(12)	-	prescribing the manner in which radiation sources must be marked or labelled:		
(13)	prescribing the requirements for signage of radiation sources:			

(14)	prescribing the method of treatment, use, storage, or disposal of a radiation source or the treatment or disposal of a package, container, or vessel used in connection with that radiation source:		
(15)	prescribing maximum periods for which authorisations may be granted, and different periods may be prescribed for—		
	(a)	different radiation sources:	
	(b)	different purposes:	
(16)	autho	ribing the fees that are payable in respect of an application for an orisation, and different fees may be prescribed for different types or es of authorisation:	10
(17)		ribing controls to avoid or mitigate adverse effects on the environ- caused by a radiation source:	
(18)	_	ribing controls to avoid or mitigate illness or injury to people or age to the environment or chattels caused by a radiation source:	
(19)	prohi	biting or restricting the use of a radiation source:	15
(20)	specifying unsealed radioactive materials that must be registered under section 34:		
(21)	prese	ribing requirements for registration of a controlled radiation source:	
(22)	maki	ding for the keeping of records, inspection of those records, and the ng of returns of entries in those records in connection with a radisource:	20
(23)	specifying details that must be included in warrants of appointment for enforcement officers:		
(24)	prescribing matters that must be specified in any form that is required for the purposes of this Act or a particular provision of this Act:		25
(25)	prese	ribing the content of a compliance order:	
(26)	prescribing the manner or form in which any order, document, or other matter under this Act is to be served:		
(27)	regulating the procedure of the Council:		
(28)	providing for any other matters contemplated by or necessary for giving full effect to this Act and for its due administration.		30
<u>(a)</u>	providing for, subject to subsection (4), exemptions from any provi-		
		in subpart 2 or 3 of Part 1 in respect of—	
	<u>(i)</u>	the operation of the armed forces; or	
	<u>(ii)</u>	any radiation source temporarily entering New Zealand by ship or aircraft; or	35
	<u>(iii)</u>	any radiation source that,—	

		<u>(A)</u>	sult in an effective dose of less than 10 microsieverts per year; or	
		<u>(B)</u>	in low-probability scenarios, is likely to result in an effect- ive dose of less than 1 millisievert per year; or	5
	<u>(iv)</u>	_	adiation source that, if regulated under this Act, is unlikely to eve a worthwhile reduction in individual doses or health risks:	
<u>(b)</u>	<u>impo</u> (a):	imposing conditions on any exemptions provided for under paragraph (a):		
<u>(c)</u>	prescribing, in accordance with subsection (2) , any material as a source material or a special fissionable material:			
<u>(d)</u>	in in		requirements relating to the duties of source licence holders involving unintended loss of, release of, or exposure to any urce:	
<u>(e)</u>	presc	ribing	requirements for radiation safety plans:	15
<u>(f)</u>	presc	ribing	requirements relating to radiation emergencies:	
(g)	presc	ribing	information that must be included in—	
	<u>(i)</u>	an ap	plication for a source licence, use licence, or consent; and	
	<u>(ii)</u>	an ap	oplication for a renewal of a source licence, use licence, or ent:	20
<u>(h)</u>		_	for the purpose of section 17(a) , a person to perform an class of activity prescribed under paragraph (i) :	
<u>(i)</u>	tiviti	es invo	for the purpose of section 17(a) , activities or classes of acolving a radiation source that may be performed by a person under paragraph (h) :	25
<u>(j)</u>	presc belle	_	the manner in which radiation sources must be marked or la-	
<u>(k)</u>	presc	ribing	requirements for signage of radiation sources:	
<u>(1)</u>			maximum periods for which authorisations may be granted, at periods may be prescribed for—	30
	<u>(i)</u>	differ	rent radiation sources:	
	<u>(ii)</u>	differ	rent purposes:	
<u>(m)</u>	-	_	controls to avoid or mitigate adverse effects on the environ- d by a radiation source:	
<u>(n)</u>		prescribing controls to avoid or mitigate illness or injury to people or damage to the environment or chattels caused by a radiation source:		
<u>(o)</u>	prohibiting or restricting the use of a radiation source:			

	<u>(p)</u>	specifying unsealed radioactive materials that must be registered under section 34 :	
	<u>(q)</u>	prescribing requirements for registration of a controlled radiation source.	
(2)	tion o	gulation under subsection (1)(4)(c) must be made on the recommendate of the Minister after the Minister has had regard to any relevant determinmade by the IAEA.	5
(3)		ne purpose of subsection (1)(21)(q) , different requirements may be preed for the registration of different classes or types of controlled radiation es.	
(4)		egulations may be made under subsection (1)(3)(b)(a) that relate to a ra-	10
	(a)	part of a nuclear reactor; or	
	(b)	pyrophoric or associated with a pyrophoric material; or	
	(e)	an explosive or associated with an explosive material; or	
	(d)	a material that would, if transported in accordance with the IAEA Regulations for the Safe Transport of Radioactive Material, require notification; or	15
	(e)	fissile material.	
(5)	the re	gulation authorising a person under subsection (1)(h) must be made on ecommendation of the Minister after being satisfied that the person has the opriate level of knowledge and experience of radiation safety for the activaless of activity.	20
93A	Regu	lations relating to fees	
<u>(1)</u>		Governor-General may, on the recommendation of the Minister, by Order uncil, make regulations prescribing—	25
	<u>(a)</u>	the fees payable by a person applying for an authorisation or renewal of an authorisation:	
	<u>(b)</u>	the method by which the fees are to be calculated:	
	<u>(c)</u>	exemptions from or refunds of the whole or any part of any fee.	
<u>(2)</u>	Regu	lations made under subsection (1) may—	30
	<u>(a)</u>	prescribe different fees or methods of calculation of fees in respect of different classes or types of authorisation, or on the basis of the level of risk posed by a radiation source or on any other differential basis:	
	<u>(b)</u>	enable, in accordance with subsections (3) to (5) , the recovery of the direct or indirect costs of the Ministry in verifying compliance by holders of authorisations with the radiation safety requirements.	35
<u>(3)</u>		re recommending any regulations that enable cost recovery under sub-	

<u>:193B</u>	Radiation Safety Bill	
-	to the following principles, in determining the most appropriate method of recovery:	
<u>(a)</u>	equity, in that funding for a particular function, power, or service (or a particular class of function, power, or service) should generally, and to the extent practicable, be sourced from the users or beneficiaries of the relevant functions, powers, or services at a level commensurate with their use of or benefit from the function, power, or service:	5
<u>(b)</u>	efficiency, in that the allocation of costs should generally be allocated and recovered in order to ensure that maximum benefits are delivered at minimum cost:	10
<u>(c)</u>	justifiability, in that costs should generally be recovered to meet only the actual and reasonable costs (including indirect costs) of the provision of or exercise of the relevant function, power, or service:	
<u>(d)</u>	transparency, in that costs should generally be identified, and allocated as closely as practicable to, tangible service provision in the recovery period in which the service is provided:	15
<u>(e)</u>	ease of administration, in that the costs of collection should generally be kept as low as possible.	
Costs	s should not be recovered under subsection (2)(b) unless—	
<u>(a)</u>	there has been appropriate consultation with persons or organisations that the Minister considers representative of the interests of persons likely to be substantially affected by the exercise of the power; and	20
<u>(b)</u>	the persons involved have been given sufficient time and information to make an informed contribution.	
speci	section (4) does not require consultation in relation to specific fees or the ific levels of fees, as long as the fees are set reasonably within the scope of general consultation.	25
	ilure to comply with subsection (4) does not affect the validity of any lations made under this section.	
Othe	er regulations	30
The	Governor-General may, by Order in Council, make regulations for all or of the following purposes:	
<u>(a)</u>	providing for the keeping of records, the inspection of those records, and the making of returns of entries in those records in connection with a radiation source:	35

specifying details that must be included in warrants of appointment for

prescribing matters that must be specified in any form that is required for

the purposes of this Act or a particular provision of this Act:

<u>(4)</u>

<u>(5)</u>

<u>(6)</u>

<u>93B</u>

<u>(b)</u>

<u>(c)</u>

enforcement officers:

94 (1)

(2)

(3)

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96

97

Revocations

<u>(d)</u>	prescribing the content of a compliance order:	
(e)	prescribing the manner or form in which any order, document, or other matter under this Act is to be served:	
<u>(f)</u>	regulating the procedure of the Council:	
(g)	providing for any other matters contemplated by or necessary for giving full effect to this Act and for its due administration.	5
Orde	er in Council amending Schedules 2 and 3	
	Governor-General may, by Order in Council, on the recommendation of finister made after complying with this section, amend Schedule 2 or 3 .	
ule 2	out limiting the generality of subsection (1) , an amendment to Sched- may, in relation to a radioactive material (radionuclide) listed in the first nn of the that schedule,—	10
(a)	replace the level of activity concentration listed for that material in the second column of that schedule; or	
(b)	replace the level of activity listed for that material in the third column <u>of that schedule</u> .	15
Befo	re making any recommendation under this section, the Minister must—	
(a)	consult any person or organisation that the Minister considers has an interest in, or will be representative of the interests of people likely to be substantially affected by, the proposed order; and	20
(b)	be satisfied that the proposed order is necessary in order to comply with any applicable requirements, guidelines, or standards of the IAEA, or is consistent with those requirements, guidelines, or standards; and	
(c)	be satisfied that the proposed order is necessary for the purpose of protecting the health or safety of people, or protecting the environment, from the harmful effects of ionising radiation.	25
	Subpart 7—Other matters	
Tran	sitional, savings, and related provisions	
	transitional, savings, and related provisions set out in Schedule 1 have t according to their terms.	30
	Repeal and revocations	

35

Radiation Protection Act 1965 repealed

The following legislative instruments are revoked:

The Radiation Protection Act 1965 (1965 No 23) is repealed.

- (b) Radiation Protection (Appeals) Regulations 1974 (SR 1974/319):
- (c) Radiation Protection Regulations 1982 (SR 1982/72).

Amendments to Terrorism Suppression Act 2002

98 Amendments to Terrorism Suppression Act 2002

- (1) This section amends the Terrorism Suppression Act 2002.
- (2) In section 4(1), replace the definition of **radioactive material** with: **radioactive material** has the meaning given in section 5(1) of the Radiation Safety Act **2014**
- (3) After section 13C(1)(a), insert:
 - (abaa) without lawful authority, carries, sends, transports, or otherwise moves nuclear material into or out of New Zealand; or

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- (4) Replace section 13E(1)(d) with:
 - (d) unlawfully and intentionally demands by threat, in circumstances that indicate the credibility of the threat, or by use of force or by any other form of intimidation, any radioactive material, radioactive device, or nuclear facility; or

Consequential amendments to enactments

99 Consequential amendments

Amend the enactments specified in **Schedule 5** as set out in that schedule.

56

Schedule 1 Transitional, savings, and related provisions

		s 95	
1	Interpretation		
	In this schedule, unless the context otherwise requires,—		5
	commencement means the commencement of this schedule		
	former Act means the Radiation Protection Act 1965		
	former regulations means the <u>Radiation Protection (Ap</u> 1974 and Radiation Protection Regulations 1982.	peals) Regulations	
2	No compensation for loss of office		10
	The Crown is not liable to make a payment to, or otherwise person in respect of the person ceasing to hold any office under the former Act.	-	
3	Members of Radiation Protection Advisory Council		
(1)	Each member of the Radiation Protection Advisory Council fice has not expired before or on commencement of this clau		15
	(a) becomes, on commencement, a member of the Radiat ry Council as if the member were appointed under sec	•	
	(b) remains a member until the expiry of that term of office	ce.	
(2)	Despite subclause (1) , if a member of the Radiation P. Council is, on commencement, the Director-General or the membership on the Council ceases immediately.	•	20
4	Obligations under former Act and former regulations		
	Nothing in this Act operates to relieve a licence holder, own using or possessing a radioactive material or an irradiating a obligation imposed on him or her by the former Act or the or otherwise by law, in relation to radiation protection.	apparatus from any	25
5	Consents under former Act		
	Every consent-issued given under section 12 of the former immediately before commencement—	Act that is in force	30
	(a) is deemed to have been granted under section 23 of to have effect despite sections 96 and 97; and	<u>Sthis Act continues</u>	
	(b) may not be renewed after it expires.		

6 Licences under former Act

- (1) Every licence-issued granted under section 16 of the former Act that is in force immediately before commencement is deemed to have been granted under **section 23** of this Act.
- (2) Every decision to cancel or suspend a licence under section 20 of the former 5 Act that is in force immediately before commencement is deemed to have been made under **section 30** of this Act.
- (3) Every decision to impose conditions on or to vary or revoke conditions in licences under section 17 of the former Act that is in force immediately before commencement is deemed to have been made under-section 30_section 10 23(2) of this Act.

7 Exemptions under former regulations

- (1) Every exemption prescribed in Part 2 of the former regulations that is in force immediately before commencement continues to have effect (despite section 97) as if it were prescribed in regulations made pursuant to section 93(1)(3) (despite sections 96 and 97) until the date that is 1 year after the date of commencement.
- (2) Every decision made under Part 2 of the former regulations to exempt materials, apparatus, ships, aircraft, certain licence holders, and employers of licence holders that is in force immediately before commencement continues to have effect (despite section 97) as if it were a decision made under regulations made pursuant to section 93(1)(3). (despite sections 96 and 97) until the date of its expiry or, if there is no expiry date, until the date that is 1 year after the date of commencement.

