

Code of Practice for the Safe Transport of Radioactive Material

Draft for consultation

2019

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This consultation document

This document sets out possible wording for a new code of practice to be issued under the Radiation Safety Act 2016 for the safe transport of radioactive material by road, rail, sea and air. Section 86(2) of the Act requires that anyone likely to be affected by the code is consulted before it is issued. The purpose of this document is to provide suggestions to assist in that consultation process.

The Introduction, Definitions and Obligations sections set out the proposed wording for the new code. The Submission form section provides a form for submitters to use when making submissions. The form contains specific questions that submitters may wish to answer. These questions are included for convenience only and submitters should feel free to provide any information they feel is relevant to the development of the code.

The consultation period concludes on 1 March 2019. Please ensure that submissions are sent to the Office of Radiation Safety by then.

Introduction to the Code

Purpose and commencement

This Code of Practice for the Safe Transport of Radioactive Material is issued by the Director for Radiation Safety under section 86 of the Radiation Safety Act 2016. It provides operational details on compliance with section 12 of the Act, which relates to the safe transport of radioactive material. The requirements in this code do not limit the general nature of the fundamental requirements in sections 9–12 of the Act. This code comes into force on a date to be determined following the consultation period.

Scope

This code applies to the safe transport of radioactive material by road, rail, sea and air. This includes the design, manufacture, maintenance and repair of packaging and the preparation, consigning, loading, carriage including in-transit storage, shipment after storage, unloading and receipt at the final destination of loads of radioactive material and packages.

This code does not apply to:

- security of radioactive material in transport
- radioactive material that is an integral part of the means of transport
- radioactive material moved within an establishment that is subject to appropriate safety regulations in force in the establishment and where the movement does not involve public roads or railways
- radioactive material implanted or incorporated into a person or live animal for diagnosis or treatment
- transport for medical treatment of a person who has been subject to an intake of radioactive material or to contamination
- radioactive material in consumer products that have received regulatory approval, following their sale to the end user
- natural material and ores containing naturally occurring radionuclides, which may have been processed, provided the activity concentration of the material does not exceed values set out in the International Atomic Energy Agency (IAEA) Transport Regulations
- non-radioactive solid objects with radioactive substances present on any surface in quantities not in excess of the levels defined in the IAEA Transport Regulations.

Contact

The Director's contact details are:

Office of Radiation Safety
PO Box 5013
Wellington 6140

Email: orsenquiries@moh.govt.nz
Fax: 04 496 2340

Key roles

The following individuals and bodies have roles and responsibilities in relation to this code.

Carrier – any person, organisation or government undertaking the carriage of radioactive material by any means of transport. This includes both carriers for hire or reward and carriers on their own account

Consignee – any person, organisation or government that is entitled to take delivery of a consignment

Consignor – any person, organisation or government that prepares a consignment for transport

Office of Radiation Safety – competent authority under the IAEA Transport Regulations

Definitions

Defined terms are identified in **bold** and have the following meanings.

IAEA Transport Regulations – the latest edition of the Regulations for the Safe Transport of Radioactive Material issued by the International Atomic Energy Agency as No. SSR-6¹

LSA-I material – low specific activity material specified in paragraph 409(a) of the IAEA Transport Regulations

Relevant transport regulations for dangerous goods – the Land Transport Rule: Dangerous Goods 2005, issued by NZ Transport Agency; Maritime Rules Part 24A: Carriage of Cargoes – Dangerous Goods, issued by Maritime New Zealand; Civil Aviation Authority Rule Part 92, Carriage of Dangerous Goods, issued by the Civil Aviation Authority of New Zealand

SCO-I – surface contaminated object specified in paragraph 413(a) of the IAEA Transport Regulations

SCO-III – surface contaminated object specified in paragraph 413(c) of the IAEA Transport Regulations

UN Number – a number specified in column 1, table 1 of the IAEA Transport Regulations to be assigned to radioactive material

This code also adopts terms defined in paragraphs 201–249 of the IAEA Transport Regulations.

¹ The 2018 edition is available here https://www-pub.iaea.org/MTCD/Publications/PDF/PUB1798_web.pdf

Obligations

Consignor

1. The consignor must ensure that the requirements in paragraphs 109–110, 301–306, 309–315, 401–434, 501–511, 514–562, 566–568, 570–573, 575–576, 580–581, 586, 602–686, 701–737, 801–803, 805, 807(a)–(c), 808–809, 811–812, 814–815, 817, 819–825, 827–827A and 829–830 of the IAEA Transport Regulations are complied with as they relate to the consignor's preparation of consignments for transport.

