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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 11806-2019

Replacing GB 11806-2004

Regulations for the safe transport of radioactive material

放射性物品安全运输规程

(English Translation)

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- 1 Introduction

1 Scope

This standard specifies the safety requirements for the transport of radioactive materials under normal conditions of transport, normal conditions of transport and conditions of transport accidents. The transportation requirements of this standard include the design, manufacture and maintenance of the package, as well as the preparation, consignment, loading and carrying of the package (including midway storage) and the receipt and unloading of the final arrival of the package.

This standard applies to any means of transport of radioactive material (including radioactive material concomitantly used) on land, water and air. This standard does not

apply to.

- a) radioactive material that has become an integral part of the means of transport;
- b) transporting radioactive materials that do not involve public roads or railways within the unit, ie in-plant transportation;
- c) radioactive material that has been implanted or injected into human or living animals for diagnosis or treatment;
- d) persons present in the body or in vitro due to accidental or deliberate ingestion of radioactive material or radioactive contamination Radioactive material;
- e) radioactive material in consumer products that have been approved by the relevant government authorities and sold to end users;
- f) processed natural substances and ores containing natural radionuclides, and the activity concentration of such substances does not exceed this standard 10 times the exemption value specified in 5.1 to 5.2. For natural substances containing natural radionuclides that are not in a long-term equilibrium state And ore, the concentration of its activity should be calculated in accordance with 5.2.3;
- g) any non-radioactive solid object with radioactive material on its surface but not exceeding the surface contamination level specified in 3.13 of this standard.

When transporting radioactive materials carries additional risks or is shipped with other dangerous goods, it should also comply with the relevant provisions on the transport of dangerous goods.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated version applies to this file. For undated references, the latest edition (including all amendments) applies to this document.

General requirements and classification of GB 4075 sealed radioactive sources (GB 4075-2009, ISO 2919:1999, MOD)

GB/T 15849 Sealing radioactive source leak test method (GB/T 15849-1995, EQV ISO 9978:1992)

Technical requirements and test methods for GB/T 5338 series 1 - Part 1: General purpose containers (GB/T 5338-2002, IDT ISO 1496-1:1990)

GB 18871 Basic standards for ionizing radiation protection and radiation source safety

ISO 7195 transport of uranium hexafluoride (UF₆)

ST/SG/AC.10/1/Rev.17 United Nations Recommendations on the Transport of Dangerous

Goods

3 Terms and definitions

The following terms and definitions apply to this standard.

3.1 Basic radionuclide values

The basic value of radionuclide refers to the activity value derived from the type of package and other management requirements, especially A1 and A2. A1 means the activity value of a special form of radioactive material listed in Appendix B, Schedule B1 or derived in Chapter 5, The activity limit specified for the determination of the requirements of this standard. A2 means the one listed in Schedule B1 of Appendix B or in Chapter 5.

The activity value of the radioactive material other than the derived special form radioactive material is specified for the determination of the requirements of this standard. Radioactivity limit.

3.2 Unilateral approval

The design of a package is subject to approval by the relevant government department of the country of design.

3.3 Multiparty approval

Except for the approval of the relevant government department of the original design country or the original shipping country, the consignment to be transported is on the way or arriving at any of them. In his country, it should also be approved by the relevant government departments of these countries. The term "via or arrival" does not include "flying over", ie the use of aircraft Such approval and notification requirements do not apply to the country when transporting radioactive material over a country and is not prepared to stay in that country.

3.4 Compliance guarantee

A series of measures and actions taken by relevant government departments to ensure that the provisions of this standard are observed in practice.

3.5 Quality assurance

Is a systematic outline for the management and supervision of organizations or units involved in the transport of radioactive materials, which is intended to Provide sufficient credibility to the safety requirements specified in this standard.