8 References to Radiation Protection Advisory Council

Every reference in a notice or document to the Radiation Protection Advisory Council must be read as a reference to the Radiation Safety Advisory Council.

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Schedule 2 List of radioactive material and acceptable activity concentration levels and activity levels

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Radioactive material (radionu- clide) radionuclide ^a	Acceptable level of activity-con- centration concentration (Bq/g)	Acceptable level of-ac- tivity activity (Bq)
H-3	1×10^6	1×10^9
Be-7	1×10^{3} 1×10^{3}	1×10^7 1×10^7
Be-10	1×10^4	1×10^6
C-11	1×10^{1} 1×10^{1}	1×10^6
C-14	1×10^4	1×10^7
N-13	1×10^2	1×10^{9}
Ne-19	1×10^2	1×10^{9}
O-15	1×10^2	1×10^{9}
F-18	1×10^{1}	1×10^6
Na-22	$1 imes 10^{1}$	1×10^6
Na-24	1×10^{1}	1×10^{5}
Mg-28	1×10^{1}	1×10^{5}
Al-26	1×10^{1}	1×10^{5}
Si-31	1×10^3	1×10^{6}
Si-32	1×10^3	1×10^6
P-32	1×10^3	1×10^{5}
P-33	1×10^{5}	1×10^{8}
S-35	1×10^{5}	1×10^{8}
C1-36	1×10^4	1×10^6
C1-38	1×10^{1}	1×10^{5}
C1-39	1×10^{1}	1×10^{5}
Ar-37	1×10^6	1×10^{8}
Ar-39	1×10^{7}	1×10^4
Ar-41	1×10^2	1×10^{9}
K-40	1×10^2	1×10^{6}
K-42	1×10^2	1×10^{6}
K-43	1×10^{1}	1×10^{6}
K-44	1×10^{1}	1×10^{5}
K-45	1×10^{1}	1×10^{5}
Ca-41	1×10^{5}	1×10^{7}
Ca-45	1×10^4	1×10^7
Ca-47	1×10^{1}	1×10^6
Sc-43	1×10^{1}	1×10^6
Sc-44	1×10^{1}	1×10^5
Sc-45	1×10^2	1×10^7
Sc-46	1×10^{1}	1×10^6
Sc-47	1×10^2	1×10^6
Sc-48	1×10^{1}	1×10^5
Sc-49	1×10^3	1×10^5
Ti-44	1×10^{1}	1×10^5
Ti-45	1×10^{1}	1×10^6

Radioactive material (radionu- clide) radionuclide ^a	Acceptable level of activity-con- centration concentration (Bq/g)	Acceptable level of-ac- tivity activity (Bq)
V-47	1×10^1	1×10^5
V-48	1×10^{1}	1×10^5
V-49	1×10^4	1×10^7
Cr-48	1×10^2	1×10^{6}
Cr-49	1×10^1	1×10^{6}
Cr-51	1×10^3	1×10^{7}
Mn-51	1×10^{1}	1×10^{5}
Mn-52	1×10^{1}	1×10^{5}
Mn-52m	1×10^{1}	1×10^{5}
Mn-53	1×10^4	1×10^{9}
Mn-54	1×10^{1}	1×10^6
Mn-56	1×10^{1}	1×10^{5}
Fe-52	1×10^{1}	1×10^6
Fe-55	1×10^4	1×10^6
Fe-59	1×10^{1}	1×10^{6}
Fe-60	1×10^2	1×10^{5}
Co-55	1×10^{1}	1×10^6
Co-56	1×10^{1}	1×10^{5}
Co-57	1×10^2	1×10^6
Co-58	1×10^{1}	1×10^6
Co-58m	1×10^4	1×10^{7}
Co-60	1×10^{1}	1×10^{5}
Co-60m	1×10^3	1×10^6
Co-61	1×10^2	1×10^6
Co-62m	1×10^{1}	1×10^{5}
Ni-56	1×10^{1}	1×10^{6}
Ni-57	1×10^{1}	1×10^6
Ni-59	1×10^{4}	1×10^{8}
Ni-63	1×10^{5}	1×10^8
Ni-65	1×10^{1}	1×10^{6}
Ni-66	1×10^4	1×10^{7}
Cu-60	1×10^{1}	1×10^{5}
Cu-61	1×10^{1}	1×10^{6}
Cu-64	1×10^2	1×10^6
Cu-67	1×10^2	1×10^{6}
Zn-62	1×10^2	1×10^{6}
Zn-63	1×10^{1}	1×10^{5}
Zn-65	1×10^{1}	1×10^{6}
Zn-69	1×10^4	1×10^{6}
Zn-69m	1×10^2	1×10^6
Zn-71m	1×10^{1}	1×10^6
Zn-72	1×10^2	1×10^{6}
Ga-65	1×10^{1}	1×10^{5}
Ga-66	1×10^{1}	1×10^{5}
Ga-67	1×10^2	1×10^{6}
Ga-68	1×10^{1}	1×10^{5}
Ga-70	1×10^2	1×10^{6}

Ga-72 Ga-73 Ga-73 I × 10 ³ I × 10 ³ Ga-73 I × 10 ³ I × 10 ⁶ Ge-66 I × 10 ¹ I × 10 ⁵ Ge-67 I × 10 ¹ I × 10 ⁵ Ge-68 Ge-69 I × 10 ¹ I × 10 ⁶ Ge-69 I × 10 ⁶ I × 10 ⁶ Ge-75 I × 10 ⁶ I × 10 ⁷ I × 10 ⁶ Ge-75 I × 10 ⁷ I × 10 ⁶ I × 10 ⁶ Ge-77 I × 10 ⁷ I × 10 ⁷ I × 10 ⁶ I × 10 ⁶ Ge-78 I × 10 ⁷	Radioactive material (radionu- clide) radionuclide ^a	Acceptable level of activity-con- centration concentration (Bq/g)	Acceptable level of activity activity (Bq)
Ge-66 1 × 10¹ 1 × 10² Ge-67 1 × 10¹ 1 × 10² Ge-68½ 1 × 10¹ 1 × 10³ Ge-69 1 × 10¹ 1 × 10° Ge-71 1 × 10⁴ 1 × 10° Ge-75 1 × 10¹ 1 × 10° Ge-78 1 × 10¹ 1 × 10° As-69 1 × 10¹ 1 × 10° As-70 1 × 10¹ 1 × 10° As-71 1 × 10¹ 1 × 10° As-72 1 × 10¹ 1 × 10° As-73 1 × 10³ 1 × 10° As-74 1 × 10³ 1 × 10° As-75 1 × 10³ 1 × 10° As-76 1 × 10³ 1 × 10° As-77 1 × 10³ 1 × 10° As-78 1 × 10³ 1 × 10° Se-70 1 × 10³ 1 × 10° Se-73 1 × 10³ 1 × 10° Se-73 1 × 10³ 1 × 10° Se-75 1 × 10³ 1 × 10° Se-81 1 × 10² 1 × 10° <t< td=""><td>Ga-72</td><td></td><td></td></t<>	Ga-72		
Ge-67 1 × 10¹ 1 × 10⁵ Ge-68° 1 × 10¹ 1 × 10⁵ Ge-69 1 × 10¹ 1 × 10⁶ Ge-71 1 × 10⁴ 1 × 10⁶ Ge-75 1 × 10¹ 1 × 10⁶ Ge-77 1 × 10⁰ 1 × 10⁶ Ge-78 1 × 10¹ 1 × 10⁶ As-69 1 × 10¹ 1 × 10⁶ As-70 1 × 10¹ 1 × 10⁶ As-71 1 × 10¹ 1 × 10⁶ As-72 1 × 10¹ 1 × 10⁶ As-73 1 × 10³ 1 × 10⁶ As-74 1 × 10¹ 1 × 10⁶ As-75 1 × 10³ 1 × 10⁶ As-76 1 × 10³ 1 × 10⁶ As-77 1 × 10³ 1 × 10⁶ As-78 1 × 10¹ 1 × 10⁶ Se-70 1 × 10¹ 1 × 10⁶ Se-73 1 × 10¹ 1 × 10⁶ Se-75 1 × 10² 1 × 10⁶ Se-79 1 × 10⁶ 1 × 10⁶ Se-81 1 × 10⁶ 1 × 10⁶ <t< td=""><td>Ga-73</td><td>1×10^2</td><td>1×10^6</td></t<>	Ga-73	1×10^2	1×10^6
Ge-68½ 1 × 10¹ 1 × 10⁵ Ge-69 1 × 10¹ 1 × 10⁶ Ge-71 1 × 10⁴ 1 × 10⁶ Ge-75 1 × 10³ 1 × 10⁶ Ge-78 1 × 10² 1 × 10⁶ As-69 1 × 10¹ 1 × 10⁶ As-70 1 × 10¹ 1 × 10⁶ As-71 1 × 10¹ 1 × 10⁶ As-72 1 × 10¹ 1 × 10⁶ As-73 1 × 10³ 1 × 10⁶ As-74 1 × 10³ 1 × 10⁶ As-75 1 × 10³ 1 × 10⁶ As-76 1 × 10³ 1 × 10⁶ As-77 1 × 10³ 1 × 10⁶ As-78 1 × 10¹ 1 × 10⁶ Se-73 1 × 10¹ 1 × 10⁶ Se-73m 1 × 10¹ 1 × 10⁶ Se-75 1 × 10² 1 × 10⁶ Se-79 1 × 10⁰ 1 × 10⁶ Se-81m 1 × 10⁶ 1 × 10⁶ Se-81m 1 × 10⁶ 1 × 10⁶ Br-74m 1 × 10⁶ 1 × 10⁶	Ge-66	1×10^{1}	1×10^{6}
Ge-69 Ge-71	Ge-67	1×10^{1}	1×10^5
Ge-71 1 × 10 ⁴ 1 × 10 ⁸ Ge-75 1 × 10 ³ 1 × 10 ⁶ Ge-77 1 × 10 ³ 1 × 10 ⁶ Ge-78 1 × 10 ¹ 1 × 10 ⁶ As-69 1 × 10 ¹ 1 × 10 ⁵ As-70 1 × 10 ¹ 1 × 10 ⁵ As-71 1 × 10 ¹ 1 × 10 ⁵ As-72 1 × 10 ¹ 1 × 10 ⁵ As-73 1 × 10 ³ 1 × 10 ⁷ As-74 1 × 10 ¹ 1 × 10 ⁶ As-76 1 × 10 ² 1 × 10 ⁶ As-77 1 × 10 ³ 1 × 10 ⁶ Se-70 1 × 10 ¹ 1 × 10 ⁶ Se-73 1 × 10 ¹ 1 × 10 ⁶ Se-73 1 × 10 ¹ 1 × 10 ⁶ Se-73 1 × 10 ¹ 1 × 10 ⁶ Se-73 1 × 10 ¹ 1 × 10 ⁶ Se-75 1 × 10 ² 1 × 10 ⁶ Se-79 1 × 10 ² 1 × 10 ⁶ Se-81 1 × 10 ³ 1 × 10 ⁶ Se-81 1 × 10 ³ 1 × 10 ⁶ Se-83 </td <td>Ge-68<u></u></td> <td>1×10^{1}</td> <td>1×10^{5}</td>	Ge-68 <u></u>	1×10^{1}	1×10^{5}
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As-74 1 × 10¹ 1 × 10⁶ As-76 1 × 10² 1 × 10⁶ As-77 1 × 10³ 1 × 10⁶ As-78 1 × 10¹ 1 × 10⁶ Se-70 1 × 10¹ 1 × 10⁶ Se-73 1 × 10¹ 1 × 10⁶ Se-73m 1 × 10² 1 × 10⁶ Se-75 1 × 10² 1 × 10⁶ Se-79 1 × 10⁴ 1 × 10⁶ Se-81 1 × 10³ 1 × 10⁶ Se-81m 1 × 10³ 1 × 10⁶ Se-83 1 × 10¹ 1 × 10⁶ Br-74 1 × 10¹ 1 × 10⁶ Br-74m 1 × 10¹ 1 × 10⁶ Br-75 1 × 10¹ 1 × 10⁶ Br-76 1 × 10¹ 1 × 10⁶ Br-77 1 × 10⁰ 1 × 10⁶ Br-80 1 × 10² 1 × 10⁶ Br-80m 1 × 10³ 1 × 10⁶ Br-83 1 × 10¹ 1 × 10⁶ Br-84 1 × 10¹ 1 × 10⁶ Kr-74 1 × 10² 1 × 10⁶ Kr-77 1 × 10⁰ 1 × 10⁶ Kr-79 1 × 10³	As-72	1×10^{1}	1×10^5
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	As-73	1×10^3	1×10^{7}
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	As-74	1×10^{1}	1×10^6
As-78 1×10^1 1×10^6 Se-70 1×10^1 1×10^6 Se-73 1×10^1 1×10^6 Se-73m 1×10^2 1×10^6 Se-75 1×10^2 1×10^6 Se-79 1×10^4 1×10^7 Se-81 1×10^3 1×10^6 Se-81m 1×10^3 1×10^6 Se-83 1×10^1 1×10^5 Br-74 1×10^1 1×10^5 Br-74m 1×10^1 1×10^5 Br-75 1×10^1 1×10^6 Br-76 1×10^1 1×10^6 Br-80 1×10^2 1×10^6 Br-80m 1×10^2 1×10^6 Br-82 1×10^1 1×10^6 Br-83 1×10^3 1×10^6 Br-84 1×10^1 1×10^6 Kr-74 1×10^2 1×10^9 Kr-76 1×10^2 1×10^9 Kr-77 1×10^2 1×10^9 Kr-79 1×10^4 1×10^7 <td>As-76</td> <td>1×10^2</td> <td>1×10^5</td>	As-76	1×10^2	1×10^5
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	As-77	1×10^3	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	As-78	1×10^{1}	1×10^5
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Se-70	1×10^{1}	1×10^{6}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Se-73	1×10^{1}	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Se-73m	1×10^2	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Se-75	1×10^2	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Se-79	1×10^4	1×10^{7}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Se-81	1×10^3	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Se-81m	1×10^3	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Se-83	1×10^{1}	1×10^{5}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Br-74	1×10^{1}	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
Br-77 1×10^2 1×10^6 Br-80 1×10^2 1×10^5 Br-80m 1×10^3 1×10^7 Br-82 1×10^1 1×10^6 Br-83 1×10^3 1×10^6 Br-84 1×10^1 1×10^5 Kr-74 1×10^2 1×10^9 Kr-76 1×10^2 1×10^9 Kr-77 1×10^2 1×10^9 Kr-79 1×10^3 1×10^5 Kr-81 1×10^4 1×10^7	Br-75		
Br-80 1×10^2 1×10^5 Br-80m 1×10^3 1×10^7 Br-82 1×10^1 1×10^6 Br-83 1×10^3 1×10^6 Br-84 1×10^1 1×10^5 Kr-74 1×10^2 1×10^9 Kr-76 1×10^2 1×10^9 Kr-77 1×10^2 1×10^9 Kr-79 1×10^3 1×10^5 Kr-81 1×10^4 1×10^7			
Br-80m 1×10^3 1×10^7 Br-82 1×10^1 1×10^6 Br-83 1×10^3 1×10^6 Br-84 1×10^1 1×10^5 Kr-74 1×10^2 1×10^9 Kr-76 1×10^2 1×10^9 Kr-77 1×10^2 1×10^9 Kr-79 1×10^3 1×10^5 Kr-81 1×10^4 1×10^7			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Br-80		
Br-83 1×10^3 1×10^6 Br-84 1×10^1 1×10^5 Kr-74 1×10^2 1×10^9 Kr-76 1×10^2 1×10^9 Kr-77 1×10^2 1×10^9 Kr-79 1×10^3 1×10^5 Kr-81 1×10^4 1×10^7			
Br-84 1×10^1 1×10^5 Kr-74 1×10^2 1×10^9 Kr-76 1×10^2 1×10^9 Kr-77 1×10^2 1×10^9 Kr-79 1×10^3 1×10^5 Kr-81 1×10^4 1×10^7			
Kr-74 1×10^2 1×10^9 Kr-76 1×10^2 1×10^9 Kr-77 1×10^2 1×10^9 Kr-79 1×10^3 1×10^5 Kr-81 1×10^4 1×10^7			
Kr-76 1×10^2 1×10^9 Kr-77 1×10^2 1×10^9 Kr-79 1×10^3 1×10^5 Kr-81 1×10^4 1×10^7			
Kr-77 1×10^2 1×10^9 Kr-79 1×10^3 1×10^5 Kr-81 1×10^4 1×10^7			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
Kr-81 1×10^4 1×10^7			
Kr-81m 1×10^3 1×10^{10}			
Kr-83m 1×10^5 1×10^{12}			
Kr-85 1×10^5 1×10^4			
Kr-85m 1×10^3 1×10^{10}			
Kr-87 1×10^2 1×10^9	Kr-87	1×10^2	1×10^{9}