Carrier

2. The carrier must ensure that:
 - a) the requirements in paragraphs 109–110, 301–306, 309–315, 504–514, 520, 522–525, 529(c), 537–540, 543–544, 562–570, 573–579, 583–588 and 627–630 of the IAEA Transport Regulations are complied with as they relate to the carrier's carriage of radioactive material for transport
 - b) vehicles carrying packages, overpacks or freight containers labelled with any of the labels shown in Figures 2–5 of the IAEA Transport Regulations, or carrying unpackaged LSA-I material, SCO-I or SCO-III display the placard shown in Figure 6 of the IAEA Transport Regulations on each of:
 - i) the two external lateral walls in the case of a rail vehicle
 - ii) the external front and rear walls in the case of a road vehicle
 - c) for vehicles without sides:
 - i) the placards required in clause 2(b) may be affixed directly on the cargo carrying unit, provided that they are readily visible
 - ii) the placards on the tanks or freight containers shall suffice for large tanks or freight containers
 - iii) the dimensions of the placard described in Figure 6 of the IAEA Transport Regulations may be reduced to 100 mm for vehicles that have insufficient area to allow the fixing of larger placards
 - iv) any placards that do not relate to the contents are removed
 - d) where the consignment in or on the vehicle is unpackaged LSA-I material, SCO-I or SCO-III, or where a consignment is required to be shipped under exclusive use and is packaged radioactive material with a single UN number, the appropriate UN number (see Table 1 of the IAEA Transport Regulations) shall also be displayed, in black digits not less than 65 mm high, either:

- i) in the lower half of the placard shown in Figure 6 of the IAEA Transport Regulations, against the white background, or
 - ii) on the placard shown in Figure 7 of the IAEA Transport Regulations
- e) when the alternative in clause 2(d)(ii) is used, the subsidiary placard is affixed immediately adjacent to the main placard, either on the two external lateral walls in the case of a rail vehicle or on the external front and rear walls in the case of a road vehicle.

Consignee

3. The consignee must ensure that the requirements in paragraphs 309 and 311–315 of the IAEA Transport Regulations are complied with as they relate to the consignee taking delivery of consignments.

Submission form

Your details

This submission was completed by: *(name)* _____
Address: *(street/box number)* _____
(town/city) _____
Email: _____
Organisation *(if applicable)*: _____
Position *(if applicable)*: _____

Additional information

I am, or I represent an organisation that is, based in:

New Zealand Australia Other *(please specify)*: _____

I am, or I represent, a: *(tick all that apply)*

transport company industrial radiographer
 user of nuclear density meters Other *(please specify)*: _____

Privacy

We may publish submissions on the Ministry's website. If you are submitting as an individual, we will automatically remove your personal details and any identifiable information.

If you do not want your submission published on the Ministry's website, please tick this box:

Do not publish this submission.

Your submission will be subject to requests made under the Official Information Act. If you want your personal details removed from your submission, please tick this box:

Remove my personal details from responses to Official Information Act requests.

Please return this form:

By email to: orsenquiries@moh.govt.nz (including 'transport code' in the subject line)

By post to: Office of Radiation Safety, PO Box 5013, Wellington 6140.

Consultation questions

The Office of Radiation Safety is seeking comments on the following.

Scope

1. The scope of the code relates to the safe transport of radioactive material. Is this appropriate?

Yes

No

If no, please provide alternative suggestions for the scope of this code.

2. Do you think requirements for the secure transport of radioactive material should also be included in this code?

Yes

No

Please provide any additional information you think is relevant.

Incorporation of international requirements

3. Do you think it is appropriate to incorporate the requirements of the International Atomic Energy Agency verbatim?

Yes

No

If no, please provide suggestions for an alternate approach.

Variation to international requirements

4. Do you think it is appropriate to amend the international requirements regarding placarding so that they are consistent with New Zealand's Land Transport Rule: Dangerous Goods?

- Yes
 No

Please provide any additional information you think is relevant.

Additional comments

5. a. Was the information in this code appropriately presented?

- Yes
 No

- b. Is there any other information or subject that should be included in this code?

- Yes
 No

Please provide any additional information you think is relevant.