



WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTY-EIGHTH MEETING

Virtual, 15 to 19 November 2021

Agenda Item 2: Managing air-specific safety risks and identifying anomalies (Ref: REC A DGS 2023)

2.2: Develop proposals, if necessary, for amendments to the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284) for incorporation in the 2023-2024 Edition

REVISION TO RADIOACTIVE MATERIAL CLASSIFICATION AS EXCEPTED PACKAGES

(Presented by P. Guo)

SUMMARY

This working paper proposes a revision to the provision in Part 7.2.4.1.1.2 to align with the corresponding provision in the IAEA *Regulations for the Safe Transport of Radioactive*.

Action by the DGP: The DGP-WG is invited to agree to the draft amendments in the appendix to this working paper.

1. INTRODUCTION

1.1 Part 2;7.2.4.1.1 of the Technical Instructions provides classification criteria for radioactive material as an excepted package. Part 2;7.2.4.1.1.1 lists five conditions that must be met for a package to be classified as excepted packages.

1.2 Part 2;7.2.4.1.1.2 outlines an additional condition under which radioactive material may be classified as an excepted package:

“A package containing radioactive material may be classified as an excepted package provided that the dose rate at any point on its external surface does not exceed 5 $\mu\text{Sv/h}$.”

This description may be misinterpreted to mean that:

- a) the provision concerning the dose rate at any point on the external surface of a package containing radioactive material not exceeding 5 $\mu\text{Sv/h}$ is not mandatory; or

- b) a package containing radioactive material for which the dose rate at any point on its external surface does not exceed 5 $\mu\text{Sv/h}$ may be classified as an excepted package, even if it contains radioactive material exceeding the activity limits specified in column 4 of Table 2-14.

1.3 The corresponding provision in the 2018 Edition of the IAEA *Regulations for the Safe Transport of Radioactive Material* is clearly a requirement, i.e.:

“516. The dose rate at any point on the external surface of an excepted package shall not exceed 5 $\mu\text{Sv/h}$.”

It is therefore proposed to align Part 2;7.2.4.1.1.2 of the Technical Instructions with the IAEA provision.

2. ACTION BY THE DGP

1.4 The DGP-WG is invited to agree to the draft amendments in the appendix to this working paper.

APPENDIX

PROPOSED AMENDMENT TO PART 2 OF THE TECHNICAL INSTRUCTIONS

Part 2

CLASSIFICATION OF DANGEROUS GOODS

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Chapter 7

CLASS 7 — RADIOACTIVE MATERIAL

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7.2.4 Classification of packages

7.2.4.1 The quantity of radioactive material in a package must not exceed the relevant limits for the package type as specified below.

7.2.4.1.1 Classification as excepted packages

7.2.4.1.1.1 A package may be classified as excepted packages if it meets one of the following conditions:

- a) it is an empty packaging having contained radioactive material;
- b) it contains instruments or articles not exceeding the activity limits specified in columns 2 and 3 of Table 2-14;
- c) it contains articles manufactured of natural uranium, depleted uranium or natural thorium; or
- d) it contains radioactive material not exceeding the activity limits specified in column 4 of Table 2-14; or
- e) it contains less than 0.1 kg of uranium hexafluoride not exceeding the activity limits specified in column 4 of Table 2-14.

7.2.4.1.1.2 ~~A package containing radioactive material may be classified as an excepted package provided that the dose rate at any point on its external surface does not exceed 5 μ Sv/h.~~ The dose rate at any point on the external surface of an excepted package shall not exceed 5 μ Sv/h.

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