Radioactive material-(radionu- elide) radionuclide ^a	Acceptable level of activity-con- centration concentration (Bq/g)	Acceptable level of-ac- tivity activity (Bq)
Kr-88	1×10^2	1×10^9
Rb-79	1×10^1	1×10^5
Rb-81	1×10^{1}	1×10^6
Rb-81m	1×10^{3}	1×10^{7}
Rb-82m	1×10^{1}	1×10^{6}
Rb-83 ^b	1×10^2	1×10^{6}
Rb-84	1×10^{1}	1×10^6
Rb-86	1×10^2	1×10^{5}
Rb-87	1×10^3	1×10^7
Rb-88	1×10^2	1×10^{5}
Rb-89	1×10^2	1×10^{5}
Sr-80	1×10^3	1×10^7
Sr-81	1×10^{1}	1×10^{5}
Sr-82 ^b	1×10^{1}	1×10^{5}
Sr-83	1×10^{1}	1×10^{6}
Sr-85	1×10^2	1×10^6
Sr-85m	1×10^2	1×10^7
Sr-87m	1×10^2	1×10^{6}
Sr-89	1×10^3	1×10^6
Sr-90 ^b	1×10^2	1×10^4
Sr-91	1×10^{1}	1×10^{5}
Sr-92	1×10^{1}	1×10^{6}
Y-86	1×10^{1}	1×10^{5}
Y-86m	1×10^2	1×10^7
Y-87 ^b _	1×10^{1}	1×10^6
Y-88	1×10^{1}	1×10^{6}
Y-90	1×10^3	1×10^{5}
Y-90m	1×10^{1}	1×10^{6}
Y-91	1×10^{3}	1×10^{6}
Y-91m	1×10^2	1×10^{6}
Y-92	1×10^2	1×10^{5}
Y-93	1×10^2	1×10^{5}
Y-94	1×10^{1}	1×10^{5}
Y-95	1×10^{1}	1×10^{5}
Zr-86	1×10^2	1×10^7
Zr-88	1×10^{2}	1×10^6
Zr-89	1×10^{1}	1×10^6
Zr-93 <u></u> ^b	1×10^{3}	1×10^{7}
Zr-95	1×10^{1}	1×10^{6}
Zr-97 <u>-</u>	1×10^{1}	1×10^{5}
Nb-88	1×10^{1}	1×10^{5}
Nb-89 -(2.03h)	1×10^{1}	1×10^{5}
Nb-89m -(1.10h)	1×10^{1}	1×10^{5}
Nb-90	1×10^{1}	1×10^{5}
Nb-93m	1×10^4	1×10^{7}
Nb-94	1×10^{1}	1×10^{6}
Nb-95	1×10^{1}	1×10^6

Nb-95	Radioactive material-(radionu- elide) radionuclide ^a	Acceptable level of activity concentration (Bq/g)	Acceptable level of activity activity (Bq)
Nb-96			
Nb-97			
Nb-98	Nb-97		
Mo-90 1 × 10¹ 1 × 10° Mo-93 1 × 10³ 1 × 10° Mo-93m 1 × 10¹ 1 × 10° Mo-101 1 × 10¹ 1 × 10° Tc-93 1 × 10¹ 1 × 10° Tc-93m 1 × 10¹ 1 × 10° Tc-94 1 × 10¹ 1 × 10° Tc-94m 1 × 10¹ 1 × 10° Tc-95m 1 × 10¹ 1 × 10° Tc-95m 1 × 10¹ 1 × 10° Tc-96 1 × 10¹ 1 × 10° Tc-97m 1 × 10³ 1 × 10° Tc-97m 1 × 10³ 1 × 10° Tc-98 1 × 10¹ 1 × 10° Tc-99 1 × 10¹ 1 × 10° Tc-99m 1 × 10¹ 1 × 10° Tc-99m 1 × 10² 1 × 10° Tc-101 1 × 10² 1 × 10° Tc-104 1 × 10² 1 × 10° Ru-98 1 × 10² 1 × 10° Ru-99 1 × 10² 1 × 10° Ru-103 1 × 10² 1 × 10° <t< td=""><td></td><td>1×10^{1}</td><td></td></t<>		1×10^{1}	
Mo-93 1 × 10³ 1 × 106 Mo-93m 1 × 10¹ 1 × 106 Mo-90 1 × 10² 1 × 106 Mo-101 1 × 10¹ 1 × 106 Tc-93 1 × 10¹ 1 × 106 Tc-93m 1 × 10¹ 1 × 106 Tc-94 1 × 10¹ 1 × 106 Tc-94m 1 × 10¹ 1 × 106 Tc-95 1 × 10¹ 1 × 106 Tc-95 1 × 10¹ 1 × 106 Tc-95m 1 × 10¹ 1 × 106 Tc-96m 1 × 10³ 1 × 106 Tc-97m 1 × 10³ 1 × 10³ Tc-97m 1 × 10³ 1 × 10³ Tc-97m 1 × 10³ 1 × 10° Tc-99 1 × 10¹ 1 × 10° Tc-99 1 × 10¹ 1 × 10° Tc-99 1 × 10² 1 × 10° Tc-99 1 × 10² 1 × 10° Tc-99 1 × 10² 1 × 10° Tc-101 1 × 10² 1 × 10° Tc-99 1 × 10² 1 × 10°			
Mo-93m 1 × 10¹ 1 × 10e Mo-99 1 × 10² 1 × 10e Mo-101 1 × 10¹ 1 × 10e Te-93 1 × 10¹ 1 × 10e Te-94 1 × 10¹ 1 × 10e Te-94m 1 × 10¹ 1 × 10° Te-95m 1 × 10¹ 1 × 10e Te-95m 1 × 10¹ 1 × 10e Te-96m 1 × 10³ 1 × 10° Te-96m 1 × 10³ 1 × 10° Te-97m 1 × 10³ 1 × 10° Te-97m 1 × 10³ 1 × 10° Te-98 1 × 10¹ 1 × 10° Te-99m 1 × 10² 1 × 10° Te-99m 1 × 10² 1 × 10° Te-101 1 × 10² 1 × 10° Te-104 1 × 10² 1 × 10° Ru-93 1 × 10² 1 × 10° Ru-103 1 × 10² 1 × 10° Ru-104 1 × 10° 1 × 10° Ru-105 1 × 10² 1 × 10° Ru-106 1 × 10² 1 × 10°			
Mo-99 1 × 10² 1 × 10° Mo-101 1 × 10¹ 1 × 10° Te-93 1 × 10¹ 1 × 10° Te-94 1 × 10¹ 1 × 10° Te-94m 1 × 10¹ 1 × 10° Te-95 1 × 10¹ 1 × 10° Te-95m 1 × 10¹ 1 × 10° Te-96m 1 × 10³ 1 × 10° Te-97m 1 × 10³ 1 × 10° Te-97m 1 × 10³ 1 × 10° Te-98 1 × 10¹ 1 × 10° Te-99 1 × 10² 1 × 10° Te-99m 1 × 10² 1 × 10° Te-99m 1 × 10² 1 × 10° Te-99m 1 × 10² 1 × 10° Te-99 1 × 10² 1 × 10° Te-101 1 × 10² 1 × 10° Te-104 1 × 10² 1 × 10° Ru-99 1 × 10² 1 × 10° Ru-94 1 × 10² 1 × 10° Ru-105 1 × 10² 1 × 10° Ru-106* 1 × 10² 1 × 10° <		1×10^{1}	
Mo-101 1 × 10¹ 1 × 10⁶ Te-93 1 × 10¹ 1 × 10⁶ Te-94 1 × 10¹ 1 × 10⁶ Te-94m 1 × 10¹ 1 × 10⁶ Te-95 1 × 10¹ 1 × 10⁶ Te-96 1 × 10¹ 1 × 10⁶ Te-96m 1 × 10³ 1 × 10⁶ Te-97 1 × 10³ 1 × 10⁶ Te-97m 1 × 10³ 1 × 10⁶ Te-97m 1 × 10³ 1 × 10⁶ Te-99 1 × 10⁶ 1 × 10⁶ Te-99m 1 × 10⁶ 1 × 10⁶ Te-99m 1 × 10⁶ 1 × 10⁶ Te-101 1 × 10⁶ 1 × 10⁶ Te-104 1 × 10⁶ 1 × 10⁶ Ru-97 1 × 10⁶ 1 × 10⁶ Ru-103 1 × 10⁶ 1 × 10⁶ Ru-105 1 × 10⁶ 1 × 10⁶ Ru-106⁰ 1 × 10⁶ 1 × 10⁶ Ru-106⁰ 1 × 10⁶ 1 × 10⁶ Rh-99 1 × 10⁶ 1 × 10⁶ Rh-100 1 × 10⁶ 1 × 10⁶			
Tc-93 1 × 10¹ 1 × 10° Tc-94 1 × 10¹ 1 × 10° Tc-94m 1 × 10¹ 1 × 10° Tc-95m 1 × 10¹ 1 × 10° Tc-95m 1 × 10¹ 1 × 10° Tc-96 1 × 10³ 1 × 10° Tc-96m 1 × 10³ 1 × 10° Tc-97m 1 × 10³ 1 × 10° Tc-97m 1 × 10³ 1 × 10° Tc-98 1 × 10¹ 1 × 10° Tc-99 1 × 10² 1 × 10° Tc-99m 1 × 10² 1 × 10° Tc-101 1 × 10² 1 × 10° Tc-104 1 × 10² 1 × 10° Ru-94 1 × 10² 1 × 10° Ru-97 1 × 10² 1 × 10° Ru-103 1 × 10² 1 × 10° Ru-106 1 × 10² 1 × 10° Ru-106 1 × 10² 1 × 10° Rh-99 1 × 10² 1 × 10° Rh-101 1 × 10² 1 × 10° Rh-102 1 × 10° 1 × 10° <t< td=""><td></td><td></td><td></td></t<>			
Tc-93m 1 × 10¹ 1 × 10° Tc-94 1 × 10¹ 1 × 10° Tc-94m 1 × 10¹ 1 × 10° Tc-95 1 × 10¹ 1 × 10° Tc-96m 1 × 10¹ 1 × 10° Tc-96m 1 × 10³ 1 × 10° Tc-97m 1 × 10³ 1 × 10° Tc-97m 1 × 10³ 1 × 10° Tc-98 1 × 10¹ 1 × 10° Tc-99 1 × 10⁴ 1 × 10° Tc-99m 1 × 10² 1 × 10° Tc-101 1 × 10² 1 × 10° Tc-104 1 × 10² 1 × 10° Tc-104 1 × 10² 1 × 10° Ru-97 1 × 10² 1 × 10° Ru-103 1 × 10² 1 × 10° Ru-105 1 × 10² 1 × 10° Ru-106½ 1 × 10° 1 × 10° Ru-106 1 × 10² 1 × 10° Ru-106 1 × 10° 1 × 10° Ru-107 1 × 10° 1 × 10° Rh-99 1 × 10¹ 1 × 10°			
Tc-94 1 × 10¹ 1 × 10⁵ Tc-95 1 × 10¹ 1 × 10⁶ Tc-95m 1 × 10¹ 1 × 10⁶ Tc-96 1 × 10¹ 1 × 10⁶ Tc-96m 1 × 10³ 1 × 10⁶ Tc-97 1 × 10³ 1 × 10⁶ Tc-97m 1 × 10³ 1 × 10⁶ Tc-98 1 × 10¹ 1 × 10⁶ Tc-99 1 × 10⁴ 1 × 10⁶ Tc-99m 1 × 10² 1 × 10⁶ Tc-101 1 × 10² 1 × 10⁶ Tc-104 1 × 10² 1 × 10⁶ Ru-94 1 × 10² 1 × 10⁶ Ru-97 1 × 10² 1 × 10⁶ Ru-103 1 × 10² 1 × 10⁶ Ru-106 1 × 10¹ 1 × 10⁶ Ru-106 1 × 10¹ 1 × 10⁶ Ru-106 1 × 10¹ 1 × 10⁶ Rh-99m 1 × 10¹ 1 × 10⁶ Rh-99m 1 × 10¹ 1 × 10⁶ Rh-101 1 × 10⁶ 1 × 10⁶ Rh-102m 1 × 10⁶ 1 × 10⁶ Rh-101 1 × 10⁶ 1 × 10⁶ Rh-102m <	Tc-93m	1×10^{1}	1×10^{6}
Tc-95 1 × 10¹ 1 × 10⁶ Tc-96 1 × 10¹ 1 × 10⁶ Tc-96m 1 × 10³ 1 × 10⁻ Tc-97m 1 × 10³ 1 × 10⁻ Tc-97m 1 × 10³ 1 × 10⁻ Tc-98 1 × 10¹ 1 × 10⁶ Tc-99 1 × 10⁴ 1 × 10⁻ Tc-99m 1 × 10² 1 × 10⁻ Tc-101 1 × 10² 1 × 10⁻ Tc-104 1 × 10¹ 1 × 10⁶ Tc-104 1 × 10¹ 1 × 10⁶ Ru-94 1 × 10² 1 × 10⁶ Ru-97 1 × 10² 1 × 10⁶ Ru-103 1 × 10² 1 × 10⁶ Ru-105 1 × 10¹ 1 × 10⁶ Ru-106♠ 1 × 10¹ 1 × 10⁶ Ru-106♠ 1 × 10¹ 1 × 10⁶ Rh-99 1 × 10¹ 1 × 10⁶ Rh-100 1 × 10¹ 1 × 10⁶ Rh-101 1 × 10⁶ 1 × 10⁶ Rh-102 1 × 10˚ 1 × 10⁶ Rh-102m 1 × 10˚ 1 × 10⁶			
Tc-95m 1 × 10¹ 1 × 10⁶ Tc-96 1 × 10¹ 1 × 10⁶ Tc-96m 1 × 10³ 1 × 10° Tc-97 1 × 10³ 1 × 10⁶ Tc-97m 1 × 10³ 1 × 10⁶ Tc-98 1 × 10¹ 1 × 10⁶ Tc-99 1 × 10⁴ 1 × 10⁶ Tc-99m 1 × 10² 1 × 10⁶ Tc-101 1 × 10² 1 × 10⁶ Tc-104 1 × 10¹ 1 × 10⁶ Ru-94 1 × 10² 1 × 10⁶ Ru-97 1 × 10² 1 × 10⁶ Ru-103 1 × 10² 1 × 10⁶ Ru-105 1 × 10² 1 × 10⁶ Ru-106♠ 1 × 10² 1 × 10⁶ Ru-105 1 × 10¹ 1 × 10⁶ Ru-106♠ 1 × 10² 1 × 10⁶ Ru-106♠ 1 × 10² 1 × 10⁶ Rh-99m 1 × 10¹ 1 × 10⁶ Rh-100 1 × 10¹ 1 × 10⁶ Rh-101 1 × 10⁶ 1 × 10⁶ Rh-102m 1 × 10² 1 × 10⁶	Tc-94m	1×10^{1}	1×10^{5}
Tc-96 1 × 10³ 1 × 10° Tc-97 1 × 10³ 1 × 10° Tc-97m 1 × 10³ 1 × 10° Tc-98 1 × 10¹ 1 × 10° Tc-99 1 × 10⁴ 1 × 10° Tc-99m 1 × 10² 1 × 10° Tc-101 1 × 10² 1 × 10° Tc-104 1 × 10¹ 1 × 10° Ru-94 1 × 10² 1 × 10° Ru-97 1 × 10² 1 × 10° Ru-103 1 × 10² 1 × 10° Ru-105 1 × 10¹ 1 × 10° Ru-106° 1 × 10² 1 × 10° Ru-106° 1 × 10¹ 1 × 10° Rh-99 1 × 10¹ 1 × 10° Rh-99m 1 × 10¹ 1 × 10° Rh-100 1 × 10¹ 1 × 10° Rh-101 1 × 10° 1 × 10° Rh-102 1 × 10° 1 × 10° Rh-103m 1 × 10² 1 × 10° Rh-105 1 × 10¹ 1 × 10° Rh-106m 1 × 10² 1 × 10°	Tc-95	1×10^{1}	1×10^{6}
Tc-96m 1 × 10³ 1 × 10* Tc-97 1 × 10³ 1 × 10* Tc-97m 1 × 10¹ 1 × 10° Tc-98 1 × 10¹ 1 × 10° Tc-99m 1 × 10² 1 × 10° Tc-99m 1 × 10² 1 × 10° Tc-101 1 × 10² 1 × 10° Tc-104 1 × 10¹ 1 × 10° Ru-94 1 × 10² 1 × 10° Ru-97 1 × 10² 1 × 10° Ru-103 1 × 10² 1 × 10° Ru-104 1 × 10² 1 × 10° Ru-105 1 × 10¹ 1 × 10° Ru-106¹ 1 × 10² 1 × 10° Ru-106¹ 1 × 10¹ 1 × 10° Rh-99 1 × 10¹ 1 × 10° Rh-99m 1 × 10¹ 1 × 10° Rh-100 1 × 10¹ 1 × 10° Rh-101 1 × 10¹ 1 × 10° Rh-102 1 × 10° 1 × 10° Rh-103m 1 × 10² 1 × 10° Rh-102m 1 × 10² 1 × 10° Rh-105 1 × 10² 1 × 10° Rh-106m	Tc-95m	1×10^{1}	1×10^{6}
Tc-97m 1 × 10³ 1 × 10² Tc-98 1 × 10¹ 1 × 10° Tc-99 1 × 10¹ 1 × 10° Tc-99m 1 × 10² 1 × 10° Tc-101 1 × 10² 1 × 10° Tc-104 1 × 10¹ 1 × 10° Ru-94 1 × 10² 1 × 10° Ru-97 1 × 10² 1 × 10° Ru-103 1 × 10² 1 × 10° Ru-105 1 × 10¹ 1 × 10° Ru-106½ 1 × 10² 1 × 10° Ru-106½ 1 × 10² 1 × 10° Rh-99 1 × 10¹ 1 × 10° Rh-99m 1 × 10¹ 1 × 10° Rh-100 1 × 10¹ 1 × 10° Rh-101 1 × 10² 1 × 10° Rh-102 1 × 10¹ 1 × 10° Rh-103m 1 × 10² 1 × 10° Rh-103m 1 × 10² 1 × 10° Rh-103m 1 × 10² 1 × 10° Rh-105 1 × 10² 1 × 10° Rh-106m 1 × 10² 1 × 10° <td>Tc-96</td> <td>1×10^{1}</td> <td>1×10^{6}</td>	Tc-96	1×10^{1}	1×10^{6}
Tc-97m 1 × 10³ 1 × 10° Tc-98 1 × 10¹ 1 × 10° Tc-99 1 × 10⁴ 1 × 10° Tc-99m 1 × 10² 1 × 10° Tc-101 1 × 10² 1 × 10° Tc-104 1 × 10¹ 1 × 10° Ru-94 1 × 10² 1 × 10° Ru-97 1 × 10² 1 × 10° Ru-103 1 × 10² 1 × 10° Ru-105 1 × 10¹ 1 × 10° Ru-106b 1 × 10² 1 × 10° Ru-106b 1 × 10² 1 × 10° Rh-99 1 × 10¹ 1 × 10° Rh-99m 1 × 10¹ 1 × 10° Rh-101 1 × 10² 1 × 10° Rh-101 1 × 10² 1 × 10° Rh-101 1 × 10² 1 × 10° Rh-102 1 × 10° 1 × 10° Rh-103m 1 × 10² 1 × 10° Rh-105 1 × 10² 1 × 10° Rh-106m 1 × 10² 1 × 10° Rh-107 1 × 10² 1 × 10°	Tc-96m	1×10^3	1×10^{7}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Tc-97	1×10^3	1×10^{8}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Tc-97m	1×10^3	1×10^7
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Tc-98	1×10^{1}	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Tc-99	1×10^4	1×10^7
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Tc-99m	1×10^2	1×10^7
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Tc-101	1×10^2	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Tc-104	1×10^{1}	1×10^{5}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Ru-94	1×10^2	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Ru-97	1×10^2	1×10^7
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Ru-103	1×10^2	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Ru-105	1×10^{1}	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Ru-106 ^b	1×10^2	1×10^{5}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rh-99	1×10^{1}	1×10^{6}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rh-99m	1×10^{1}	1×10^{6}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rh-100	1×10^{1}	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rh-101	1×10^2	1×10^{7}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rh-101m	1×10^{2}	1×10^{7}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rh-102	1×10^{1}	1×10^{6}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rh-102m	1×10^{2}	1×10^{6}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rh-103m	1×10^{4}	1×10^{8}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rh-105	1×10^{2}	1×10^{7}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rh-106m	1×10^{1}	1×10^{5}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rh-107	1×10^2	1×10^{6}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Pd-100	1×10^{2}	1×10^{7}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Pd-101	1×10^{2}	1×10^6
Pd-109 1×10^3 1×10^6 Ag-102 1×10^1 1×10^5	Pd-103	1×10^{3}	1×10^{8}
Ag-102 1×10^{1} 1×10^{5}	Pd-107	1×10^{5}	1×10^{8}
e	Pd-109	1×10^{3}	1×10^6
Ag-103 1×10^{1} 1×10^{6}	Ag-102	1×10^{1}	
	Ag-103	1×10^{1}	1×10^6

Radioactive material (radionu- clide) <u>radionuclide^a</u>	Acceptable level of activity-con- concentration (Bq/g)	Acceptable level of-ac- tivity activity (Bq)
Ag-104	1×10^{1}	1×10^{6}
Ag-104m	1×10^{1}	1×10^{6}
Ag-105	1×10^2	1×10^6
Ag-106	1×10^{1}	1×10^{6}
Ag-106m	1×10^{1}	1×10^{6}
Ag-108m	1×10^{1}	1×10^{6}
Ag-110m	1×10^{1}	1×10^6
Ag-111	1×10^3	1×10^{6}
Ag-112	1×10^{1}	1×10^{5}
Ag-115	1×10^{1}	1×10^{5}
Cd-104	1×10^2	1×10^{7}
Cd-107	1×10^3	1×10^{7}
Cd-109	1×10^4	1×10^{6}
Cd-113	1×10^3	1×10^{6}
Cd-113m	1×10^3	1×10^{6}
Cd-115	1×10^2	1×10^{6}
Cd-115m	1×10^3	1×10^{6}
Cd-117	1×10^{1}	1×10^{6}
Cd-117m	1×10^{1}	1×10^6
In-109	1×10^{1}	1×10^6
In-110 -(4.9h)	1×10^{1}	1×10^6
In-110 -(69.1m) <u>m</u>	1×10^{1}	1×10^{5}
In-111	1×10^2	1×10^{6}
In-112	1×10^2	1×10^{6}
In-113m	1×10^2	1×10^{6}
In-114	1×10^3	1×10^{5}
In-114m	1×10^2	1×10^6
In-115	1×10^3	1×10^{5}
In-115m	1×10^2	1×10^6
In-116m	1×10^{1}	1×10^{5}
In-117	1×10^{1}	1×10^6
In-117m	1×10^2	1×10^6
In-119m	1×10^2	1×10^{5}
Sn-110	1×10^2	1×10^7
Sn-111	1×10^2	1×10^6
Sn-113	1×10^3	1×10^{7}
Sn-117m	1×10^2	1×10^{6}
Sn-119m	1×10^3	1×10^7
Sn-121	1×10^5	1×10^{7}
Sn-121m _b	1×10^3	1×10^7
Sn-123	1×10^3	1×10^{6}
Sn-123m	1×10^2	1×10^6
Sn-125	1×10^2	1×10^5
Sn-126 ^b	1×10^{1}	1×10^5
Sn-127	1×10^{1}	1×10^{6}
Sn-128	1×10^{1} 1×10^{1}	1×10^6
Sb-115	1×10^{1} 1×10^{1}	1×10^6
50 115	1 10	1 . 10

Sb-116	Radioactive material (radionu- elide) radionuclide ^a	Acceptable level of activity-con- centration concentration (Bq/g)	Acceptable level of activity activity (Bq)
Sb-117	Sb-116	1×10^{1}	1×10^6
Sb-118m	Sb-116m	1×10^{1}	1×10^{5}
Sb-119	Sb-117	1×10^{2}	1×10^{7}
Sb-120-(15.89m)m	Sb-118m	1×10^{1}	1×10^6
Sb-120	Sb-119	1×10^{3}	1×10^{7}
Sb-124	Sb-120 -(5.76d)	$1 \times 10^{+2}$	1×10^6
Sb-124	Sb-120 -(15.89m) m	1×10^{21}	1×10^6
Sb-124m	Sb-122	1×10^{2}	1×10^4
Sb-126	Sb-124	1×10^{1}	1×10^6
Sb-126	Sb-124m	1×10^{2}	1×10^6
Sb-126m	Sb-125	1×10^{2}	1×10^6
Sb-127 1 × 10¹ 1 × 10² Sb-128 (10.4m)m 1 × 10¹ 1 × 10³ Sb-129 1 × 10¹ 1 × 10² Sb-130 1 × 10¹ 1 × 10² Sb-131 1 × 10¹ 1 × 10² Te-116 1 × 10² 1 × 10² Te-121 1 × 10¹ 1 × 10² Te-121m 1 × 10² 1 × 10² Te-123 1 × 10³ 1 × 10² Te-123m 1 × 10³ 1 × 10² Te-123m 1 × 10³ 1 × 10² Te-125m 1 × 10³ 1 × 10² Te-127m 1 × 10³ 1 × 10² Te-127m 1 × 10³ 1 × 10² Te-129 1 × 10² 1 × 10² Te-129m 1 × 10² 1 × 10² Te-131 1 × 10² 1 × 10² Te-132m 1 × 10² 1 × 10² Te-133m 1 × 10² 1 × 10² Te-131m 1 × 10² 1 × 10² Te-133 1 × 10² 1 × 10² Te-133m 1 × 10² 1	Sb-126	1×10^{1}	1×10^5
Sb-128 (+0.01h) 1 × 10¹ 1 × 10⁵ Sb-129 (10.4m)m 1 × 10¹ 1 × 10⁵ Sb-130 (10.4m)m 1 × 10¹ 1 × 10⁵ Sb-130 (10.4m)m 1 × 10¹ 1 × 10⁵ Sb-131 (10.4m)m 1 × 10¹ 1 × 10⁶ Te-116 (10.4m)m 1 × 10² 1 × 10² Te-121 (10.4m)m 1 × 10² 1 × 10⁶ Te-121 (10.4m)m 1 × 10² 1 × 10⁶ Te-121 (10.4m)m 1 × 10³ 1 × 10⁶ Te-123 (10.4m)m 1 × 10³ 1 × 10⁶ Te-123 (10.4m)m 1 × 10³ 1 × 10⁶ Te-125m (10.4m)m 1 × 10³ 1 × 10⁶ Te-127 (10.4m)m 1 × 10³ 1 × 10⁶ Te-127 (10.4m)m 1 × 10³ 1 × 10⁶ Te-127 (10.4m)m 1 × 10³ 1 × 10⁶ Te-129 (10.4m)m 1 × 10³ 1 × 10⁶ Te-129 (10.4m)m 1 × 10³ 1 × 10⁶ Te-131 (10.4m)m 1 × 10⁶ 1 × 10⁶ Te-132 (10.4m)m 1 × 10⁶ 1 × 10⁶ Te-133 (10.4m)m 1 × 10⁶ 1 × 10⁶	Sb-126m	1×10^{1}	1×10^{5}
Sb-128 (10.4m)m 1 × 10¹ 1 × 10² Sb-129 1 × 10¹ 1 × 10° Sb-130 1 × 10¹ 1 × 10° Sb-131 1 × 10¹ 1 × 10° Te-116 1 × 10² 1 × 10° Te-121 1 × 10¹ 1 × 10° Te-121m 1 × 10² 1 × 10° Te-123m 1 × 10³ 1 × 10° Te-123m 1 × 10³ 1 × 10° Te-125m 1 × 10³ 1 × 10° Te-127m 1 × 10³ 1 × 10° Te-127m 1 × 10³ 1 × 10° Te-129m 1 × 10³ 1 × 10° Te-131 1 × 10² 1 × 10° Te-131m 1 × 10² 1 × 10° Te-131m 1 × 10² 1 × 10° Te-132 1 × 10¹ 1 × 10° Te-133 1 × 10¹ 1 × 10° Te-134 1 × 10¹ 1 × 10° Te-133m 1 × 10¹ 1 × 10° Te-134 1 × 10¹ 1 × 10° Te-120 1 × 10¹ 1 × 10° I-120 1 × 10° 1 × 10°	Sb-127	1×10^{1}	1×10^6
Sb-129	Sb-128 -(9.01h)	1×10^{1}	1×10^5
Sb-130 1 × 10¹ 1 × 106 Sb-131 1 × 10¹ 1 × 106 Te-116 1 × 10² 1 × 107 Te-121 1 × 10¹ 1 × 106 Te-121m 1 × 10² 1 × 106 Te-123 1 × 10³ 1 × 106 Te-123m 1 × 10² 1 × 107 Te-125m 1 × 10³ 1 × 107 Te-125m 1 × 10³ 1 × 10° Te-127m 1 × 10³ 1 × 106 Te-127m 1 × 10³ 1 × 106 Te-129m 1 × 10² 1 × 106 Te-129m 1 × 10² 1 × 106 Te-131 1 × 10² 1 × 106 Te-131m 1 × 10² 1 × 106 Te-131m 1 × 10¹ 1 × 106 Te-132 1 × 10² 1 × 10° Te-133m 1 × 10¹ 1 × 10° Te-133m 1 × 10¹ 1 × 10° Te-133m 1 × 10¹ 1 × 10° Te-134 1 × 10¹ 1 × 10° Te-134 1 × 10¹ 1 × 10° I-120m 1 × 10¹ 1 × 10° I	Sb-128 -(10.4m) m	1×10^{1}	1×10^{5}
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sb-129	1×10^{1}	1×10^6
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sb-130	1×10^{1}	1×10^{5}
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Sb-131	1×10^{1}	1×10^6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Te-116	1×10^2	1×10^{7}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Te-121	1×10^{1}	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Te-121m	1×10^2	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Te-123	1×10^3	1×10^{6}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Te-123m	1×10^2	1×10^7
Te-127m 1×10^3 1×10^7 Te-129 1×10^2 1×10^6 Te-129m 1×10^3 1×10^6 Te-131 1×10^2 1×10^5 Te-131m 1×10^1 1×10^6 Te-132 1×10^2 1×10^7 Te-133 1×10^1 1×10^5 Te-134m 1×10^1 1×10^5 Te-134 1×10^1 1×10^6 I-120 1×10^1 1×10^6 I-120m 1×10^1 1×10^5 I-121m 1×10^2 1×10^6 I-121m 1×10^2 1×10^6 I-122 1×10^6 I-123m 1×10^2 1×10^6 I-124m 1×10^2 1×10^6 I-125m 1×10^3 1×10^6 I-126m 1×10^3 1×10^6 I-127m 1×10^6 1×10^6 I-129m 1×10^2 1×10^6 I-121m 1×10^6 1×10^6 I-125m 1×10^6 1×10^6	Te-125m	1×10^3	1×10^{7}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Te-127	1×10^3	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Te-127m	1×10^3	1×10^{7}
Te-131 1×10^2 1×10^5 Te-131m 1×10^1 1×10^6 Te-132 1×10^2 1×10^7 Te-133 1×10^1 1×10^5 Te-133m 1×10^1 1×10^5 Te-134 1×10^1 1×10^6 I-120 1×10^1 1×10^5 I-120m 1×10^1 1×10^5 I-121 1×10^2 1×10^6 I-123 1×10^2 1×10^6 I-124 1×10^1 1×10^6 I-125 1×10^3 1×10^6 I-126 1×10^2 1×10^6 I-128 1×10^2 1×10^5 I-129 1×10^2 1×10^5 I-130 1×10^1 1×10^6 I-131 1×10^2 1×10^6	Te-129	1×10^2	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Te-129m	1×10^3	1×10^6
Te-132 1×10^2 1×10^7 Te-133 1×10^1 1×10^5 Te-134 1×10^1 1×10^6 I-120 1×10^1 1×10^5 I-120m 1×10^1 1×10^5 I-121 1×10^2 1×10^6 I-123 1×10^2 1×10^7 I-124 1×10^1 1×10^6 I-125 1×10^3 1×10^6 I-126 1×10^2 1×10^6 I-128 1×10^2 1×10^5 I-129 1×10^2 1×10^5 I-130 1×10^1 1×10^6 I-131 1×10^2 1×10^6	Te-131	1×10^{2}	1×10^{5}
Te-133 1×10^1 1×10^5 Te-134 1×10^1 1×10^6 I-120 1×10^1 1×10^5 I-120m 1×10^1 1×10^5 I-121 1×10^2 1×10^6 I-123 1×10^2 1×10^7 I-124 1×10^1 1×10^6 I-125 1×10^3 1×10^6 I-126 1×10^2 1×10^6 I-128 1×10^2 1×10^5 I-129 1×10^2 1×10^5 I-130 1×10^1 1×10^6 I-131 1×10^2 1×10^6	Te-131m	1×10^{1}	1×10^6
Te-133m 1×10^1 1×10^5 Te-134 1×10^1 1×10^6 I-120 1×10^1 1×10^5 I-120m 1×10^1 1×10^5 I-121 1×10^2 1×10^6 I-123 1×10^2 1×10^7 I-124 1×10^1 1×10^6 I-125 1×10^3 1×10^6 I-126 1×10^2 1×10^6 I-128 1×10^2 1×10^5 I-129 1×10^2 1×10^5 I-130 1×10^1 1×10^6 I-131 1×10^2 1×10^6	Te-132	1×10^{2}	1×10^{7}
Te-134 1×10^1 1×10^6 I-120 1×10^1 1×10^5 I-120m 1×10^1 1×10^5 I-121 1×10^2 1×10^6 I-123 1×10^2 1×10^7 I-124 1×10^1 1×10^6 I-125 1×10^3 1×10^6 I-126 1×10^2 1×10^6 I-128 1×10^2 1×10^5 I-129 1×10^2 1×10^5 I-130 1×10^1 1×10^6 I-131 1×10^2 1×10^6	Te-133	1×10^{1}	1×10^5
I-120 1×10^1 1×10^5 I-120m 1×10^1 1×10^5 I-121 1×10^2 1×10^6 I-123 1×10^2 1×10^7 I-124 1×10^1 1×10^6 I-125 1×10^3 1×10^6 I-126 1×10^2 1×10^6 I-128 1×10^2 1×10^5 I-129 1×10^2 1×10^5 I-130 1×10^1 1×10^6 I-131 1×10^2 1×10^6	Te-133m	1×10^{1}	1×10^{5}
I-120m 1×10^1 1×10^5 I-121 1×10^2 1×10^6 I-123 1×10^2 1×10^7 I-124 1×10^1 1×10^6 I-125 1×10^3 1×10^6 I-126 1×10^2 1×10^6 I-128 1×10^2 1×10^5 I-129 1×10^2 1×10^5 I-130 1×10^1 1×10^6 I-131 1×10^2 1×10^6	Te-134	1×10^{1}	1×10^6
I-121 1×10^2 1×10^6 I-123 1×10^2 1×10^7 I-124 1×10^1 1×10^6 I-125 1×10^3 1×10^6 I-126 1×10^2 1×10^6 I-128 1×10^2 1×10^5 I-129 1×10^2 1×10^5 I-130 1×10^1 1×10^6 I-131 1×10^2 1×10^6	I-120	1×10^{1}	1×10^{5}
I-123 1×10^2 1×10^7 I-124 1×10^1 1×10^6 I-125 1×10^3 1×10^6 I-126 1×10^2 1×10^6 I-128 1×10^2 1×10^5 I-129 1×10^2 1×10^5 I-130 1×10^1 1×10^6 I-131 1×10^2 1×10^6	I-120m	1×10^{1}	1×10^{5}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	I-121	1×10^{2}	1×10^6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	I-123	1×10^{2}	1×10^7
I-126 1×10^2 1×10^6 I-128 1×10^2 1×10^5 I-129 1×10^2 1×10^5 I-130 1×10^1 1×10^6 I-131 1×10^2 1×10^6	I-124	1×10^{1}	1×10^6
I-128 1×10^2 1×10^5 I-129 1×10^2 1×10^5 I-130 1×10^1 1×10^6 I-131 1×10^2 1×10^6	I-125	1×10^{3}	1×10^6
I-129 1×10^2 1×10^5 I-130 1×10^1 1×10^6 I-131 1×10^2 1×10^6	I-126	1×10^{2}	1×10^6
I-130 1×10^{1} 1×10^{6} I-131 1×10^{2} 1×10^{6}	I-128	1×10^2	1×10^{5}
I-131 1×10^2 1×10^6	I-129	1×10^2	1×10^{5}
	I-130	1×10^{1}	1×10^6
I-132 1×10^{1} 1×10^{5}	I-131	1×10^2	1×10^6
	I-132	1×10^{1}	1×10^{5}

Radioactive material (radionu-	Acceptable level of activity-con- centration	Acceptable level of activity
<u>radionuclide</u> ^a	concentration (Bq/g)	activity (Bq)
I-132m	1×10^2	1×10^{6}
I-133	1×10^{1}	1×10^{6}
I-134	1×10^{1}	1×10^{5}
I-135	1×10^{1}	1×10^{6}
Xe-120	1×10^2	1×10^{9}
Xe-121	1×10^2	1×10^{9}
Xe-122 ^b	1×10^2	1×10^{9}
Xe-123	1×10^2	1×10^{9}
Xe-125	1×10^{3}	1×10^{9}
Xe-127	1×10^{3}	1×10^{5}
Xe-129m	1×10^{3}	1×10^4
Xe-131m	1×10^4	1×10^4
Xe-133m	1×10^3	1×10^4
Xe-133	1×10^{3}	1×10^4
Xe-135	1×10^{3}	1×10^{10}
Xe-135m	1×10^2	1×10^{9}
Xe-138	1×10^2	1×10^{9}
Cs-125	1×10^{1}	1×10^4
Cs-127	1×10^2	1×10^{5}
Cs-129	1×10^2	1×10^{5}
Cs-130	1×10^2	1×10^6
Cs-131	1×10^3	1×10^6
Cs-132	1×10^{1}	1×10^{5}
Cs-134m	1×10^3	1×10^{5}
Cs-134	1×10^{1}	1×10^4
Cs-135	$1 imes 10^4$	1×10^{7}
Cs-135m	1×10^{1}	1×10^6
Cs-136	1×10^{1}	1×10^{5}
Cs-137 ₋	$1 imes 10^{1}$	1×10^4
Cs-138	$1 imes 10^{1}$	1×10^4
Ba-126	$1 imes 10^2$	1×10^7
Ba-128	$1 imes 10^2$	1×10^{7}
Ba-131	$1 imes 10^2$	1×10^6
Ba-131m	$1 imes 10^2$	1×10^7
Ba-133	1×10^2	1×10^6
Ba-133m	$1 imes 10^2$	1×10^6
Ba-135m	1×10^2	1×10^6
Ba-137m	1×10^{1}	1×10^{6}
Ba-139	1×10^2	1×10^{5}
Ba-140 ^b	1×10^1	1×10^5
Ba-141	1×10^2	1×10^{5}
Ba-142	1×10^2	1×10^{6}
La-131	1×10^{1}	1×10^6
La-132	1×10^{1}	1×10^6
La-135	1×10^3 1×10^3	1×10^7
La-137	1×10^{3} 1×10^{3}	1×10^7 1×10^7
La-138	1×10^{1} 1×10^{1}	1×10^6 1×10^6
Lu 130	I IV	1 10

Radioactive material-(radionu- elide) radionuclide ^a	Acceptable level of activity-con- centration concentration (Bq/g)	Acceptable level of activity activity (Bq)
La-140	$\frac{1}{1 \times 10^1}$	1×10^5
La-141	1×10^2	1×10^{5}
La-142	1×10^{1}	1×10^{5}
La-143	1×10^2	1×10^{5}
Ce-134	1×10^3	1×10^{7}
Ce-135	1×10^{1}	1×10^{6}
Ce-137	1×10^3	1×10^{7}
Ce-137m	1×10^3	1×10^{6}
Ce-139	1×10^2	1×10^{6}
Ce-141	1×10^2	1×10^7
Ce-143	1×10^2	1×10^6
Ce-144 ^b	1×10^2	1×10^{5}
Pr-136	1×10^{1}	1×10^{5}
Pr-137	1×10^2	1×10^6
Pr-138m	1×10^{1}	1×10^6
Pr-139	1×10^2	1×10^7
Pr-142	1×10^2	1×10^{5}
Pr-142m	1×10^{7}	1×10^{9}
Pr-143	1×10^{4}	1×10^6
Pr-144	1×10^2	1×10^{5}
Pr-145	1×10^3	1×10^{5}
Pr-147	1×10^{1}	1×10^{5}
Nd-136	1×10^2	1×10^6
Nd-138	1×10^3	1×10^7
Nd-139	1×10^2	1×10^{6}
Nd-139m	1×10^{1}	1×10^{6}
Nd-141	1×10^2	1×10^{7}
Nd-147	1×10^2	1×10^{6}
Nd-149	1×10^2	1×10^{6}
Nd-151	1×10^{1}	1×10^{5}
Pm-141	1×10^{1}	1×10^{5}
Pm-143	1×10^2	1×10^{6}
Pm-144	1×10^{1}	1×10^{6}
Pm-145	1×10^3	1×10^{7}
Pm-146	1×10^{1}	1×10^{6}
Pm-147	1×10^4	1×10^{7}
Pm-148	1×10^{1}	1×10^{5}
Pm-148m	1×10^{1}	1×10^{6}
Pm-149	1×10^3	1×10^{6}
Pm-150	1×10^1	1×10^{5}
Pm-151	1×10^2	1×10^{6}
Sm-141	1×10^{1}	1×10^{5}
Sm-141m	1×10^{1}	1×10^6
Sm-142	1×10^2	1×10^{7}
Sm-145	1×10^2	1×10^{7}
Sm-146	1×10^{1}	1×10^{5}
Sm-147	1×10^{1}	1×10^4

Radioactive material (radionuclide)	Acceptable level of activity-con-	Acceptable level of-ac- tivity
<u>radionuclide</u> ^a	concentration (Bq/g)	activity (Bq)
Sm-151	1×10^4	1×10^{8}
Sm-153	1×10^2	1×10^{6}
Sm-155	1×10^2	1×10^{6}
Sm-156	1×10^2	1×10^{6}
Eu-145	1×10^{1}	1×10^{6}
Eu-146	1×10^{1}	1×10^{6}
Eu-147	1×10^{2}	1×10^{6}
Eu-148	1×10^{1}	1×10^{6}
Eu-149	1×10^{2}	1×10^{7}
Eu-150 -(34.2a)	1×10^{1}	1×10^{6}
Eu-150 (12.6h) <u>m</u>	1×10^{3}	1×10^6
Eu-152	1×10^{1}	1×10^{6}
Eu-152m	1×10^{2}	1×10^6
Eu-154	1×10^{1}	1×10^{6}
Eu-155	1×10^2	1×10^{7}
Eu-156	1×10^{1}	1×10^{6}
Eu-157	1×10^2	1×10^{6}
Eu-158	1×10^{1}	1×10^{5}
Gd-145	1×10^{1}	1×10^{5}
Gd-146 ^b	1×10^{1}	1×10^6
Gd-147	1×10^{1}	1×10^{6}
Gd-148	1×10^{1}	1×10^4
Gd-149	1×10^2	1×10^{6}
Gd-151	1×10^2	1×10^{7}
Gd-152	1×10^{1}	1×10^4
Gd-153	1×10^2	1×10^{7}
Gd-159	1×10^3	1×10^{6}
Tb-147	1×10^{1}	1×10^{6}
Tb-149	1×10^{1}	1×10^6
Tb-150	1×10^{1}	1×10^{6}
Tb-151	1×10^{1}	1×10^{6}
Tb-153	1×10^2	1×10^7
Tb-154	1×10^{1}	1×10^{6}
Tb-155	1×10^2	1×10^{7}
Tb-156	1×10^{1}	1×10^{6}
Tb-156m -(24.4h) ^a	1×10^{3}	1×10^{7}
Tb-156 m (5h) m' ^a	1×10^4	1×10^7
Tb-157	1×10^4	1×10^{7}
Tb-158	1×10^{1}	1×10^6
Tb-160	1×10^{1}	1×10^6
Tb-161	1×10^3	1×10^6
Dy-155	1×10^{1}	1×10^6
Dy-157	1×10^2	1×10^6
Dy-159	1×10^3	1×10^7
Dy-165	1×10^3	1×10^6
Dy-166	1×10^3	1×10^6
Ho-155	1×10^2	1×10^6
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Radioactive material (radionuclide)	Acceptable level of activity-con- centration	Acceptable level of-ac- tivity
<u>radionuclide^a</u>	<u>concentration</u> (Bq/g)	activity (Bq)
Ho-157	1×10^2	1×10^6
Ho-159	1×10^2	1×10^6
Ho-161	1×10^2	1×10^{7}
Ho-162	1×10^2	1×10^{7}
Ho-162m	1×10^{1}	1×10^6
Ho-164	1×10^3	1×10^{6}
Ho-164m	1×10^3	1×10^{7}
Ho-166	1×10^3	1×10^{5}
Ho-166m	1×10^{1}	1×10^{6}
Ho-167	1×10^2	1×10^{6}
Er-161	1×10^1	1×10^{6}
Er-165	1×10^3	1×10^{7}
Er-169	1×10^4	1×10^{7}
Er-171	1×10^2	1×10^{6}
Er-172	1×10^2	1×10^{6}
Tm-162	1×10^{1}	1×10^{6}
Tm-166	1×10^{1}	1×10^{6}
Tm-167	1×10^2	1×10^{6}
Tm-170	1×10^3	1×10^{6}
Tm-171	1×10^4	1×10^{8}
Tm-172	1×10^2	1×10^{6}
Tm-173	1×10^2	1×10^{6}
Tm-175	1×10^{1}	1×10^{6}
Yb-162	1×10^2	1×10^{7}
Yb-166	1×10^2	1×10^{7}
Yb-167	1×10^2	1×10^{6}
Yb-169	1×10^2	1×10^{7}
Yb-175	1×10^3	1×10^{7}
Yb-177	1×10^2	1×10^{6}
Yb-178	1×10^3	1×10^{6}
Lu-169	1×10^{1}	1×10^{6}
Lu-170	1×10^{1}	1×10^{6}
Lu-171	1×10^{1}	1×10^{6}
Lu-172	1×10^{1}	1×10^{6}
Lu-173	1×10^2	1×10^{7}
Lu-174	1×10^2	1×10^{7}
Lu-174m	1×10^2	1×10^{7}
Lu-176	1×10^2	1×10^{6}
Lu-176m	1×10^{3}	1×10^6
Lu-177	1×10^{3}	1×10^{7}
Lu-177m	1×10^{1}	1×10^6
Lu-178	1×10^2	1×10^5
Lu-178m	1×10^{1}	1×10^5
Lu-179	1×10^3	1×10^6
Hf-170	1×10^2	1×10^6
Hf-172 ₋	1×10^{1}	1×10^6
Hf-173	1×10^2	1×10^6

Radioactive material (radionu- elide) radionuclide ^a	Acceptable level of activity-con- centration concentration (Bq/g)	Acceptable level of-ac- tivity activity (Bq)
Hf-175	1×10^2	1×10^6
Hf-177m	1×10^1	1×10^5
Hf-178m	1×10^{1}	1×10^6
Hf-179m	1×10^{1}	1×10^6
Hf-180m	1×10^{1}	1×10^6
Hf-181	1×10^{1}	1×10^6
Hf-182	1×10^2	1×10^6
Hf-182m	1×10^{1}	1×10^{6}
Hf-183	1×10^{1}	1×10^{6}
Hf-184	1×10^2	1×10^6
Ta-172	1×10^{1}	1×10^6
Ta-173	1×10^{1}	1×10^6
Ta-174	1×10^{1}	1×10^6
Ta-175	1×10^{1}	1×10^6
Ta-176	1×10^{1}	1×10^6
Ta-177	1×10^2	1×10^7
Ta-178	1×10^{1}	1×10^6
Ta-179	1×10^3	1×10^7
Ta-180	1×10^{1}	1×10^6
Ta-180m	1×10^3	1×10^{7}
Ta-182	1×10^{1}	1×10^4
Ta-182m	1×10^2	1×10^{6}
Ta-183	1×10^2	1×10^{6}
Ta-184	1×10^{1}	1×10^{6}
Ta-185	1×10^2	1×10^{5}
Ta-186	1×10^{1}	1×10^{5}
W-176	1×10^{2}	1×10^6
W-177	1×10^{1}	1×10^6
W-178 ₋	1×10^{1}	1×10^{6}
W-179	1×10^2	1×10^{7}
W-181	1×10^3	1×10^{7}
W-185	1×10^4	1×10^{7}
W-187	1×10^2	1×10^{6}
W-188 ₋	1×10^2	1×10^{5}
Re-177	1×10^{1}	1×10^{6}
Re-178	1×10^{1}	1×10^{6}
Re-181	1×10^{1}	1×10^{6}
Re-182 -(64h)	1×10^{1}	1×10^{6}
Re-182 -(12.7h) <u>m</u>	1×10^1	1×10^{6}
Re-184	1×10^1	1×10^{6}
Re-184m	1×10^2	1×10^{6}
Re-186	1×10^3	1×10^{6}
Re-186m	1×10^3	1×10^{7}
Re-187	1×10^6	1×10^{9}
Re-188	1×10^2	1×10^{5}
Re-188m	1×10^2	1×10^{7}
Re-189 <u>b</u>	1×10^2	1×10^{6}

Radioactive material (radionuclide)	Acceptable level of activity-con-	Acceptable level of activity
<u>radionuclide^a</u>	concentration (Bq/g)	activity (Bq)
Os-180	1×10^2	1×10^{7}
Os-181	1×10^{1}	1×10^{6}
Os-182	1×10^2	1×10^{6}
Os-185	1×10^{1}	1×10^{6}
Os-189m	1×10^4	1×10^{7}
Os-191	1×10^2	1×10^{7}
Os-191m	1×10^3	1×10^{7}
Os-193	1×10^2	1×10^{6}
Os-194 <u></u>	1×10^2	1×10^{5}
Ir-182	1×10^{1}	1×10^{5}
Ir-184	1×10^{1}	1×10^{6}
Ir-185	1×10^{1}	1×10^{6}
Ir-186 -(15.8h)	1×10^{1}	1×10^{6}
Ir-186 -(1.75h) <u>m</u>	1×10^{1}	1×10^{6}
Ir-187	1×10^2	1×10^{6}
Ir-188	1×10^{1}	1×10^{6}
Ir-189	1×10^2	1×10^{7}
Ir-190	1×10^{1}	1×10^{6}
Ir-190m -(3.1h) -	1×10^{1}	1×10^{6}
Ir-190 m (1.2h) m' ^a	1×10^4	1×10^{7}
Ir-192	1×10^{1}	1×10^4
Ir-192m	1×10^2	1×10^{7}
Ir-193m	1×10^4	1×10^{7}
Ir-194	1×10^2	1×10^{5}
Ir-194m	1×10^{1}	1×10^{6}
Ir-195	1×10^2	1×10^{6}
Ir-195m	1×10^2	1×10^{6}
Pt-186	1×10^{1}	1×10^{6}
Pt-188 <u></u>	1×10^{1}	1×10^{6}
Pt-189	1×10^2	1×10^{6}
Pt-191	1×10^2	1×10^{6}
Pt-193	1×10^4	1×10^{7}
Pt-193m	1×10^3	1×10^{7}
Pt-195m	1×10^2	1×10^{6}
Pt-197	1×10^3	1×10^{6}
Pt-197m	1×10^2	1×10^{6}
Pt-199	1×10^2	1×10^{6}
Pt-200	1×10^2	1×10^{6}
Au-193	1×10^2	1×10^{7}
Au-194	1×10^{1}	1×10^{6}
Au-195	1×10^2	1×10^{7}
Au-198	1×10^2	1×10^6
Au-198m	1×10^{1}	1×10^6
Au-199	1×10^2	1×10^6
Au-200	1×10^2	1×10^5
Au-200m	1×10^{1}	1×10^6
Au-201	1×10^2	1×10^6

Radioactive material (radionu- elide) radionuclide ^a	Acceptable level of activity-con-	Acceptable level of activity activity (Bq)
Hg-193	concentration (Bq/g) 1 × 10 ²	$\frac{\mathbf{activity}}{1 \times 10^6}$ (Bq)
Hg-193m	1×10^{1} 1×10^{1}	1×10^6 1×10^6
Hg-194 <u>b</u>	1×10 1×10^{1}	1×10^6 1×10^6
Hg-195	1×10^{3} 1×10^{2}	1×10^{6} 1×10^{6}
Hg-195m ^b	1×10^{2} 1×10^{2}	$1 \times 10^{\circ}$ 1×10^{6}
Hg-197	1×10 1×10^{2}	1×10^7 1×10^7
Hg-197m	1×10^{2} 1×10^{2}	1×10^6 1×10^6
Hg-199m	1×10^{2} 1×10^{2}	$1 \times 10^{\circ}$ 1×10^{6}
_	1×10^{-1} 1×10^{2}	1×10^{5} 1×10^{5}
Hg-203 Tl-194	1×10^{2} 1×10^{1}	1×10^{6} 1×10^{6}
	1×10^{1} 1×10^{1}	1×10^{6} 1×10^{6}
Tl-194m Tl-195	1×10^{1} 1×10^{1}	$1 \times 10^{\circ}$ 1×10^{6}
TI-193 TI-197	1×10^{3} 1×10^{2}	$1 \times 10^{\circ}$ 1×10^{6}
Tl-198	1×10^{1} 1×10^{1}	1×10^6
Tl-198m		1×10^6
Tl-199	1×10^2 1×10^1	1×10^6 1×10^6
Tl-200	1×10^{5} 1×10^{2}	
T1-201 T1-202	1×10^{2} 1×10^{2}	1×10^{6} 1×10^{6}
TI-202 TI-204	1×10^{4} 1×10^{4}	$1 \times 10^{\circ}$ 1×10^{4}
	1×10^{1} 1×10^{1}	1×10^6 1×10^6
Pb-195m		
Pb-198	1×10^2	1×10^6
Pb-199	1×10^{1}	1×10^6
Pb-200	1×10^2	1×10^6
Pb-201	1×10^{1}	1×10^6
Pb-202	1×10^3	1×10^6
Pb-202m	1×10^{1}	1×10^6
Pb-203	1×10^2	1×10^6
Pb-205	1×10^4	1×10^7
Pb-209	1×10^5	1×10^6
Pb-210 ^b	1×10^{1}	1×10^4
Pb-211	1×10^2 1×10^1	1×10^6
Pb-212 ^b		1×10^5
Pb-214	1×10^2	1×10^6
Bi-200	1×10^{1}	1×10^6
Bi-201	1×10^{1}	1×10^{6}
Bi-202	1×10^{1}	1×10^6
Bi-203	1×10^{1}	1×10^{6}
Bi-205	1×10^{1}	1×10^6
Bi-206	1×10^{1}	1×10^5
Bi-207	1×10^{1}	1×10^{6}
Bi-210	1×10^3	1×10^6
Bi-210m ^b	1×10^{1}	1×10^5
Bi-212 ^b	1×10^{1}	1×10^5
Bi-213	1×10^2	1×10^6
Bi-214	1×10^{1}	1×10^5
Po-203	1×10^{1}	1×10^6

Radioactive material (radionu- elide)	Acceptable level of activity-con-	Acceptable level of-ac- tivity
<u>radionuclide^a</u>	concentration (Bq/g)	activity (Bq)
Po-205	1×10^{1}	1×10^6
Po-206	1×10^1	1×10^6
Po-207	1×10^{1}	1×10^6
Po-208	1×10^{1}	1×10^4
Po-209	1×10^{1}	1×10^4
Po-210	1×10^{1}	1×10^4
At-207	1×10^{1}	1×10^{6}
At-211	1×10^3	1×10^{7}
Fr-222	1×10^{3}	1×10^{5}
Fr-223	1×10^2	1×10^{6}
Rn-220 ^b	1×10^4	1×10^{7}
Rn-222 ^b	1×10^{1}	1×10^{8}
Ra-223 <u>b</u>	1×10^2	1×10^{5}
Ra-224 <u></u> ^b	1×10^{1}	1×10^{5}
Ra-225	1×10^2	1×10^{5}
Ra-226 ^b	1×10^{1}	1×10^4
Ra-227	1×10^2	1×10^{6}
Ra-228 <u>b</u>	1×10^{1}	1×10^{5}
Ac-224	1×10^2	1×10^{6}
Ac-225 ₋	1×10^{1}	1×10^4
Ac-226	1×10^2	1×10^{5}
Ac-227 ₋	1×10^{-1}	1×10^3
Ac-228	1×10^{1}	1×10^6
Th-226 ₋	1×10^3	1×10^{7}
Th-227	1×10^{1}	1×10^4
Th-228 ^b _	1×10^{0}	1×10^4
Th-229 ^b _	1×10^{0}	1×10^3
Th-230	1×10^{0}	1×10^4
Th-231	1×10^3	1×10^{7}
Th-232	1×10^{1}	1×10^4
Th-234 ₋	1×10^3	1×10^{5}
Pa-227	1×10^{1}	1×10^6
Pa-228	1×10^{1}	1×10^6
Pa-230	1×10^{1}	1×10^{6}
Pa-231	1×10^{0}	1×10^{3}
Pa-232	1×10^{1}	1×10^{6}
Pa-233	1×10^2	1×10^{7}
Pa-234	$1 imes 10^{1}$	1×10^6
U-230 ^b	1×10^{1}	1×10^{5}
U-231	$1 imes 10^2$	1×10^{7}
U-232 ^b	$1 imes 10^{0}$	1×10^3
U-233	1×10^{1}	1×10^4
U-234	1×10^1	1×10^4
U-235 ^b	1×10^{1}	1×10^4
U-236	1×10^1	1×10^4
U-237	1×10^2	1×10^{6}
U-238 ^b	1×10^{1}	1×10^4
	- *	

Radioactive material-(radionu-	Acceptable level of activity-con-	Acceptable level of-ac-
<u>radionuclide</u> ^a U-239	concentration (Bq/g) 1 × 10 ²	activity (Bq) 1 × 10 ⁶
U-240	1×10^{3} 1×10^{3}	1×10^7 1×10^7
U-240 ^b	1×10^{1} 1×10^{1}	1×10^6 1×10^6
Np-232	1×10^{1} 1×10^{1}	1×10^6 1×10^6
Np-233	1×10^{2} 1×10^{2}	1×10^7 1×10^7
Np-234	1×10^{1} 1×10^{1}	1×10^{6} 1×10^{6}
Np-235	1×10^{3} 1×10^{3}	1×10^7 1×10^7
Np-236- $(1.5 \times 10^5 a)$	1×10^{2} 1×10^{2}	1×10^5 1×10^5
Np-236 -(22.5h) <u>m</u>	1×10^{3} 1×10^{3}	1×10^7 1×10^7
Np-237 <u>b</u>	1×10^{0} 1×10^{0}	1×10^{3} 1×10^{3}
Np-238	1×10^{2} 1×10^{2}	1×10^6 1×10^6
Np-239	1×10^{2} 1×10^{2}	1×10^7 1×10^7
Np-240	1×10^{1} 1×10^{1}	1×10^{6} 1×10^{6}
Pu-234	1×10^{2} 1×10^{2}	1×10^7 1×10^7
Pu-235	1×10^{2} 1×10^{2}	1×10^7 1×10^7
Pu-236	1×10^{1} 1×10^{1}	1×10^4 1×10^4
Pu-237	1×10 1×10^{3}	1×10^{7} 1×10^{7}
Pu-238	1×10^{0} 1×10^{0}	1×10^4 1×10^4
Pu-239	1×10^{0} 1×10^{0}	1×10^4 1×10^4
Pu-240	1×10^{0} 1×10^{0}	1×10^{3} 1×10^{3}
Pu-241	1×10^{2} 1×10^{2}	1×10^5 1×10^5
Pu-242	1×10^{0} 1×10^{0}	1×10^4 1×10^4
Pu-243	1×10^{3} 1×10^{3}	1×10^{7} 1×10^{7}
Pu-244	1×10^{0} 1×10^{0}	1×10^{4} 1×10^{4}
Pu-245	1×10^{2} 1×10^{2}	1×10^6 1×10^6
Pu-246	1×10 1×10^{2}	1×10^6 1×10^6
Am-237	1×10^{2} 1×10^{2}	1×10^{6} 1×10^{6}
Am-238	1×10^{1} 1×10^{1}	$1 \times 10^{\circ}$ 1×10^{6}
Am-239	1×10^{2} 1×10^{2}	1×10^6 1×10^6
Am-240	1×10^{-1} 1×10^{1}	$1 \times 10^{\circ}$ 1×10^{6}
Am-241	1×10^{0} 1×10^{0}	
Am-242	1×10^{3} 1×10^{3}	1×10^4 1×10^6
	1×10^{0} 1×10^{0}	1×10^{3} 1×10^{4}
Am-242m ^b	$1 \times 10^{\circ}$ $1 \times 10^{\circ}$	
Am-243 <u></u> Am-244	$1 \times 10^{\circ}$ 1×10^{1}	1×10^{3} 1×10^{6}
Am-244m	1×10^4 1×10^4	1×10^{5} 1×10^{7}
Am-245	1×10^{3} 1×10^{3}	1×10^6 1×10^6
Am-246	1×10^{1} 1×10^{1}	1×10^{5} 1×10^{5}
Am-246m	1×10^{1} 1×10^{2}	1×10^6 1×10^7
Cm-238	1×10^{2} 1×10^{2}	1×10^5 1×10^5
Cm-240 Cm-241	1×10^2 1×10^2	1×10^{5} 1×10^{6}
Cm-241 Cm-242	1×10^2 1×10^2	$1 \times 10^{\circ}$ 1×10^{5}
Cm-243	1×10^{0}	1×10^4
Cm-244	1×10^{1}	1×10^4
Cm-245	1×10^{0}	1×10^3
Cm-246	$1 imes 10^{0}$	1×10^3

Radioactive material (radionu- elide) radionuclide ^a	Acceptable level of activity-con- centration concentration (Bq/g)	Acceptable level of activity activity (Bq)
Cm-247	1×10^{0}	1×10^4
Cm-248	1×10^{0}	1×10^{3}
Cm-249	1×10^{3}	1×10^{6}
Cm-250	1×10^{-1}	1×10^3
Bk-245	1×10^2	1×10^6
Bk-246	1×10^{1}	1×10^6
Bk-247	1×10^{0}	1×10^4
Bk-249	1×10^{3}	1×10^6
Bk-250	1×10^{1}	1×10^6
Cf-244	1×10^{4}	1×10^{7}
Cf-246	1×10^{3}	1×10^6
Cf-248	1×10^{1}	1×10^4
Cf-249	1×10^{0}	1×10^3
Cf-250	1×10^{1}	1×10^4
Cf-251	1×10^{0}	1×10^3
Cf-252	1×10^{1}	1×10^4
Cf-253	1×10^2	1×10^{5}
Cf-254	1×10^{0}	1×10^3
Es-250	1×10^{2}	1×10^6
Es-251	1×10^2	1×10^{7}
Es-253	1×10^{2}	1×10^{5}
Es-254	1×10^{1}	1×10^4
Es-254m	1×10^{2}	1×10^6
Fm-252	1×10^{3}	1×10^6
Fm-253	1×10^2	1×10^6
Fm-254	1×10^{4}	1×10^{7}
Fm-255	1×10^{3}	1×10^6
Fm-257	1×10^{1}	1×10^{5}
Md-257	1×10^2	1×10^7
Md-258	1×10^{2}	1×10^5

- ^a m and m' denote metastable states of the radionuclide. The metastable state m' is of higher energy than the metastable state m.
- ^b Parent radionuclides and their progeny whose dose contributions are taken into account in the dose calculations (thus requiring only the exemption level of the parent radionuclide to be considered) are listed here:

Parent	Progeny
<u>Ge-68</u>	<u>Ga-68</u>
<u>Rb-83</u>	<u>Kr-83m</u>
<u>Sr-82</u>	<u>Rb-82</u>
<u>Sr-90</u>	<u>Y-90</u>
<u>Y-87</u>	<u>Sr-87m</u>
<u>Zr-93</u>	<u>Nb-93m</u>
<u>Zr-97</u>	<u>Nb-97</u>
<u>Ru-106</u>	<u>Rh-106</u>
<u>Ag-108m</u>	<u>Ag-108</u>
<u>Sn-121m</u>	Sn-121 (0.776)

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<u>Sn-126</u>	<u>Sb-126m</u>
<u>Xe-122</u>	<u>I-122</u>
<u>Cs-137</u>	<u>Ba-137m</u>
<u>Ba-140</u>	<u>La-140</u>
<u>Ce-134</u>	<u>La-134</u>
<u>Ce-144</u> Gd-146	<u>Pr-144</u>
	<u>Eu-146</u>
<u>Hf-172</u>	<u>Lu-172</u>
<u>W-178</u>	<u>Ta-178</u>
<u>W-188</u>	<u>Re-188</u> <u>Os-189m (0.241)</u>
<u>Re-189</u> <u>Ir-189</u>	
<u>11-189</u> Pt-188	<u>Os-189m</u> <u>Ir-188</u>
<u>Hg-194</u>	<u>Au-194</u>
<u>Hg-194</u> Hg-195m	Hg-195 (0.542)
Pb-210	Bi-210, Po-210
Pb-212	Bi-212, Tl-208 (0.36), Po-212 (0.64)
Bi-210m	T1-206
Bi-212	TI-208 (0.36), Po-212 (0.64)
Rn-220	Po-216
Rn-222	Po-218, Pb-214, Bi-214, Po-214
Ra-223	Rn-219, Po-215, Pb-211, Bi-211, Tl-207
Ra-224	Rn-220, Po-216, Pb-212, Bi-212, Tl-208 (0.36), Po-212 (0.64)
Ra-226	Rn-222, Po-218, Pb-214, Bi-214, Po-214, Pb-210, Bi-210, Po-210
Ra-228	Ac-228
Ac-225	Fr-221, At-217, Bi-213, Po-213 (0.978), Tl-209 (0.0216), Pb-209 (0.978)
Ac-227	Fr-223 (0.0138)
<u>Th-226</u>	Ra-222, Rn-218, Po-214
<u>Th-228</u>	Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tl-208 (0.36), Po-212 (0.64)
Th-229	Ra-225, Ac-225, Fr-221, At-217, Bi-213, Po-213, Pb-209
<u>Th-234</u>	Pa-234m
<u>U-230</u>	Th-226, Ra-222, Rn-218, Po-214
<u>U-232</u>	Th-228, Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tl-208 (0.36), Po-212 (0.64)
<u>U-235</u>	<u>Th-231</u>
<u>U-238</u>	<u>Th-234, Pa-234m</u>
<u>U-240</u>	<u>Np-240m</u>
Np-237	<u>Pa-233</u>
<u>Am-242m</u>	<u>Am-242</u>
<u>Am-243</u>	<u>Np-239</u>

Schedule 3 Dose limits for ionising radiation

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Occupational exposure

- For occupational exposure of workers over 18 years of age, the dose limits for 5 ionising radiation are—
 - (a) an effective dose of 20 millisieverts (**mSv**) per year averaged over 5 consecutive years (100 mSv in 5 years) and of 50 mSv in any single year; and or
 - (b) an equivalent dose to the lens of the eye of 20 mSv per year averaged over 5 consecutive years (100 mSv in 5 years) and of 50 mSv in any single year; and or
 - (c) an equivalent dose to the extremities (hands and feet) or the skin of 500 mSv in a year.
- For occupational exposure of persons of 16 to 18 years of age who are being trained for employment involving radiation, and for exposure of students of 16 to 18 years of age who use ionising radiation sources in the course of their studies, the dose limits are—
 - (a) an effective dose of 6 mSv in a year; and or
 - (b) an equivalent dose to the lens of the eye of 20 mSv in a year; and or
 - (c) an equivalent dose to the extremities (hands and feet) or the skin of 150 mSv in a year.

Public exposure

- For public exposure, including exposure—to_of an embryo or a foetus in a female worker, the dose limits for ionising radiation are—
 - (a) an effective dose of 1 mSv in a year; and or
 - (b) an equivalent dose to the lens of the eye of 15 mSv in a year; and or
 - (c) an equivalent dose to the skin of 50 mSv in a year.
- For public exposure, the effective dose may be higher than 1 mSv in a year, if so specified in regulations, provided that the average dose over 5 consecutive years does not exceed 1 mSv per year.

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Term of office

Schedule 4 Radiation Safety Advisory Council

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(1)	A m	ember of the Council—	5
	(a)	holds office for a term of 3 years from the date of the member's appointment or from the date (if any) specified in the instrument by which the member is appointed; and	
	(b)	may from time to time be reappointed.	
(2)	A pe	rson—	10
	(a)	becomes ineligible for appointment to the Council after completing 6 consecutive years as a member; but	
	(b)	becomes eligible for appointment 1 year after the date that the person became ineligible for appointment.	
(3)	or be	ember whose term of office has expired continues, unless sooner vacating eing removed from office, by virtue of the appointment for the term that expired, until—	15
	(a)	that member is reappointed; or	
	(b)	a successor to that member is appointed.	
2	Vaca	ation of office	20
(1)	ister	ember of the Council may at any time be removed from office by the Minfor inability to perform the functions of the office, bankruptcy, neglect of or misconduct proved to the satisfaction of the Minister.	
(2)	A member of the Council may resign from office by giving written notice to		25
(3)	A member of the Council who becomes ineligible for appointment under clause 1(2)(a) ceases to be a member of the Council.		
(4)	The	powers of the Council are not affected by any vacancy in its membership.	
3	Cha	irperson and deputy chairperson of Council	
(1)	The	Council—	30
	(a)	must appoint a member as chairperson; and	
	(b)	may appoint another member as deputy chairperson.	
(2)	The statin	appointment must be by notice in writing to the member and the Council ng—	
	(a)	the period (starting at or after the time the member comes into office as a member of the Council and ending at or before the time he or she must	35

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cease to be a member) for which the member is appointed chairperson or deputy chairperson; and

- (b) the date on which he or she comes into that office.
- (3) A person whose appointment as chairperson or deputy chairperson has expired—
 - (a) continues in that office until his or her successor is appointed; and
 - (b) is eligible for reappointment to that office so long as he or she continues to be a member of the Council.

4 Meetings of Council

- (1) The meetings of the Council are to be held at the times and places that the Council or the chairperson from time to time appoints.
- (2) At any meeting of the Council, 4 members constitute a quorum.
- (3) Every question before any meeting of the Council must be determined by a majority of the votes of the members present and voting.
- (4) The chairperson has a deliberative vote and, in the case of an equality of votes, 15 has a casting vote.

Schedule 5 Consequential amendments

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Part 1 Amendments to Acts

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Carriage of Goods Act 1979 (1979 No 43)

In section 30, replace "Radiation Protection Act 1965" with "Radiation Safety Act **2014**".

Environment Act 1986 (1986 No 127)

In the Schedule, replace the item relating to the Radiation Protection Act 1965 with:

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Radiation Safety Act 2014

Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (2012 No 72)

In section 4(1), definition of **radioactive waste or other radioactive matter**, replace "Radiation Protection Act 1965" with "Radiation Safety Act **2014**".

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Fire Service Act 1975 (1975 No 42)

In section 2(1), definition of **hazardous substance**, replace paragraph (b) with:

(b) any radioactive material as defined in **section 5(1)** of the Radiation Safety Act **2014** or infectious substance that may impair human, animal, or plant health

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Health Practitioners Competence Assurance Act 2003 (2003 No 48)

Replace section 67(b)(xii) with:

(xii) the Radiation Safety Act 2014.

Replace section 100(2)(a)(xii) with:

(xii) the Radiation Safety Act 2014; or

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Maritime Transport Act 1994 (1994 No 104)

In section 257, definition of **radioactive waste or other radioactive matter**, replace "the Radiation Protection Act 1965" with "**section 5(1)** of the Radiation Safety Act **2014**".

Medicines Act 1981 (1981 No 118)

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In section 3(1)(c)(iii), replace "section 2(1) of the Radiation Protection Act 1965" with "section 5(1) of the Radiation Safety Act 2014".

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Medicines Act 1981 (1981 No 118) —continued
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In section 38(1)(a), replace "section 2(1) of the Radiation Protection Act 1965" with "section 5(1) of the Radiation Safety Act 2014".

Official Information Act 1982 (1982 No 156)

In Schedule 1, replace "Radiation Protection Advisory Council" with "Radiation Safety Advisory Council".

Search and Surveillance Act 2012 (2012 No 24)

In the Schedule, repeal the item relating to the Radiation Protection Act 1965.

Trans-Tasman Mutual Recognition Act 1997 (1997 No 60)

In Schedule 2, replace the item relating to the Radiation Protection Act 1965 with:

Radiation Safety Act **2014**, to the extent that it deals with any requirement described in section 10(2) applicable to the sale of any radioactive material (within the meaning of **section 5(1)** of the Radiation Safety Act **2014**)

Part 2

Amendment Amendments to legislative instrument

Accident Compensation (Liability to Pay or Contribute to Cost of Treatment) Regulations 2003 (SR 2003/388)

In regulation 3, replace the definition of **radiologist** with:

radiologist means a medical practitioner who holds an authorisation, appropriate to the treatment for which payment is sought, under the Radiation Safety Act 2014

- (a) a medical practitioner who is registered in the diagnostic and interventional radiology scope of practice by the Medical Council of New Zealand; or
- (b) a medical practitioner who—
 - (i) <u>is registered in a general scope of practice by the Medical Council</u> of New Zealand; and
 - (ii) holds a licence under the Radiation Safety Act **2014** to use X-ray equipment for the purposes of radiology; or
- (c) a medical practitioner who—
 - (i) is registered in the general practice vocational scope of practice by the Medical Council of New Zealand; and
 - (ii) holds a licence under the Radiation Safety Act **2014** to use X-ray equipment for the purposes of general practice

<u>In regulation 3, definition of **recognised branch of medicine**, replace paragraph (d) with:</u>

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Accident Compensation (Liability to Pay or Contribute to Cost of Treatment) Regulations 2003 (SR 2003/388)—continued

(d) <u>diagnostic and interventional radiology:</u>

Replace regulation 12(2) with:

(2) If a claimant receives treatment from a radiologist whose scope of practice includes the branch of medicine known as diagnostic and interventional radiology, the Corporation is liable to pay the amount specified for the treatment.

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Legislative history

8 December 2014 10 March 2015 Introduction (Bill 3–1)
First reading and referral to Health Committee